RIVERSIDE COUNTY
AIRPORT LAND USE COMMISSION

STAFF REPORT

AGENDA ITEM:	3.1
HEARING DATE:	July 13, 2023
CASE NUMBER:	ZAP1091BD23 -- Beacon Realty Advisors (Representative: GoUrban Development)
APPROVING JURISDICTION:	City of La Quinta
JURISDICTION CASE NO:	2023-0001 (SP2022-0004 [Specific Plan Amendment SP2002-062], TTM2022-0003 [Tentative Tract Map No. 38604], SDP2022-0015 [Site Development Permit])
LAND USE PLAN:	2004 Bermuda Dunes Airport Land Use Compatibility Plan
Airport Influence Area:	Bermuda Dunes Airport
Land Use Policy:	Compatibility Zone E
Noise Levels:	Below 55 CNEL from aircraft
MAJOR ISSUES:	None

RECOMMENDATION: Staff recommends that the Commission find the Specific Plan Amendment CONSISTENT, with the 2004 Bermuda Dunes Airport Land Use Compatibility Plan and find the Site Development Permit and Tentative Tract Map CONSISTENT, subject to the conditions included herein.

PROJECT DESCRIPTION: A proposal to construct an 88-unit multi-family apartment/townhome complex on 5.1 acres. The applicant also proposes amending the Jefferson Square Specific Plan, creating two Planning Areas (PA1 and PA2) to allow the specific plan area to be developed as a mixed-use project, which includes the existing commercial development in PA1, and the residential uses (which will meet the Mixed-Use Overlay District density criteria of 12 to 24 dwelling units per acre) in PA2. The applicant also proposes to create one lot for PA2.

PROJECT LOCATION: The site is located westerly of Jefferson Street and southerly of Fred Waring Drive, approximately 6,459 feet southerly of Runway 10-28 at Bermuda Dunes Airport.

BACKGROUND:

Residential Density/Non-Residential Intensity: Pursuant to the 2004 Bermuda Dunes Airport Land Use Compatibility Plan, the project site is located within Compatibility Zone E, which does not restrict residential density or non-residential intensity.

Prohibited and Discouraged Uses: The applicant does not propose any uses specifically prohibited or discouraged in Compatibility Zone E of the Bermuda Dunes Airport Influence Area.

Noise: The site is located below the 55 CNEL contour range from aircraft noise. Therefore, no special measures are required to mitigate aircraft-generated noise.

Part 77: The elevation of Runway 10-28 at its easterly terminus is approximately 49 feet above mean sea level (AMSL). At a distance of approximately 6,459 feet from the runway, FAA review would be required for any structures with top of roof exceeding 114 feet AMSL. The project's site elevation is 59 feet AMSL, and the maximum height of the existing building is 45 feet, for a maximum top point elevation of 104 feet AMSL. Therefore, review of the buildings for height/elevation reasons by the FAA Obstruction Evaluation Service (FAAOES) was not required.

Hazards to Flight: Land use practices that attract or sustain hazardous wildlife populations on or near airports significantly increase the potential of Bird Aircraft Strike Hazards (BASH). The FAA strongly recommends that storm water management systems located within 5,000 or 10,000 feet of the Airport Operations Area, depending on the type of aircraft, be designed and operated so as not to create above-ground standing water. To facilitate the control of hazardous wildlife, the FAA recommends the use of steep-sided, rip-rap lined, narrow, linearly shaped water detention basins. All vegetation in and around detention basins that provide food or cover for hazardous wildlife should be eliminated. (FAA Advisory Circular 5200-33C).

Although the nearest portion of the proposed project is located within 10,000 feet of the runway (approximately 6,459 feet), the project utilizes existing underground detention systems which will not contain surface water or attract wildlife and, therefore, would not constitute a hazard to flight.

Specific Plan Amendment: The applicant also proposes amending the Jefferson Square Specific Plan, creating two Planning Areas (PA1 and PA2) to allow the specific plan area to be developed as a mixed-use project, which includes the existing commercial development in PA1, and the residential uses (which will meet the Mixed-Use Overlay District density criteria of 12 to 24 dwelling units per acre) in PA2. The proposed amendments would be as, or more, consistent with the Compatibility Plan as the underlying compatibility zone does not restrict density or intensity.

CONDITIONS:

1. Any outdoor lighting installed shall be hooded or shielded to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.

2. The following uses shall be prohibited:

   (a) Any use or activity which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.

   (b) Any use or activity which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.

(c) Any use or activity which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses include landscaping utilizing water features, aquaculture, outdoor production of cereal grains, sunflower, and row crops, composting operations, wastewater management facilities, artificial marshes, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, and incinerators.)

(d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.

(e) Any use which results in a hazard to flight, including physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations.

3. The attached "Notice of Airport in Vicinity" shall be provided to all prospective purchasers and occupants of the property.

4. Any proposed stormwater basins or facilities shall be designed and maintained to provide for a maximum 48-hour detention period following the design storm, and remain totally dry between rainfalls. Vegetation in and around the basins that would provide food or cover for birds would be incompatible with airport operations and shall not be utilized in project landscaping. Trees shall be spaced so as to prevent large expanses of contiguous canopy, when mature. Landscaping in and around the basin(s) shall not include trees or shrubs that produce seeds, fruits, or berries.

   Landscaping in the stormwater basin, if not rip-rap, should be in accordance with the guidance provided in ALUC "LANDSCAPING NEAR AIRPORTS" brochure, and the "AIRPORTS, WILDLIFE AND STORMWATER MANAGEMENT" brochure available at RCALUC.ORG which list acceptable plants from Riverside County Landscaping Guide or other alternative landscaping as may be recommended by a qualified wildlife hazard biologist.

   A notice sign, in a form similar to that attached hereto, shall be permanently affixed to the stormwater basin with the following language: "There is an airport nearby. This stormwater basin is designed to hold stormwater for only 48 hours and not attract birds. Proper maintenance is necessary to avoid bird strikes". The sign will also include the name, telephone number or other contact information of the person or entity responsible to monitor the stormwater basin.

NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances [can vary from person to person. You may wish to consider what airport annoyances], if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. Business & Professions Code Section 11010 (b)(13)(A)

NOTICE

THERE IS AN AIRPORT NEARBY.

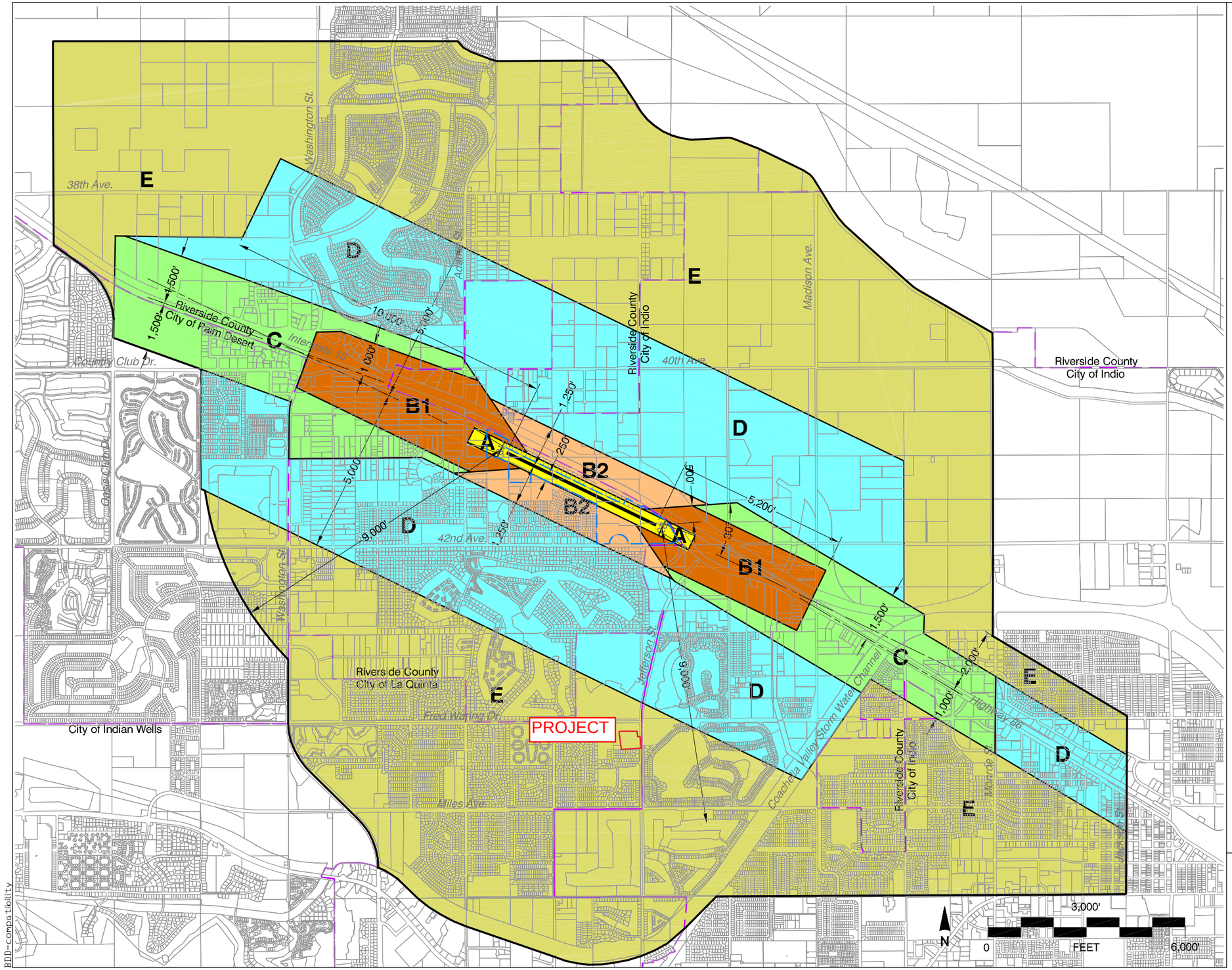
THIS STORM WATER BASIN IS DESIGNED TO HOLD STORM WATER FOR ONLY 48 HOURS AND NOT TO ATTRACT BIRDS

PROPER MAINTENANCE IS NECESSARY TO AVOID BIRD STRIKES

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION ALUC

IF THIS BASIN IS OVERGROWN, PLEASE CONTACT:

Name: _____ Phone: _____



Legend

Compatibility Zones

- Airport Influence Area Boundary
- Zone A
- Zone B1
- Zone B2
- Zone C
- Zone D
- Zone E

Boundary Lines

- Airport Property Line
- City Limits

Note

Southwestern edge of Airport Influence Area boundary measured from a point 200 feet beyond runway ends in accordance with FAA airspace protection criteria (FAR Part 77). All other dimensions measured from runway ends and centerlines.

See Chapter 2, Table 2A for compatibility criteria associated with this map.

Riverside County
Airport Land Use Commission

Riverside County
Airport Land Use Compatibility Plan
Policy Document

(Adopted December 2004)

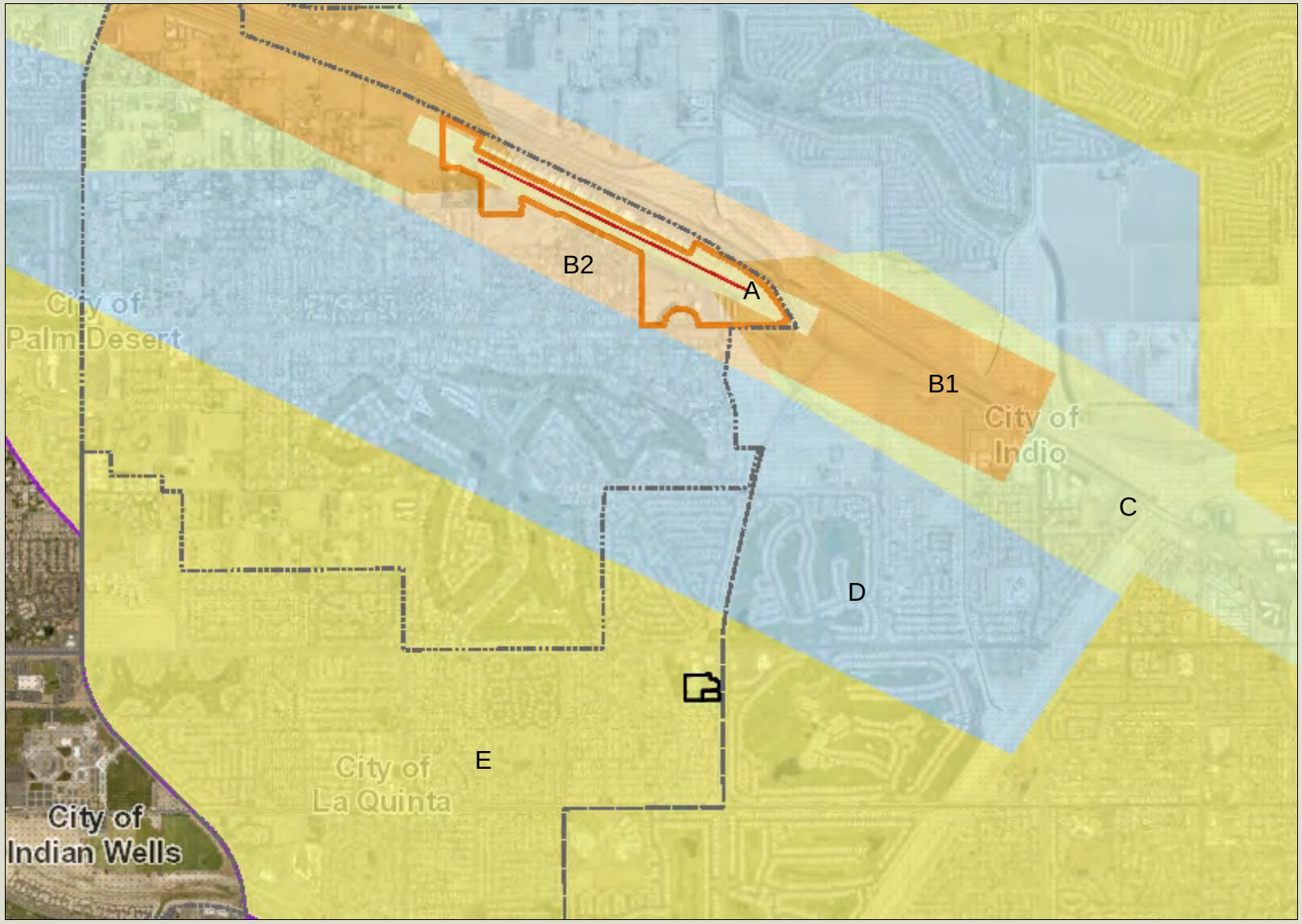
Map BD-1

Compatibility Map

Bermuda Dunes Airport

BDD-compatibility

Map My County Map



Legend

- Runways
- Airports
- Airport Influence Areas
- Airport Compatibility Zones
  - OTHER COMPATIBILITY ZONE
  - A
  - A-EXC1
  - B1
  - B1-APZ I
  - B1-APZ I-EXC1
  - B1-APZ II
  - B1-APZ II-EXC1
  - B1-EXC1
  - B2
  - B2-EXC1
  - C
  - C1
  - C1-EXC1
  - C1-EXC3
  - C1-EXC4
  - C1-HIGHT
  - C2
  - C2-EXC1
  - C2-EXC2
  - C2-EXC3
  - C2-EXC5
  - C2-EXC6

RCIT

0 3,079 6,157 Feet

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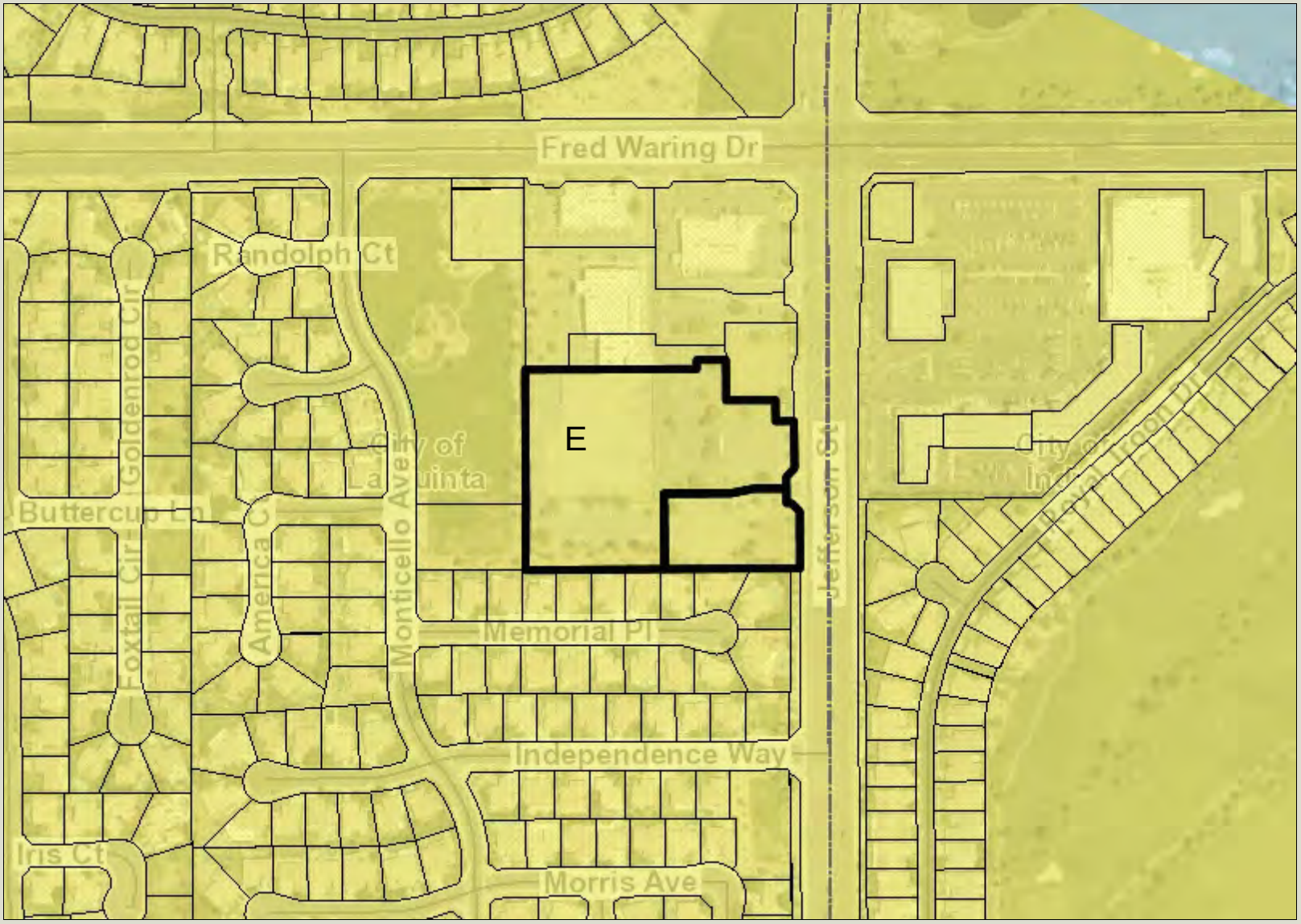
Notes

Map My County Map



Legend

- Parcels
- Runways
- Airports
- Airport Influence Areas
- Airport Compatibility Zones
  - OTHER COMPATIBILITY ZONE
  - A
  - A-EXC1
  - B1
  - B1-APZ I
  - B1-APZ I-EXC1
  - B1-APZ II
  - B1-APZ II-EXC1
  - B1-EXC1
  - B2
  - B2-EXC1
  - C
  - C1
  - C1-EXC1
  - C1-EXC3
  - C1-EXC4
  - C1-HIGHT
  - C2
  - C2-EXC1
  - C2-EXC2
  - C2-EXC3
  - C2-EXC5

0 385 770 Feet

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Notes

Map My County Map

Legend

- Parcels
- County Centerline Names
- County Centerlines
- Blueline Streams
- City Areas
- World Street Map

0 385 770 Feet

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Notes

Map My County Map

Legend

- Blueline Streams
- City Areas
- World Street Map

0 3,079 6,157 Feet

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Map My County Map

Legend

- County Centerline Names
- County Centerlines
- Blueline Streams
- City Areas
- World Street Map

0 1,539 3,079 Feet

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Map My County Map

Legend

- County Centerline Names
- County Centerlines
- Blueline Streams
- City Areas
- World Street Map

0 770 1,539 Feet

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Notes

VICINITY MAP

ABBREVIATIONS

&	AND
@	AT
	CENTERLINE
	DIAMETER
	PERPENDICULAR
#	POUND OR NUMBER
(E)	EXISTING
(N)	NEW
A.D.	AREA DRAIN
ADD'L	ADDITIONAL
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISH GRADE
AGGR	AGGREGATE
ALUM	ALUMINUM
APPROX	APPROXIMATE
APT	APARTMENT
ARCH	ARCHITECTURAL
ASPH	ASPHALT
A.S.W.	AREA SEPARATION WALL
BD	BOARD
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM
BOT	BOTTOM
BS	BOTH SIDES
BTWN	BETWEEN
BUR	BUILT-UP ROOFING
CAB	CABINET
CB	CATCH BASIN
CEM	CEMENT
CLG	CEILING
CLKG	CAULKING
CLO	CLOSET
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
CORR	CORRIDOR
CPT	CARPET
CTR	CENTER
DBL	DOUBLE
DET	DETAIL
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
DO	DOOR OPENING
DR	DOOR
DS	DOWNSPOUT
DWG	DRAWING

E	EAST
EA	EACH
EE	EMERGENCY EGRESS WINDOW
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATION
ENCL	ENCLOSURE
EP	ELECTRICAL PANEL BOARD
EQ	EQUAL
EQPT	EQUIPMENT
ES	EACH SIDE
EXT	EXTERIOR
EXH	EXHAUT
EW	EACH WAY
FA	FIRE ALARM
FAU	FORCED AIR UNIT
FD	FLOOR DRAIN
FDN	FOUNDATION
FE	FIRE EXTINGUISHER
FF	FINISH FLOOR
FG	FINISH GRADE
FIN	FINISH
FIXT	FIXTURE
FLR	FLOOR
FLUOR	FLUORESCENT
FOC	FACE OF CONCRETE
FOF	FACE OF FINISH
FOM	FACE OF MASONRY
FOS	FACE OF STUD/STRUCTURE
FR	FIRE RESISTIVE
FS	FINISH SURFACE
FT	FOOT OR FEET
FTG	FOOTING
FURR	FURRING
GA	GAUGE
GALV	GALVANIZED
GB	GRAB BAR
GD	GARBAGE DISPOSAL
GEN	GENERAL
GL	GLASS
GND	GROUND
GR	GRADE
G.S.M.	GALVANIZED SHEET METAL
GYP	GYPSUM
H	HIGH
HB	HOSE BIB
HC	HOLLOW CORE
HDR	HEADER
HDWD	HARDWOOD
HDWR	HARDWARE
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HP	HIGH POINT
HR	HOUR
HT	HEIGHT

IGN	IGNITION
INSUL	INSULATION
INT	INTERIOR
JT	JOINT
KIT	KITCHEN
LAM	LAMINATE
LAV	LAVATORY
LG	LONG
LP	LOW POINT
LS	LANDSCAPING
LT	LIGHT
MAX	MAXIMUM
MC	MEDICINE CABINET
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MR	MOISTURE RESISTANT
MTD	MOUNTED
MTL	METAL
N	NORTH
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
NO OR #	NUMBER
NTS	NOT TO SCALE
OA	OVERALL
OC	ON CENTER
OCC	OCCUPANCY
OFF	OFFICE
O.H.	OVERHANG
OPNG	OPENING
OPP. H.	OPPOSITE HAND
OZ	OUNCE
P-LAM	PLASTIC LAMINATE
PA	PLANTING AREA
PL	PLATE
PLAS	PLASTER
PLYWD	PLYWOOD
PR	PAIR
PT	PAINT
PTN	PARTITION
QT	QUARRY TILE

R	RISER
RAD	RADIUS
RD	ROOF DRAIN
REF	REFERENCE
REFR	REFRIGERATOR
REINF	REINFORCING/MENT
REQ	REQUIRED
RESIL	RESILIENT
RM	ROOM
RO	ROUGH OPENING
S	SOUTH
S.A.S.F.	
SC	SOLID CORE
SCHED	SCHEDULE
SECT	SECTION
SF	SQUARE FEET
SHT	SHEET
SIM	SIMILAR
SL	SLOPE
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STO	STORAGE
SUSP	SUSPENDED
SW	SWITCH
SYM	SYMMETRICAL
TEL	TELEPHONE
THK	THICK
TOC	TOP OF CURB
TP	TOP OF PAVEMENT
TOP	TOP OF PARAPET
TH	TOWNHOUSE
TRD	TREAD
TV	TELEVISION
TOW	TOP OF WALL
TYP	TYPICAL
UNF	UNFINISHED
UNO	UNLESS NOTED OTHERWISE
UR	URINAL
VB	VAPOR BARRIER
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD
VL	VALLEY LINE
W	WEST OR WIDE
W/	WITH
W/O	WITHOUT
WC	WATER CLOSET
WD	WOOD
WH	WATER HEATER
WP	WATERPROOF/ING
WPT	WORKING POINT
WR	WATER RESISTIVE
WT	WEIGHT

SYMBOL LEGEND

Symbol	Description
SECTION (BUILDING) — 1 / A-000	DETAIL NUMBER / SHEET WHERE FOUND
SECTION (WALL) — 1 / A0.00	DETAIL NUMBER / SHEET WHERE FOUND
BLDG. ELEVATION — 1 / A0.00	DETAIL NUMBER / SHEET WHERE FOUND
1 / A0.00	DETAIL / DETAIL NUMBER / SHEET WHERE FOUND
000	DOOR SYMBOL / HARDWARE HEADING-SEE SPECS / DOOR MARK- SEE SCHED.
1	WINDOW TYPE SYMBOL / HARDWARE HEADING-SEE SPECS
A	WALL TYPE INDICATOR
ROOM 100	ROOM NAME / ROOM NUMBER
	SPOT ELEVATION
2	REVISION
1	KEYNOTE
A B C D — 1 / A0.00	INTERIOR ELEVATION / DETAIL NUMBER / SHEET WHERE FOUND

PLANNING AND ZONING DATA

PLANNING AND ZONING DATA

ZONING DISTRICT	CN		
GENERAL PLAN LAND USE	NEIGHBORHOOD COMMERCIAL		
CURRENT SPECIFIC PLAN AREA	JEFFERSON SQUARE SPECIFIC PLAN SP2002-062, AMENDMENT NO. 2		
PROPOSED SPECIFIC PLAN AREA	PLANNING AREA 2, JEFFERSON SQ SPECIFIC PLAN SP2002-062, AMENDMENT NO. 3		
OVERLAY	MIXED USE OVERLAY	LQ MC 9.140.090	
SB 35 ELIGIBILITY	YES		
GROSS SITE AREA	222,529	SF	
	5.1	ACRE	
NET SITE AREA	222,529	SF	
	5.1	ACRE	
MINIMUM LOT AREA	43,560	SF	(1 ACRE, SP2002-062, AMT 03, TBL 6)
MAXIMUM LOT COVERAGE	133,517	SF	60% NET LOT AREA (SP2002-062, AMT 03, TBL 6)
LOT COVERAGE PROPOSED	**42,327**	**SF**	
DENSITY ALLOWED (FOR BONUS)	122.6	UNITS	MIN 12 DU/ACRE. MAX 24 DU/ACRE
DENSITY PROPOSED	**88**	**UNITS**	
	17.23	**DU / ACRE**	

SETBACKS (SP2002-062, AMT 03, TBL 6)

BUILDING SETBACKS

MIN BUILDING SETBACK FROM THE STREET RIGHT-OF-WAY. IN ADDITION TO THE REQUIRED LANDSCAPE SETBACK, THE BUILDING SETBACK MAY CONTAIN PARKING, DRIVEWAYS, AND SIMILAR FACILITIES.

	REQUIRED	PROPOSED
JEFFERSON ST	30'-0"	112'-3"
FRED WARING DR	30'-0"	451'-2"
INTERIOR PROPERTY LINES	0'-0"	0'-0"

LANDSCAPE SETBACKS

MINIMUM LANDSCAPED AREA FROM THE STREET RIGHT-OF-WAY. LANDSCAPE SETBACK SHALL CONSIST OF LANDSCAPED AREA WITHIN THE BUILDING SETBACK.

	REQUIRED	PROPOSED
JEFFERSON ST	15'-0"	16'-0"
FRED WARING DR	20'-0"	NA
OPEN SPACE/PARK DISTRICTS	5'-0"	9'-6"
RESIDENTIAL AREAS	15'-0"	20'-0"

HEIGHT AND STORIES (SP2002-062, AMT 03, TBL 6)

	ALLOWED	PROPOSED	
BUILDING HEIGHT	43'-9"	**43'-9"**	ARCH APPENDAGES ALLOWABLE UP TO 48'-0"
BUILDING STORIES	3	**3**	
HEIGHT WITHIN 150' OF JEFFERSON ST	28'-0"	**27'-7"**	ARCH APPENDAGES ALLOWABLE UP TO 36'-0"
STORIES WITHIN 150' OF JEFFERSON ST	2	**2**	
HEIGHT WITHIN 75' OF ADJ RESIDENTIAL	28'-0"	**27'-7"**	ARCH APPENDAGES ALLOWABLE UP TO 36'-0"
STORIES WITHIN 75' OF ADJ RESIDENTIAL	2	**2**	

OPEN SPACE SUMMARY

REQUIRED OPEN SPACE

(SP2002-062, AMT 03, TBL 6) MIN COMMON OPEN AREA: 20% NET PROJECT AREA, EXCLUDING PARKING AREA

NET ACREAGE		222,529	
PARKING AREA		95,561	SEE G0.03 FOR CALCULATION
TOTAL ACREAGE		126,968	
TOTAL REQUIRED OPEN SPACE	**20%**	**25,394**	**SF**

	BLDG 1	BLDG 2	BLDG 3	TOTAL	
PRIVATE OPEN SPACE					
TOTAL PRIVATE OPEN SPACE	**5,703**	**2,559**	**3,608**	**11,870**	(APPROX)

PROVIDED COMMON OPEN SPACE	AREA (SF)	% SITE AREA		
EXTERIOR COMMON OPEN SPACE	11,933			
INTERIOR COMMON OPEN SPACE	4,853			
ADDITIONAL LANDSCAPED AREA	22,192			
TOTAL COMMON OPEN AREA	**38,978**	**30.70%**	> 25,394	REQUIRED=OK

SEE G0.03 FOR CALCULATION

REQUIRED ACTIVE RECREATION AREA

(SP2002-062, AMT 03, TBL 6) MIN ACTIVE RECREATION AREA: 30% COMMON OPEN AREA

TOTAL COMMON OPEN AREA		38,978	
TOTAL REQ ACTIVE REC AREA	**30%**	**11,693**	**SF**

PROVIDED ACTIVE RECREATION AREA	AREA (SF)	% COMMON OPEN AREA		
TOTAL EXTERIOR ACTIVE REC AREA	11,933			
TOTAL INTERIOR ACTIVE REC AREA	2,464			
TOTAL PROVIDED ACTIVE RECREATION AREA	**14,397**	**36.94%**	> 11,693	REQUIRED=OK

* SEE G0.03 FOR OPEN SPACE DIAGRAMS AND CALCULATIONS

PARKING SUMMARY

(SP2002-062, AMT 03, TBL 6) MIN OFF-STREET PARKING REQUIREMENT

STUDIO AND 1-BR: 1 COVERED SPACE PLUS 0.5 GUEST SPACES PER UNIT

TWO- AND 3-BR: 2 COVERED SPACES PLUS 0.5 GUEST SPACES PER UNIT

FOUR OR MORE BR: 3 COVERED SPACES PLUS 0.5 COVERED SPACES PER EACH BR OVER THREE, PLUS 0.5 GUEST SPACES PER UNIT

COVERED RESIDENTIAL PARKING REQUIRED

UNIT TYPE	NUMBER OF UNITS	SPACES / UNIT	SPACES	
STUDIO	0	1.0	0	
1 BEDROOM	42	1.0	42	
2 BEDROOM	28	2.0	56	
3 BEDROOM	18	2.0	36	
TOTAL REQUIRED RESIDENTIAL PARKING SPACES			**134**	SPACES

GUEST PARKING REQUIRED

	NUMBER OF UNITS	SPACES / UNIT		
	88	0.5	44	
TOTAL REQUIRED GUEST PARKING SPACES			**44**	SPACES

ACCESSIBLE PARKING REQUIRED

RESIDENTIAL STALLS	2%	3	(ASSIGNED PARKING PER - CBC11A 1109A.4)
GUEST PARKING	5% (CBC 1109A.5)	3	
TOTAL REQUIRED ACCESSIBLE SPACES		**6**	SPACES
TOTAL PARKING REQUIRED		**178**	

PARKING PROVIDED:		
ACCESSIBLE SPACES	6	
COVERED RESIDENTIAL STALLS	134	SPACES
GUEST PARKING STALLS	44	
TOTAL PROVIDED RESIDENTIAL PARKING	**178**	**SPACES**

PROJECT DESCRIPTION

NEW CONSTRUCTION OF MULTIFAMILY APARTMENTS AND TOWNHOMES, APPROXIMATELY 88 UNITS WITH AT-GRADE VEHICLE PARKING. OCCUPANCY R-2, TYPE V CONSTRUCTION WITH AUTOMATIC SPRINKLER SYSTEM (NFPA 13). FIRE ALARM SYSTEM PER CODE THROUGH ALL BUILDINGS. BUILDING 1 WILL BE A SLAB ON GRADE 3 STORY APARTMENT BUILDING OF APPROXIMATELY 70 UNITS. BUILDING 2 WILL CONSIST OF 10 SLAB ON GRADE 3-STORY TOWNHOMES. BUILDING 3 WILL CONSIST OF 8 SLAB ON GRADE 2-3 STORY TOWNHOMES.

THIS PROPERTY IS 100% PRIVATELY FUNDED. THIS IS NOT PUBLIC HOUSING. THERE IS NO TAX CREDIT RECEIVED.

LOT SUMMARY

PROJECT ADDRESS	44155 JEFFERSON ST, LA QUINTA, CA 92253
APN	604-521-013, 014
LOT SIZE	222,529 SF
ZONING DISTRICT	CN
GENERAL PLAN LAND USE	NEIGHBORHOOD COMMERCIAL
CURRENT SPECIFIC PLAN AREA	JEFFERSON SQUARE SPECIFIC PLAN SP2002-062, AMENDMENT NO. 2
PROPOSED SPECIFIC PLAN AREA	PA2, JEFFERSON SQUARE SPECIFIC PLAN SP2002-062, AMENDMENT NO. 3
OVERLAY	MIXED USE OVERLAY LQ MC 9.140.090
EXISTING USE	COMMERCIAL PARKING LOT / VACANT LAND
PROPOSED USE	MULTIFAMILY RESIDENTIAL APARTMENTS & TOWNHOMES

PROJECT INFORMATION

DESCRIPTION	MULTIFAMILY APARTMENTS AND TOWNHOMES
OCCUPANCY	RESIDENTIAL = R-2 (APARTMENTS)
CONSTRUCTION	TYPE-V

LOT AREA BY USE SUMMARY

	SF	% SITE AREA
BUILDING AREA (GROSS)	46,047	20.7%
PRIVATE OPEN SPACE (1ST FLR)	4,328	1.94%
PARKING AREA	95,561	42.9%
EQUIPMENT AREA	755	0.34%
LANDSCAPE AREA	75,825	34.1%
TOTAL PROJECT AREA	**222,529**	**100.0%**

SEE SHEET G0.03 FOR AREA CALCULATIONS

LOT COVERAGE

MAXIMUM LOT COVERAGE

(SP2002-062, AMT 03, TBL 6) MAXIMUM LOT COVERAGE: 60% NET LOT AREA

NET LOT AREA			222,529		
MAXIMUM LOT COVERAGE		**60%**	**133,517 SF**		
LOT COVERAGE	SF	% SITE AREA			
BUILDING AREA (GROSS)	46,047				
ENCLOSED PATIOS	2,083				
CARPORTS	19,015				
EQUIPMENT & TRASH ENCLOSURES	755				
TOTAL LOT COVERAGE	**67,900**	**30.5%**	<	133,517	REQUIRED=OK

SEE G0.03 FOR LOT COVERAGE DIAGRAMS AND DETAILED AREA BY USE CALCULATIONS

BUILDING AREA BY FLOOR (FAR)

	BLDG 1	BLDG 2	BLDG 3	TOTAL
1ST FLOOR	26,145	8,164	8,018	42,327
2ND FLOOR	27,740	8,476	7,740	43,956
3RD FLOOR	27,740	8,476	1,618	37,834
ACTUAL BUILDING AREA	**81,625**	**25,116**	**17,376**	**124,117**

BUILDING AREA BY USE

(SP2002-062, AMT 03, TBL 6) MIN LIVABLE AREA: 600 SF

UNIT SUMMARY

TYPE	QTY	SF	TOTAL SF	%
B1 (1 BED + 1 BATH)	24	696	16,704	27%
B2 (1 BED + 1 BATH)	18	741	13,338	20%
C1 (2 BED + 2 BATH)	20	1,050	21,000	23%
C2 (2 BED + 2 BATH)	6	1,203	7,218	7%
C3 (2 BED + 2 BATH)	2	1,195	2,390	2%
D1 (3 BED + 3.5 BATH) 3 STORY TOWNHOUSE	4	2,495	9,980	5%
D2 (3 BED + 3.5 BATH) 3 STORY TOWNHOUSE	4	2,502	10,008	5%
D3 (3 BED + 3 BATH) 3 STORY TOWNHOUSE	2	2,564	5,128	2%
D4 (3 BED + 3.5 BATH) 3 STORY TOWNHOUSE	2	2,379	4,758	2%
D5 (3 BED + 3.5 BATH) 2 STORY TOWNHOUSE	6	2,103	12,618	7%
TOTAL	**88**	**1,172**	**103,142**	**100%**
NET UNIT FLOOR AREA				**103,142**

MAIN LOBBY	888
REAR LOBBY	474
UPPER ELEVATOR LOBBIES	1,008
CORRIDORS (1-3 FLOORS)	15,969
MAILROOM	264
OFFICE	262
CO WORKING	747
COMMUNITY ROOM	1,339
GYM	1,125
ELECTRICAL ROOM	470
POOL EQUIPMENT RM	376
BIKE PARKING - FIRST	280
TRASH (1-3 FLOORS)	531
UTILITY (1-3)	195
ELEVATOR EQUIPMENT RM (ROOF)	200
TOTAL COMMON FLOOR AREA	**24,128**
TOTAL PROJECT SF	**127,270**

PROJECT TEAM

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1844 CAMINO DEL MAR #11
DEL MAR, CA 92014
CONTACT: OMAR HUSSEIN
PHONE: 214.923.3246

PROJECT MANAGER: GO URBAN DEVELOPMENT
ONE WORLD TRADE CTR, 8TH FLR
LONG BEACH, CA 90831
CONTACT: LUIS GOMEZ
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ARCHITECT: AERO COLLECTIVE
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CONTACT: ANDREW CRANE
PHONE: 323.553.2376

SURVEYOR: DRC ENGINEERING, INC
160 S. OLD SPRINGS RD, STE 210
ANAHEIM HILLS, CA 92808
CONTACT: RENÈ VARGA
PHONE: 714.685.6860

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TUSTIN, CA 92780
CONTACT: ALEX POLEN
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LIGHTING CONSULTANT: FIRST CIRCLE DESIGN INC.
3187 AIRWAY AVE, BLDG C
COSTA MESA, CA 92626
CONTACT: MATT LEVESQUE
PHONE: 949.681.0500

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	CITY SUBMITTAL	12/15/2022

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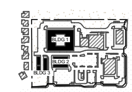
KEY PLAN



Project Info & Index

ISSUE DATE 12/15/2022

G0.01

9. NE Corner of North Shopping Plaza (Parcels 3 & 5)

6. SW Property Line Facing East (Parcel 6 / Proposed Bldg 1)

3. Jefferson Street Facing West

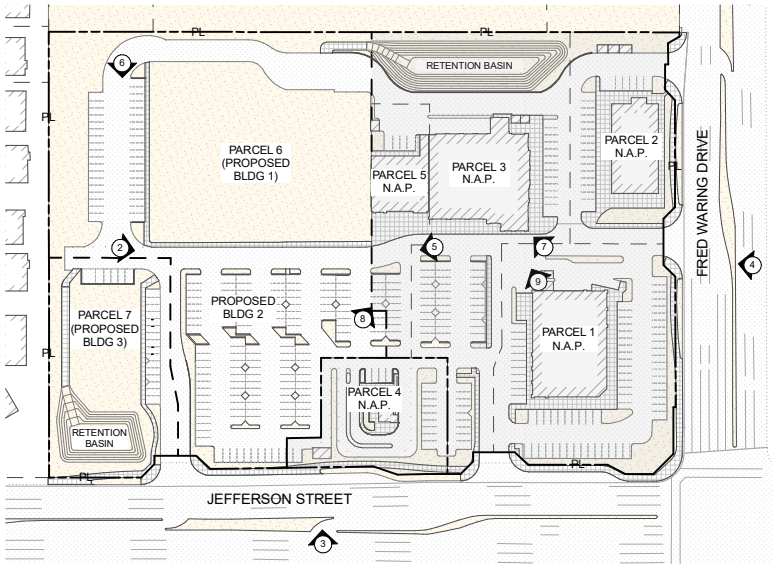
8. SE Corner of North Shopping Plaza (Parcels 3 & 5)

5. Facing South (Parcels 5, 6 & Proposed Bldg 2)

2. South Property Line Facing North (Parcels 6 & 7)

7. Facade of North Shopping Plaza (Parcels 3 & 5)

4. Fred Waring Drive Facing South



Key Plan 1

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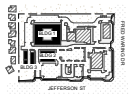
KEY PLAN



Site Photos

ISSUE DATE 12/15/2022

G0.02

LOT COVERAGE

MAXIMUM LOT COVERAGE

(SP2002-062, AMT 03, TBL 6) MAXIMUM LOT COVERAGE: 60% NET LOT AREA

LOT COVERAGE MEANS THE CUMULATIVE GROUND FLOOR AREA OF THE STRUCTURES ON A LOT EXPRESSED AS A PERCENTAGE OF THE NET LOT AREA.

FOR PURPOSES OF THIS DEFINITION, "GROUND FLOOR AREA" MEANS ALL ENCLOSED AREA WITHIN THE GROUND FLOOR OF A STRUCTURE, INCLUDING EXTERIOR WALLS AND MECHANICAL SPACES. CARPORTS, GARAGES, ACCESSORY BUILDINGS AND PARKING STRUCTURES ARE INCLUDED IN GROUND FLOOR AREA BUT SWIMMING POOLS AND UNENCLOSED POST-SUPPORTED ROOFS OVER PATIOS AND WALKWAYS ARE NOT INCLUDED AND "NET LOT AREA" MEANS THE HORIZONTAL LAND AREA WITHIN A LOT EXPRESSED IN SQUARE FEET, ACRES, OR OTHER AREA MEASUREMENT.

NET LOT AREA		222,529	
MAXIMUM LOT COVERAGE	**60%**	**133,517**	**SF**

LOT COVERAGE	AREA (SF)	% SITE AREA		
BUILDING AREA (GROSS)	46,047	20.7%		
ENCLOSED PATIOS	2,083	0.9%		
CARPORTS	19,015	8.5%		
EQUIPMENT & TRASH ENCLOSURES	755	0.3%		
TOTAL LOT COVERAGE	**67,900**	**30.5%**	< 133,517	REQUIRED=OK

SEE G0.03 FOR LOT COVERAGE DIAGRAMS AND DETAILED AREA BY USE CALCULATIONS

LOT AREA BY USE CALCULATIONS

BUILDING AREA (GROSS)	AREA (SF)	% SITE AREA
BLDG 1	29,182	13.1%
BLDG 2	8,358	3.8%
BLDG 3	8,507	3.8%
TOTAL BUILDING AREA	**46,047**	**20.7%**

PARKING AREA	AREA (SF)	% SITE AREA
COVERED PARKING		
CARPORT A	3,189	
CARPORT B	3,022	
CARPORT C	3,547	
CARPORT D	545	
CARPORT E	4,076	
CARPORT F	2,489	
CARPORT G	2,147	
TOTAL COVERED PARKING	19,015	8.5%
UNCOVERED PARKING & DRIVE AISLE		
PARKING (A)	21,260	
PARKING (B)	31,145	
TOTAL UNCOVERED PARKING	52,405	23.5%
INTERIOR STREETS	24,141	10.8%
TOTAL PARKING AREA	**95,561**	**42.9%**

EQUIPMENT AREA	AREA (SF)	% SITE AREA
EQUIP (A)	228	0.10%
EQUIP (B)	228	0.10%
TRASH ENCLOSURE	299	0.13%
TOTAL EQUIPMENT AREA	755	0.34%

PRIVATE OPEN SPACE AREA (1ST FLOOR)	AREA (SF)	% SITE AREA
BLDG 1	1,921	0.86%
BLDG 2	853	0.38%
BLDG 3	1,554	0.70%
TOTAL PRIVATE OPEN SPACE (1ST FLOOR)	**4,328**	**1.94%**

LANDSCAPE AREA		
OPEN AREAS	AREA (SF)	% SITE AREA
COURTYARD	7,782	
PLAZA	1,904	
DOG RUN	2,247	
RETENTION BASIN	7,482	
OPEN SPACE (A)	11,867	
OPEN SPACE (B)	2,843	
TOTAL OPEN AREAS	34,125	15.3%
ADDITIONAL LANDSCAPED AREAS (INCLUDING LANDSCAPE SETBACKS)		
SITE LANDSCAPE (A)	14,403	
SITE LANDSCAPE (B)	12,404	
SITE LANDSCAPE (C)	6,402	
SITE LANDSCAPE (D)	8,491	
TOTAL ADDITIONAL AREA	41,700	18.7%
TOTAL LANDSCAPE AREA	**75,825**	**34.1%**

TOTAL PROJECT AREA	**222,529**	**100.0%**

OPEN AREA CALCULATIONS

REQUIRED OPEN AREA

(SP2002-062, AMT 03, TBL 6) MIN COMMON OPEN AREA: 20% NET PROJECT AREA

COMMON OPEN AREA EQUALS PERCENT OF NET PROJECT AREA. COMMON OPEN AREA SHALL CONSIST OF PASSIVE LANDSCAPED AND ACTIVE RECREATION AREA.

RIGHTS-OF-WAY, PARKING AREAS, PRIVATE PATIOS, PRIVATE YARDS AND SLOPES STEEPER THAN TWENTY PERCENT (20%) SHALL NOT COUNT TOWARD THE COMMON OPEN AREA REQUIREMENT.

"NET PROJECT AREA" MEANS ALL OF THE LAND AREA INCLUDED WITHIN A DEVELOPMENT PROJECT EXCEPTING THOSE AREAS WHICH ARE DESIGNATED AS PRIMARY DRIVEWAYS, DRIVE AISLES, PARKING AREAS, STORMWATER RETENTION SYSTEM (ABOVE AND UNDERGROUND), PUBLIC PARKS, AND OTHER USES OR EASEMENTS WHICH PRECLUDE THE USE OF THE LAND THEREIN AS PART OF THE DEVELOPMENT PROJECT.

NET ACREAGE		222,529	
PARKING AREA (SEE BELOW FOR CALCULATION)		95,561	SEE "PARKING AREA" ON THIS SHEET FOR CALC
TOTAL ACREAGE		126,968	
TOTAL REQUIRED OPEN AREA	**20%**	**25,394**	**SF**

	BLDG 1	BLDG 2	BLDG 3	TOTAL	
PROVIDED PRIVATE OPEN SPACE					
1ST FLOOR	1,921	853	1,554	4,328	
2ND FLOOR	1,891	853	1,554	4,298	(APPROX)
3RD FLOOR	1,891	853	500	3,244	(APPROX)
TOTAL PRIVATE OPEN SPACE	**5,703**	**2,559**	**3,608**	**11,870**	(APPROX)

PROVIDED COMMON OPEN SPACE				
EXTERIOR COMMON OPEN SPACE	AREA (SF)			
COURTYARD	7,782			
PLAZA	1,904			
DOG RUN	2,247			
INTERIOR COMMON OPEN SPACE				
GYM	1,125			
COMMUNITY ROOM	1,339			
EAST LOBBY	888			
WEST LOBBY	474			
BIKE ROOM	280			
COWORKING SPACE	747			
ADDITIONAL LANDSCAPED AREA				
RETENTION BASIN	7,482			
SITE LANDSCAPE (SEE LANDSCAPE AREA)	14,710	SEE "LANDSCAPE AREA" ON THIS SHEET FOR CALC		
TOTAL COMMON OPEN AREA	**38,978**	**30.70%**	> 25,394	REQUIRED=OK

* SEE G0.03 FOR OPEN SPACE DIAGRAMS

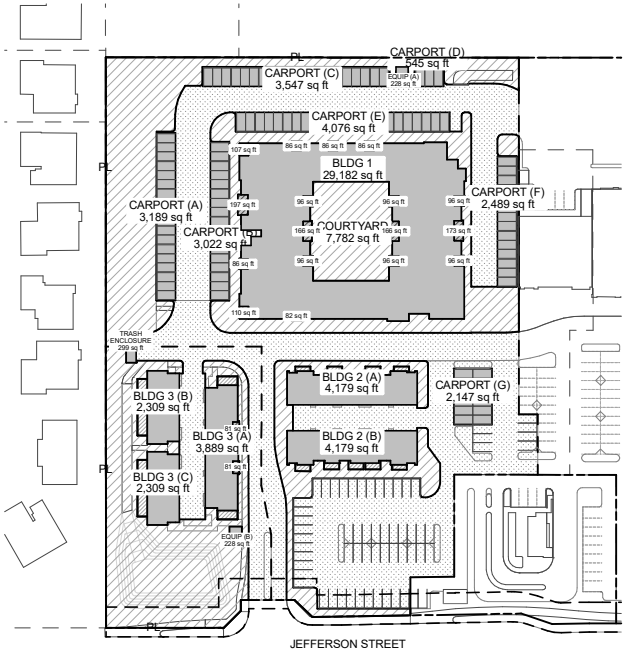
REQUIRED ACTIVE RECREATION AREA

(SP2002-062, AMT 03, TBL 6) MIN ACTIVE RECREATION AREA: 30% COMMON OPEN AREA

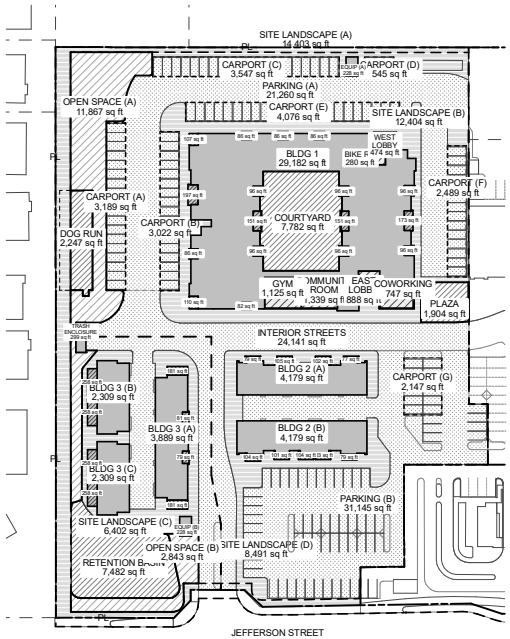
ACTIVE RECREATION AREA EQUALS THE PERCENT OF COMMON OPEN AREA SUITABLE FOR ACTIVE RECREATIONAL USES SUCH AS: SWIMMING POOL, SPA AND RELATED FACILITIES; CLUBHOUSE; TOT LOT WITH PLAY EQUIPMENT; COURT GAME FACILITIES SUCH AS TENNIS, BASKETBALL OR RACQUETBALL; IMPROVED SOFTBALL OR OTHER PLAYFIELDS; OR SIMILAR FACILITIES FOR ACTIVE RECREATIONAL USE.

TOTAL COMMON OPEN AREA		38,978	
TOTAL REQ ACTIVE RECREATION AREA	**30%**	**11,693**	**SF**

PROVIDED ACTIVE RECREATION AREA				
EXTERIOR REC AREA				
COURTYARD	7,782			
PLAZA	1,904			
DOG RUN	2,247			
INTERIOR REC AREA				
GYM	1,125			
COMMUNITY ROOM	1,339			
TOTAL PROVIDED ACTIVE REC AREA	**14,397**	**36.94%**	> 11,693	REQUIRED=OK



Lot Coverage Diagram 2
SCALE: 1" = 50'



Open Space Diagram 1
SCALE: 1" = 50'

LEGEND

- LANDSCAPE (SITE)
- LANDSCAPE (BUILDING)
- DESIGNED OPEN SPACE (EXTERIOR)
- DESIGNED OPEN SPACE (INTERIOR)
- PRIVATE BALCONIES / PATIOS
- PARKING AND INTERIOR STREETS
- BUILDINGS AND EQUIPMENT

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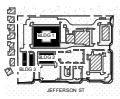
CITY SUBMITTAL		12/15/2022

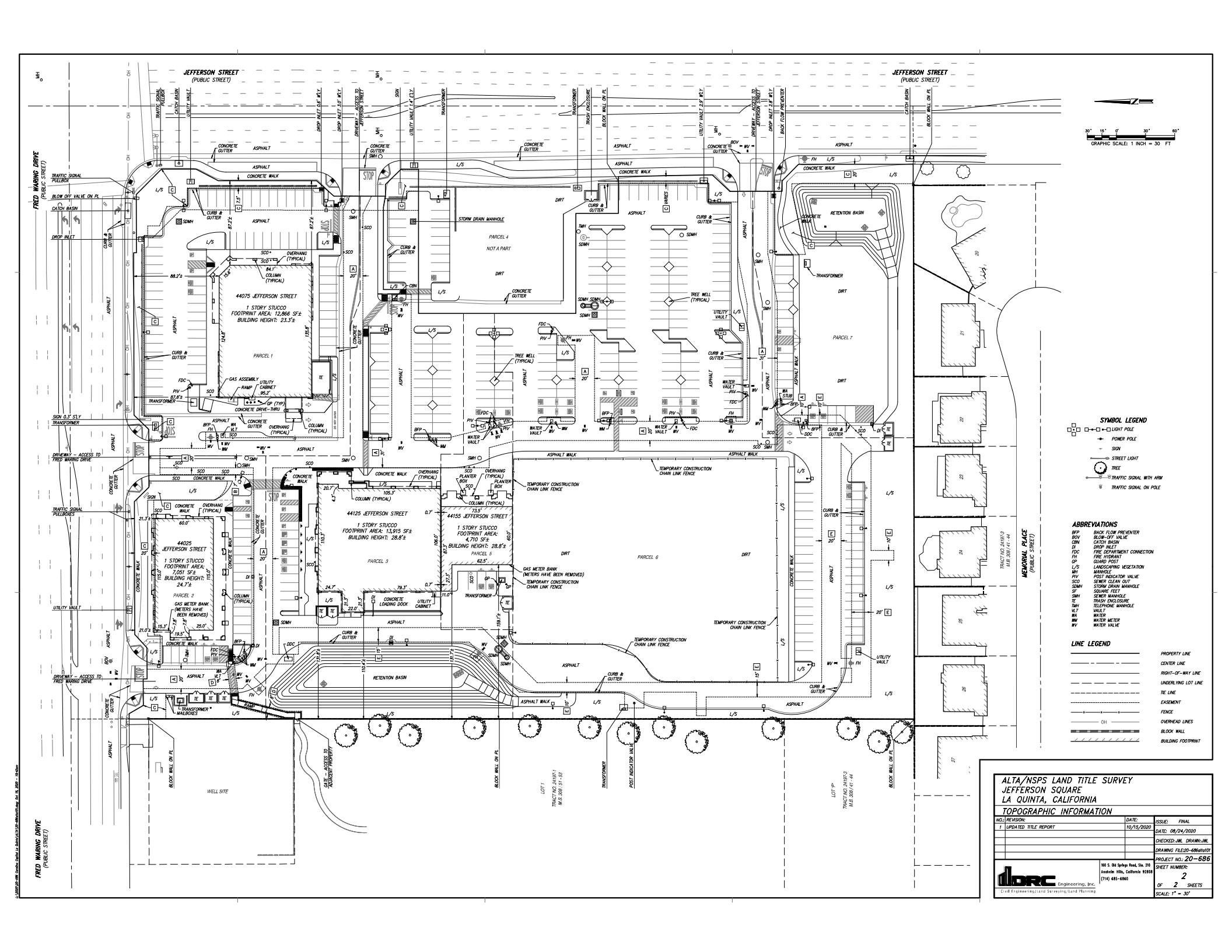
KEY PLAN



Diagrams

ISSUE DATE 12/15/2022

G0.03



SYMBOL LEGEND

- LIGHT POLE
- POWER POLE
- SIGN
- STREET LIGHT
- TREE
- TRAFFIC SIGNAL WITH ARM
- TRAFFIC SIGNAL ON POLE

ABBREVIATIONS

BFP	BACK FLOW PREVENTER
BOV	BLOW-OFF VALVE
CBN	CATCH BASIN
DI	DROP INLET
FDC	FIRE DEPARTMENT CONNECTION
FH	FIRE HYDRANT
GP	GUARD POST
L/S	LANDSCAPING VEGETATION
MH	MANHOLE
PIV	POST INDICATOR VALVE
SCO	SEWER CLEAN OUT
SDMH	STORM DRAIN MANHOLE
SF	SQUARE FEET
SMH	SEWER MANHOLE
TE	TRASH ENCLOSURE
TMH	TELEPHONE MANHOLE
VLT	VAULT
WA	WATER
WM	WATER METER
WV	WATER VALVE

LINE LEGEND

- PROPERTY LINE
- CENTER LINE
- RIGHT-OF-WAY LINE
- UNDERLYING LOT LINE
- TIE LINE
- EASEMENT
- FENCE
- OVERHEAD LINES
- BLOCK WALL
- BUILDING FOOTPRINT

ALTA/NSPS LAND TITLE SURVEY
JEFFERSON SQUARE
LA QUINTA, CALIFORNIA
TOPOGRAPHIC INFORMATION

NO.:	REVISION:	DATE:
1	UPDATED TITLE REPORT	10/15/2020

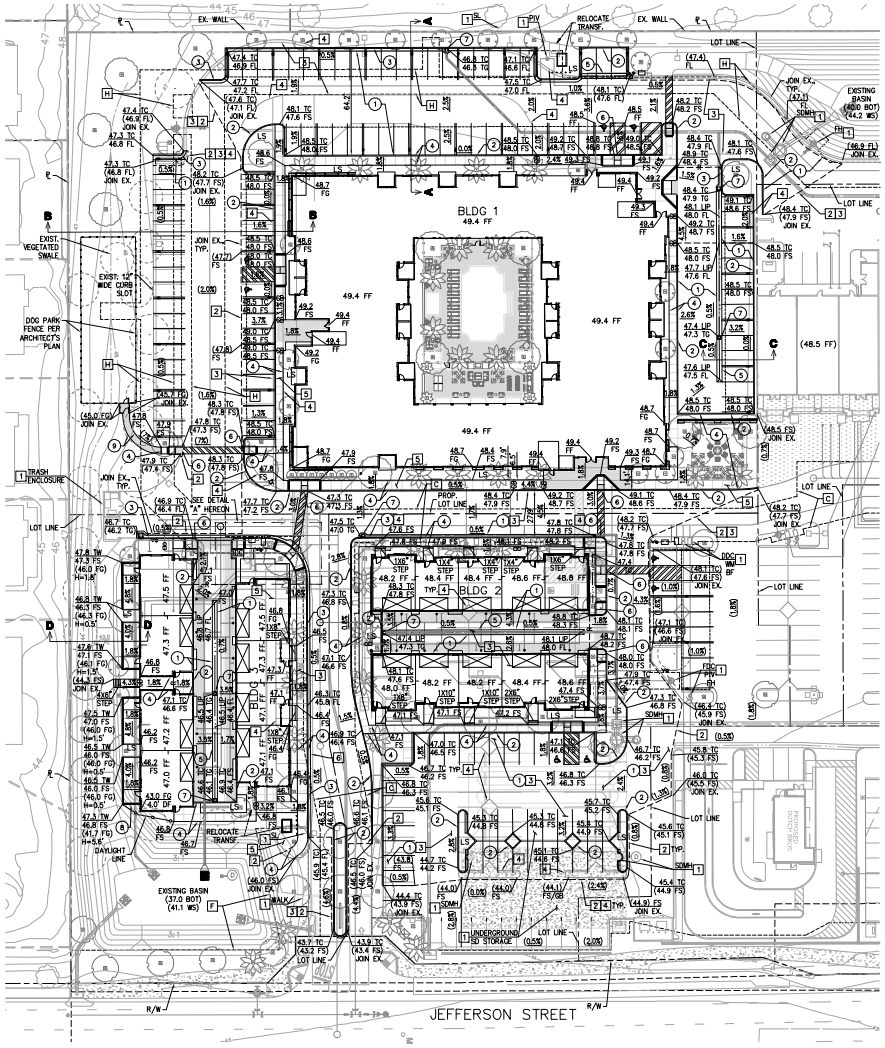
ISSUE: FINAL
DATE: 08/24/2020
CHECKED: JML DRAWN: JML
DRAWING FILE: 20-686ata101
PROJECT NO.: 20-686
SHEET NUMBER: 2 OF 2 SHEETS
SCALE: 1" = 30'

DRC Engineering, Inc.
Civil Engineering/Land Surveying/Land Planning
760 S. Old Springs Road, Ste. 210
Anaheim Hills, California 92808
(714) 685-6860

PRELIMINARY GRADING PLAN

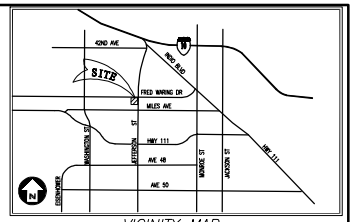
SWC OF JEFFERSON AVE AND FRED WARING DR.

LA QUINTA, CALIFORNIA



LEGEND:

PROPERTY LINE	AC ASPHALT CONCRETE
PROPOSED LOT LINES	BLDG BUILDING
CENTER LINE	BF BACKFLOW PREVENTER
ADJACENT LOT LINES	CB CATCH BASIN
EASEMENT	CF CURB FACE
CURB LINE	C&G CURB & GUTTER
CURB AND GUTTER	CL CENTERLINE
EDGE OF PAVEMENT	CO CLEANOUT
EXISTING RETAINING WALL	CONC CONCRETE
CHAIN LINK FENCE	DF DEEPENED FOOTING
SAWCUT LINE	DG DECOMPOSED GRANITE
RIDGE LINE	EX. EXISTING
RETAINING WALL	FF FINISHED FLOOR
PROPOSED STORMDRAIN	FG FINISHED GRADE
EXISTING STORMDRAIN	FH FIRE HYDRANT
EXISTING SEWER LINE	FL FLOW LINE
EXISTING WATER LINE	FS FINISHED SURFACE
FIRE HYDRANT	GB GRADE BREAK
CB CATCH BASIN	LS LANDSCAPE AREA
SDMH STORMDRAIN MANHOLE	LIP LIP OF GUTTER
SWMH SANITARY SEWER MANHOLE	NAP NOT A PART
SWCO SANITARY SEWER CLEANOUT	P. & P/L PROPERTY LINE
66.00 TC 65.50 FL PROPOSED ELEVATIONS	PROP. PROPOSED
(66.66 TC) (65.00 FL) EXISTING ELEVATIONS	POC POINT OF CONNECTION
SLOPE OF GRADE	PVMT PAVEMENT
FDC, PIV, & DCDA	R RIDGE
WATER METER/BACKFLOW PREVENTER	RET RETAINING
	R/W RIGHT OF WAY
	SD STORM DRAIN
	SDMH STORMDRAIN MANHOLE
	SWMH SEWER MANHOLE
	STD STANDARD
	SW SEWER
	TC TOP OF CURB
	TG TOP OF GRATE
	TRANSF. TRANSFORMER
	TYP. TYPICAL
	WM WATER METER



VICINITY MAP
N.T.S.

APPLICANT
GO URBAN DEVELOPMENT
130 PINE AVE, SUITE 203
LONG BEACH, CA 90802
TEL: (562) 805-3360
CONTACT: LUIS GOMEZ

PRELIMINARY EARTHWORK

CUT:	1,180 CY
OVER-EXCAVATION:	1,960 CY
IMPORT/FILL:	1,710 CY
NET EXPORT:	1,430 CY

APN NUMBERS:
604-521-013
604-521-014

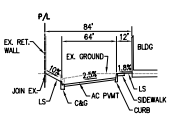
LEGAL DESCRIPTION:
PARCEL 6 AND 7 OF PARCEL MAP NO. 36241 IN THE CITY OF LA QUINTA, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA RECORDED IN BOOK 235, PAGES 1 TO 7 INCLUSIVE, OF PARCEL MAPS IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

FLOOD ZONE
THE LAND SHOWN ON THIS SURVEY LIES WITHIN FLOOD ZONE "X" (UNSHADED), BEING AN AREA DETERMINED TO BE OUTSIDE 500-YEAR FLOOD PLAIN PER FLOOD INSURANCE RATE MAP (FIRM) – COMMUNITY PANEL NUMBER 06065C2232G DATED AUGUST 28, 2008.

UTILITY PURVEYORS

SEWER & WATER	COACHELLA VALLEY WATER DISTRICT	(760) 398-2651
ELECTRIC	IMPERIAL IRRIGATION DISTRICT	(760) 303-7756
	SOUTHERN CALIFORNIA EDISON	(760) 202-4291
GAS	THE GAS COMPANY	(800) 427-2200
TELEPHONE	VERIZON	(800) 483-5000
CABLE	TIME WARNER CABLEVISION	(760) 340-1312

BASIS OF BEARINGS
THE BEARINGS SHOWN HEREON ARE BASED ON THE BEARING OF JEFFERSON STREET HAVING A BEARING OF NORTH 00°30'29" WEST, AS SHOWN ON THE MAP OF TRACT No. 24197-3, RECORDED IN BOOK 308, PAGES 41-44 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF RIVERSIDE COUNTY.



SECTION A-A
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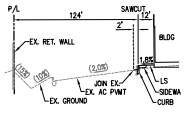

SECTION B-B
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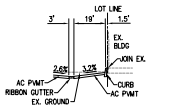
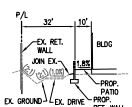


SECTION C-C
N.T.S.



SECTION D-D
N.T.S.

DEMOLITION NOTES:
1. PROTECT IN PLACE/ADJUST TO GRADE (ITEM PER PLAN)
2. SAWCUT EXISTING PAVEMENT
3. REMOVE EXISTING PAVEMENT
4. REMOVE EXISTING CURB/CURB & GUTTER/REDWOOD HEADER
5. REMOVE EXISTING SIDEWALK
6. REMOVE EXISTING RIBBON GUTTER
7. REMOVE EXISTING SIGN

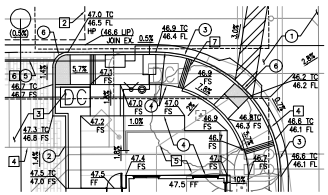
*FOR UTILITY RELOCATION SEE PRELIMINARY UTILITY PLAN

GRADING CONSTRUCTION NOTES:
1. CONSTRUCT AC PAVEMENT
2. CONSTRUCT 6" CURB
3. CONSTRUCT 6" CURB AND GUTTER
4. CONSTRUCT SIDEWALK
5. CONSTRUCT 3' WIDE RIBBON GUTTER
6. CONSTRUCT CURB RAMP
7. CONSTRUCT 18"X18" GRATE INLET
8. CONSTRUCT RETAINING WALL
9. CONSTRUCT DECOMPOSED GRANITE PATHWAY PER ARCHITECT'S PLAN

EASEMENT NOTES:
C — EASEMENT FOR PIPELINES AND INCIDENTAL PURPOSES DEDICATED IN FAVOR OF THE COACHELLA VALLEY WATER DISTRICT, RECORDED AUGUST 12, 2008 AS INSTRUMENT NO. 2008-0443679 ON PARCEL MAP 36241, PMB 235, PGS 1-7

F — EASEMENT FOR LANDSCAPE AND SIDEWALK PURPOSES DEDICATED TO THE CITY OF LA QUINTA RESERVING TO THE OWNER OF THE LAND INCLUDED WITHIN THE SUBDIVISION THE RIGHT TO MAKE MINOR CHANGES TO THIS EASEMENT, AT ITS SOLE COST, RECORDED ON PARCEL MAP 36241, PMB 235, PGS 1-7

H — EASEMENT FOR WATER AND ACCESS PURPOSES DEDICATED TO THE CITY OF LA QUINTA ON PARCEL MAP 36241, PMB 235, PGS 1-7 (TO BE QUITCLAIMED BY CITY OF LA QUINTA), FIRE WATER LINE SHALL BE ON-SITE PRIVATE AND NO NEW EASEMENT DEDICATION IS REQUIRED.



DETAIL 'A'
SCALE: 1" = 10'

GRAPHIC SCALE: 1"=30'

160 S. Old Springs Road
Suite 210
Anaheim Hills, CA 92808
714-685-6860
Civil Engineering/Land Surveying/Land Planning

NOT FOR CONSTRUCTION

NO.	REVISION:	DATE:

PROJECT: **JEFFERSON SQUARE**
SWC FRED WARING DR. & JEFFERSON ST.
LA QUINTA, CA
DRAWING NAME: **PRELIMINARY GRADING PLAN**

ISSUE:	PRELIM.
DATE:	12/01/22
CHECKED: RV	DRAWN: DG
DRAWING FILE:	21177eg101
PROJECT NO.:	21-177
SHEET NUMBER:	1
OF	1 SHEETS
SCALE:	AS SHOWN

FILENAME: M:\2021\21-177 Go Urban La Quinta Jackson Sq\21177 C0101.dwg, LAST SAVED: Dec. 01 2022 11:04am PLOTTED BY: DAN K. Dec. 01 2022 1:23pm, CPD

AERO COLLECTIVE
209 S MARKET ST
INGLEWOOD, CA 90301
323.553.2376

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GO URBAN DEVELOPMENT, LUIS GOMEZ, ONE WORLD TRADE CTR 8TH FLR LONG BEACH CA 90831

CONSULTANT:

FLORA
44155 JEFFERSON ST
LA QUINTA,CA 92253
22006

12/15/2022
SITE DEVELOPMENT PERMIT

STAMP:

NOT FOR CONSTRUCTION

NO.	ISSUE/REVISIONS	DATE
CITY SUBMITTAL		12/15/2022

KEY PLAN

Preliminary Grading Plan

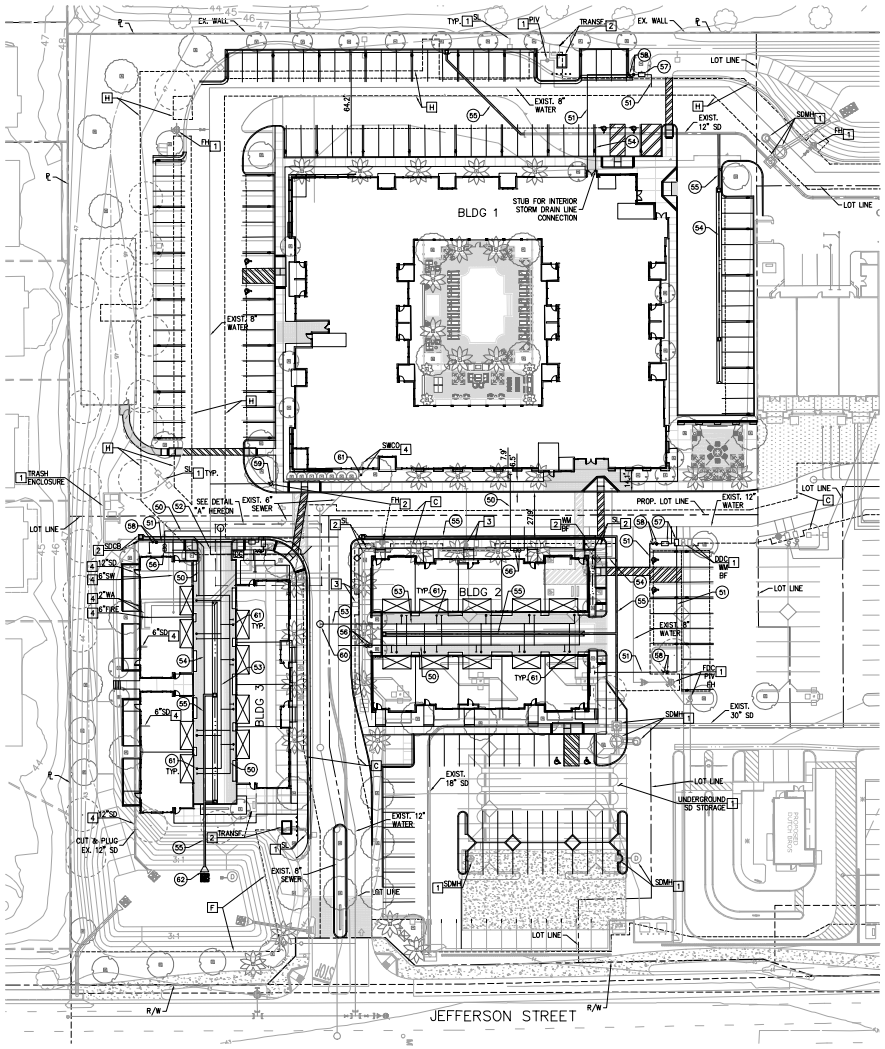
ISSUE DATE 12/15/2022

C1.10

PRELIMINARY UTILITY PLAN

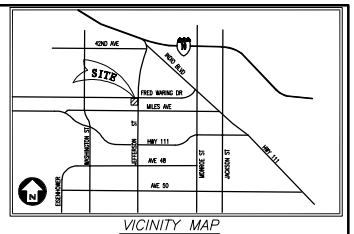
SWC OF JEFFERSON AVE AND FRED WARING DR.

LA QUINTA, CALIFORNIA



LEGEND:

PROPERTY LINE	BLDG	BUILDING
PROPOSED LOT LINES	BF	BACKFLOW PREVENTER
CENTER LINE	CB	CATCH BASIN
ADJACENT LOT LINES	CF	CURB FACE
EASEMENT	CL	CENTERLINE
CURB LINE	CO	CLEANOUT
CURB AND GUTTER	CONC	CONCRETE
EDGE OF PAVEMENT	EX.	EXISTING
EXISTING RETAINING WALL	FF	FINISHED FLOOR
CHAIN LINK FENCE	FG	FINISHED GRADE
SAWCUT LINE	FH	FIRE HYDRANT
RIDGE LINE	FL	FLOW LINE
RETAINING WALL	FS	FINISHED SURFACE
PROPOSED STORMDRAIN	GB	GRADE BREAK
EXISTING STORMDRAIN	LS	LANDSCAPE AREA
EXISTING SEWER LINE	LIP	LIP OF GUTTER
EXISTING WATER LINE	NAP	NOT A PART
FIRE HYDRANT	PL	PROPERTY LINE
CATCH BASIN	PROP.	PROPOSED
STORMDRAIN MANHOLE	POC	POINT OF CONNECTION
SANITARY SEWER MANHOLE	R	RIDGE
SANITARY SEWER CLEANOUT	R/W	RIGHT OF WAY
PROPOSED ELEVATIONS	SD	STORM DRAIN
EXISTING ELEVATIONS	SDMH	STORMDRAIN MANHOLE
SLOPE OF GRADE	SWMH	SEWER MANHOLE
FDC, PIV, & DCDA	STD	STANDARD
WATER METER/BACKFLOW PREVENTER	SW	SEWER
	TC	TOP OF CURB
	TG	TOP OF GRATE
	TYP.	TYPICAL
	WM	WATER METER



VICINITY MAP
N.T.S.

APPLICANT
GO URBAN DEVELOPMENT
130 PINE AVE, SUITE 203
LONG BEACH, CA 90802
TEL: (562) 895-3380
CONTACT: LUIS GOMEZ

APN NUMBERS:
804-521-013
804-521-014

LEGAL DESCRIPTION:
PARCEL 6 AND 7 OF PARCEL MAP NO. 36241 IN THE CITY OF LA QUINTA, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA RECORDED IN BOOK 235, PAGES 1 TO 7 INCLUSIVE, OF PARCEL MAPS IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

FLOOD ZONE
THE LAND SHOWN ON THIS SURVEY LIES WITHIN FLOOD ZONE "X" (UNSHADED), BEING AN AREA DETERMINED TO BE OUTSIDE 500-YEAR FLOOD PLAIN PER FLOOD INSURANCE RATE MAP (FIRM) - COMMUNITY PANEL NUMBER 06065C2232G DATED AUGUST 28, 2008.

UTILITY PURVEYORS

SEWER & WATER	COACHELLA VALLEY WATER DISTRICT	(760) 398-2651
ELECTRIC	IMPERIAL IRRIGATION DISTRICT	(760) 303-7756
	SOUTHERN CALIFORNIA EDISON	(760) 202-4291
GAS	THE GAS COMPANY	(800) 427-2200
TELEPHONE	VERIZON	(800) 483-5000
CABLE	TIME WARNER CABLEVISION	(760) 340-1312

DEMOLITION NOTES:

1. PROTECT IN PLACE/ADJUST TO GRADE (ITEM PER PLAN)
2. RELOCATE UTILITIES (ITEM PER PLAN)
3. RELOCATE DDC, PIV, & FDC UTILITIES
4. REMOVE UTILITIES (ITEM PER PLAN)

UTILITY CONSTRUCTION NOTES:

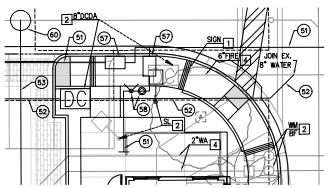
50. INSTALL 2" PVC DOMESTIC WATER LINE
51. INSTALL 6" PVC FIRE WATER LINE
52. INSTALL 8" DI FIRE WATER LINE
53. INSTALL 6" PVC SEWER LINE
54. INSTALL 6" PVC STORM DRAIN LINE
55. INSTALL 12" HDPE STORM DRAIN
56. INSTALL 2" DOMESTIC WATER METER AND BACKFLOW PREVENTER
57. INSTALL 6" DOUBLE CHECK DETECTOR ASSEMBLY
58. INSTALL PIV AND FDC
59. INSTALL 6" FIRE HYDRANT ASSEMBLY
60. INSTALL 48" SEWER MANHOLE
61. INSTALL SEWER CLEANOUT
62. INSTALL STORM DRAIN OUTLET STRUCTURE AND RIP RAP

EASEMENT NOTES:

C. EASEMENT FOR PIPELINES AND INCIDENTAL PURPOSES DEDICATED IN FAVOR OF THE COACHELLA VALLEY WATER DISTRICT, RECORDED AUGUST 12, 2008 AS INSTRUMENT NO. 2008-343679 ON PARCEL MAP 36241, PMB 235, PGS 1-7

F. EASEMENT FOR LANDSCAPE AND SIDEWALK PURPOSES DEDICATED TO THE CITY OF LA QUINTA RESERVING TO THE OWNER OF THE LAND INCLUDED WITHIN THE SUBDIVISION THE RIGHT TO MAKE MINOR CHANGES TO THIS EASEMENT, AT ITS SOLE COST, RECORDED ON PARCEL MAP 36241, PMB 235, PGS 1-7

H. EASEMENT FOR WATER AND ACCESS PURPOSES DEDICATED TO THE CITY OF LA QUINTA ON PARCEL MAP 36241, PMB 235, PGS 1-7 (TO BE QUITCLAIMED BY CITY OF LA QUINTA). FIRE WATER LINE SHALL BE ON-SITE PRIVATE AND NO NEW EASEMENT DEDICATION IS REQUIRED.



DETAIL 'A'
SCALE: 1" = 10'

GRAPHIC SCALE: 1"=30'

160 S. Old Springs Road
Suite 210
Anaheim Hills, CA 92808
714-685-6880
JDRC Engineering, Inc.
Civil Engineering/Land Surveying/Land Planning

NOT FOR CONSTRUCTION

NO.	REVISIONS:	DATE:

PROJECT: **JEFFERSON SQUARE**
SWC FRED WARING DR. & JEFFERSON ST.
LA QUINTA, CA

DRAWING NAME: **PRELIMINARY UTILITY PLAN**

ISSUE:	PRELIM.
DATE:	12/01/22
CHECKED: RV	DRAWN: DG
DRAWING FILE: 21177su101	
PROJECT NO.: 21-177	
SHEET NUMBER:	1
OF	1 SHEETS
SCALE: AS SHOWN	

PLOTTED: Dec 01 2022 11:37am, CHO
PLOTTED BY: DAGIL, Dec 01 2022 11:37am
FILENAME: W:\2021\21-177 Go Urban La Quinta Jackson Sq\SU\21177 CUTOI.dwg, LAST SAVED: Dec 01 2022 11:37am, PLOTTED BY: DAGIL, Dec 01 2022 11:37am, CHO

AERO COLLECTIVE
209 S MARKET ST
INGLEWOOD, CA 90301
323.553.2376

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GO URBAN DEVELOPMENT,
LUIS GOMEZ, ONE WORLD
BEACH CTR 8TH FLR LONG
BEACH CA 90831

CONSULTANT:

JDRC Engineering, Inc.
Civil Engineering/Land Surveying/Land Planning

FLORA
44155 JEFFERSON ST
LA QUINTA,CA 92253
22006

12/15/2022
SITE DEVELOPMENT PERMIT

STAMP:

NOT FOR CONSTRUCTION

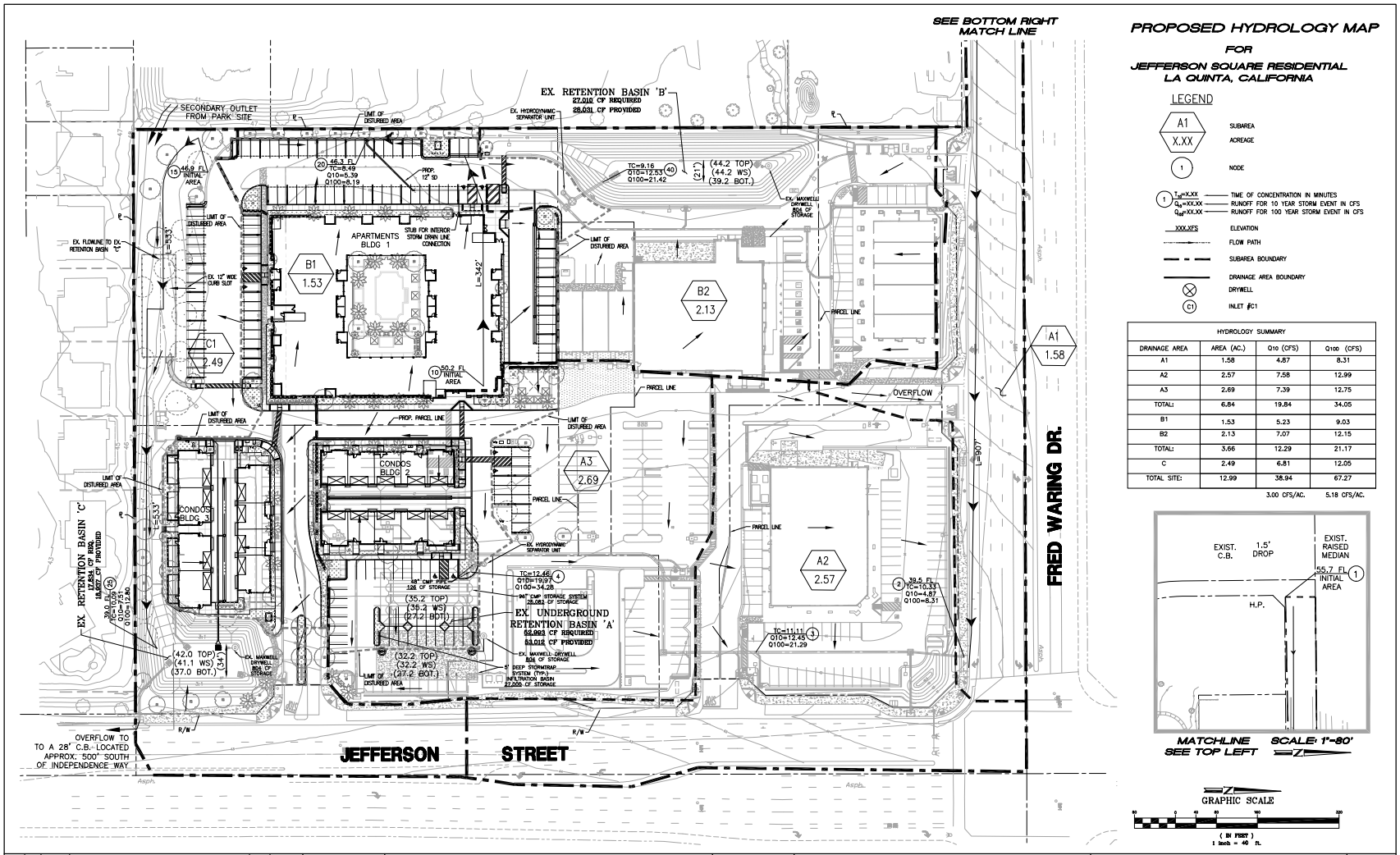
NO.	ISSUE/REVISIONS	DATE
CITY SUBMITTAL		12/15/2022

KEY PLAN

Preliminary Utility Plan

ISSUE DATE 12/15/2022

C2.10



PROPOSED HYDROLOGY MAP
FOR
JEFFERSON SQUARE RESIDENTIAL
LA QUINTA, CALIFORNIA

LEGEND

- A1 / X.XX — SUBAREA / ACREAGE
- 1 — NODE
- T_c=X.XX — TIME OF CONCENTRATION IN MINUTES
- Q_{10}=XX.XX — RUNOFF FOR 10 YEAR STORM EVENT IN CFS
- Q_{100}=XX.XX — RUNOFF FOR 100 YEAR STORM EVENT IN CFS
- XXX.XFS — ELEVATION
- FLOW PATH
- SUBAREA BOUNDARY
- DRAINAGE AREA BOUNDARY
- DRYWELL
- C1 — INLET #C1

HYDROLOGY SUMMARY

DRAINAGE AREA	AREA (AC.)	Q_{10} (CFS)	Q_{100} (CFS)
A1	1.58	4.87	8.31
A2	2.57	7.58	12.99
A3	2.69	7.39	12.75
TOTAL:	6.84	19.84	34.05
B1	1.53	5.23	9.03
B2	2.13	7.07	12.15
TOTAL:	3.66	12.29	21.17
C	2.49	6.81	12.05
TOTAL SITE:	12.99	38.94	67.27
		3.00 CFS/AC.	5.18 CFS/AC.

EXTERNAL REFERENCES: 21177mm01 21177bm10 21177st02 21177st01 21177st10 21177st02 21177 GS101 21177 AR Site 21177 LA Trees 21177 CE Dutch Bros
FILENAME: M:\2021\21-177 Go Urban La Quinta Jackson St\MA\21177 PR HMap, LAST SAVED ON: Dec 01 2022 8:26am PLOTTED BY: DREW, ON: Dec 01 2022 8:26am, CPD:

MARK	BY	DATE	REVISIONS	APPR.	DATE
ENGINEER				CITY	

DESIGNED BY: DG — DATE: 12-01-22
DRAWN BY: DG — DATE: 12-01-22
CHECKED BY: CM — DATE: 12-01-22

SEAL—ENGINEER

dRC Engineering, Inc.
Civil Engineering/Land Surveying/Land Planning
160 S. Old Springs Road
Suite 210
Anaheim Hills, CA 92808
714-685-6860

CITY OF LA QUINTA

PROPOSED HYDROLOGY MAP FOR JEFFERSON SQUARE RESIDENTIAL SWC JEFFERSON ST. & FRED WARING DRIVE LA QUINTA, CA

SHEET NO. 1 OF 1 SHTS

AERO COLLECTIVE
209 S MARKET ST
INGLEWOOD, CA 90301
323.553.2376

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GO URBAN DEVELOPMENT, LUIS GOMEZ, ONE WORLD TRADE CTR 8TH FLR LONG BEACH CA 90831

CONSULTANT:

dRC Engineering, Inc.
Civil Engineering/Land Surveying/Land Planning

FLORA
44155 JEFFERSON ST
LA QUINTA,CA 92253
22006

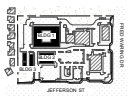
12/15/2022
SITE DEVELOPMENT PERMIT

STAMP:

NOT FOR CONSTRUCTION

NO.	ISSUE/REVISIONS	DATE
CITY SUBMITTAL		12/15/2022

KEY PLAN



Proposed Hydrology Map

ISSUE DATE 12/15/2022

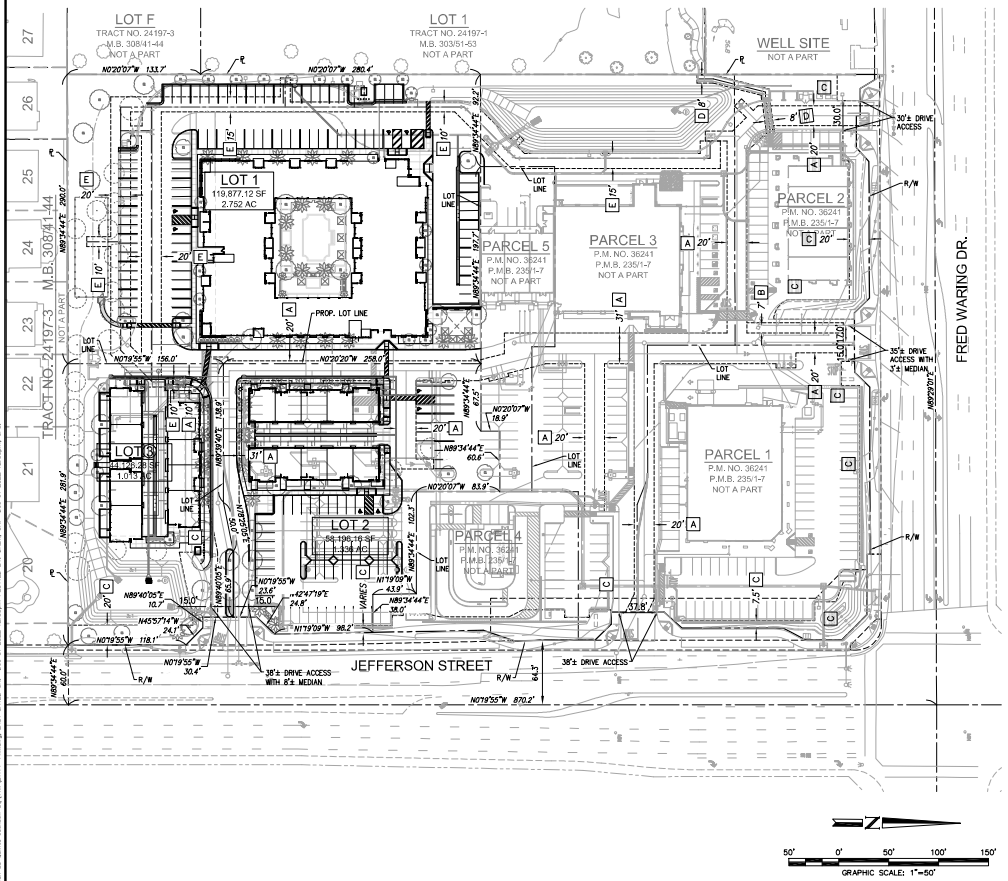
C3.10

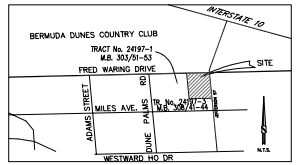
IN THE CITY OF LA QUINTA, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

TENTATIVE TRACT MAP NO. 38604

BEING A SUBDIVISION OF PARCELS 6 AND 7 AS PER MAP RECORDED IN BOOK 235, PAGES 1 TO 7 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.
(FOR PURPOSE OF SUBDIVISION OF EXISTING PARCEL)

FOR CONDOMINIUM PURPOSES





VICINITY MAP
NOT TO SCALE

EASEMENT NOTES:

- AN UNRECORDED LEASE WITH CERTAIN TERMS, COVENANTS, CONDITIONS AND PROVISIONS SET FORTH THEREIN AS DISCLOSED BY THE DOCUMENT ENTITLED "MEMORANDUM OF LEASE" RECORDED MARCH 28, 2008 AS INSTRUMENT NO. 2008-0154694, OFFICIAL RECORDS.

[A] EASEMENT(S) GRANTED TO COACHELLA VALLEY WATER DISTRICT FOR PIPELINE AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT RECORDED AUGUST 12, 2008 AS INSTRUMENT NO. 2008-0443679, OFFICIAL RECORDS.

- MATTERS CONTAINED IN THAT CERTAIN DOCUMENT ENTITLED "COMMERCIAL DOMESTIC WATER AND/OR SANITATION INSTALLATION AGREEMENT" RECORDED SEPTEMBER 12, 2008 AS INSTRUMENT NO. 2008-0503074, OFFICIAL RECORDS. DOCUMENT DOES NOT AFFECT.

- EASEMENT(S) GRANTED TO VERIZON CALIFORNIA INC., A CORPORATION FOR PUBLIC UTILITIES AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT RECORDED SEPTEMBER 26, 2008 AS INSTRUMENT NO. 2008-0524518, OFFICIAL RECORDS. DOCUMENT DOES NOT AFFECT – NOT PLOTTABLE FROM RECORD INFORMATION.

[B] EASEMENT(S) GRANTED TO COACHELLA VALLEY WATER DISTRICT FOR PIPELINE AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT RECORDED OCTOBER 22, 2008 AS INSTRUMENT NO. 2008-0566382, OFFICIAL RECORDS.

- EASEMENT(S) GRANTED TO SOUTHERN CALIFORNIA GAS COMPANY, A CALIFORNIA CORPORATION FOR RIGHT OF WAY AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT RECORDED NOVEMBER 13, 2008 AS INSTRUMENT NO. 2008-0600993, OFFICIAL RECORDS. DOCUMENT DOES NOT AFFECT – NOT PLOTTABLE FROM RECORD INFORMATION.

- AN UNRECORDED LEASE WITH CERTAIN TERMS, COVENANTS, CONDITIONS AND PROVISIONS SET FORTH THEREIN AS DISCLOSED BY THE DOCUMENT ENTITLED "MEMORANDUM OF LEASE" RECORDED DECEMBER 15, 2008 AS INSTRUMENT NO. 2008-0654035, OFFICIAL RECORDS. AN AMENDED AND RESTATED MEMORANDUM OF LEASE WAS RECORDED FEBRUARY 19, 2009 AS INSTRUMENT NO. 2009-0078661. DOCUMENT DOES NOT AFFECT.

- COVENANTS, CONDITIONS AND RESTRICTIONS AS SET FORTH IN THE DOCUMENT RECORDED FEBRUARY 19, 2009 AS INSTRUMENT NO. 2009-0078662, OFFICIAL RECORDS. MODIFICATION(S) OF SAID COVENANTS, CONDITIONS AND RESTRICTIONS RECORDED OCTOBER 25, 2012 AS INSTRUMENT NO. 2012-0511307, OFFICIAL RECORDS. BLANKET IN NATURE.

- THE OWNERSHIP OF SAID LAND DOES NOT INCLUDE RIGHTS OF ACCESS TO OR FROM THE STREET, HIGHWAY, OR FREEWAY ABUTTING SAID LAND, SUCH RIGHTS HAVING BEEN RELINQUISHED BY SAID MAP/PLAT AFFECTS: FRED WARING DRIVE AND JEFFERSON STREET. DOCUMENT DOES NOT AFFECT.

[C] EASEMENT(S) FOR LANDSCAPE AND SIDEWALK AND RIGHTS INCIDENTAL THERETO AS DELINEATED OR AS OFFERED FOR DEDICATION, ON THE MAP OF SAID TRACT/PLAT.

[D] EASEMENT(S) FOR ACCESS AND RIGHTS INCIDENTAL THERETO AS DELINEATED OR AS OFFERED FOR DEDICATION, ON THE MAP OF SAID TRACT/PLAT.

[E] EASEMENT(S) FOR WATER AND ACCESS AND RIGHTS INCIDENTAL THERETO AS DELINEATED OR AS OFFERED FOR DEDICATION, ON THE MAP OF SAID TRACT/PLAT.

- MATTERS CONTAINED IN THAT CERTAIN DOCUMENT ENTITLED "OPENING COVENANT AGREEMENT" RECORDED JUNE 30, 2020 AS DOCUMENT NO. 2020-0281586, OF OFFICIAL RECORDS. DOCUMENT DOES NOT AFFECT.

LOT TABULATION:

LOT	1	119,877 SF	2.752 AC
LOT	2	58,196 SF	1.336 AC
LOT	3	44,126 SF	1.013 AC
TOTAL		222,199 SF	5.101 AC

BENCHMARK:

THE CONTOURS AND ELEVATIONS SHOWN HEREON ARE BASED ON THE FOLLOWING BENCHMARK:

BM NO.: PD 2-1
LOCATION: AT THE INTERSECTION OF JEFFERSON STREET AND MILES AVE.
DESCRIPTION: 1 1/4" IRON PIPE
ELEV.: 38.947' DATUM: NAVD 88 (2009 ADJUSTMENT)

PER THE CITY OF LA QUINTA PUBLIC WORKS DEPARTMENT.

CONTOUR INTERVAL = 1 FOOT

BASIS OF BEARINGS:

THE BEARINGS SHOWN HEREON ARE BASED ON THE SOUTH LINE OF PARCEL MAP NO. 27984, FILED IN PARCEL MAP BOOK 186, PAGES 91 AND 92, BEING NORTH 89°58'02" EAST.

NOTE:

PROPERTY LINE INFORMATION SHOWN HEREON BASED ON RECORD DRAWINGS AND ON FIELD SURVEY AND FOUND MONUMENTS CONDUCTED BY DRC ENGINEERING ON 09/11/2020 AND ALL PRECEDING FIELD SURVEYS.

APNs:

604-521-013 & 604-521-014

LEGAL DESCRIPTION:

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF LA QUINTA IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL A:

PARCELS 6 AND 7 OF PARCEL MAP 36241, IN THE CITY OF LA QUINTA, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 235, PAGES 1 TO 7 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

PARCEL B:

EASEMENTS FOR INGRESS, EGRESS, PARKING, UTILITIES, DRAINAGE AND ENCROACHMENT PURPOSES AND EMERGENCY ACCESS, AS SET FORTH IN THE DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (JEFFERSON SQUARE), RECORDED FEBRUARY 19, 2009 AS INSTRUMENT NO. 2009-0078662 OFFICIAL RECORDS, AS AMENDED BY FIRST AMENDMENT TO DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (JEFFERSON SQUARE), RECORDED OCTOBER 25, 2012 AS INSTRUMENT NO. 2012-0511307 OFFICIAL RECORDS.

APN: 604-521-013, 604-521-014

UTILITIES:

COACHELLA VALLEY WATER DISTRICT	(760) 398-2651
IMPERIAL IRRIGATION DISTRICT	(800) 303-7756
THE GAS COMPANY	(800) 427-2200
VERIZON (FORMERLY GTE)	(888) 553-1555
TIME WARNER CABLEVISION	(760) 340-1312

ALTA/NSPS TABLE A ITEM NOTES:

THE LAND SHOWN ON THIS SURVEY LIES WITHIN FLOOD ZONE "X" (UNSHADED), BEING AN AREA DETERMINED TO BE OUTSIDE 500-YEAR FLOOD PLAIN PER FLOOD INSURANCE RATE MAP (FIRM) – COMMUNITY PANEL NUMBER 06065C2232G DATED AUGUST 28, 2008.

TITLE INFORMATION:

THE TITLE INFORMATION SHOWN HEREON IS PER COMMITMENT FOR TITLE INSURANCE NO. NCS-1026223-SA1 DATED AUGUST 12, 2020 AS PREPARED BY FIRST AMERICAN TITLE INSURANCE COMPANY, IRVINE, CALIFORNIA [TITLE OFFICER: JEFFERY PASCHAL/RYAN ACHTERBERG, TELEPHONE: (949) 885-2481]. NO RESPONSIBILITY OF CONTENT, COMPLETENESS OR ACCURACY OF SAID COMMITMENT IS ASSUMED BY THIS MAP OR THE SURVEYOR.

RECORD OWNER:

BEACON REALTY ADVISORS LLC
1944 CAMINO DEL MAR #1, DEL MAR, CA 92014
CONTACT: OMAR HUSSEIN
PHONE: (214) 923-3246

GENERAL PLAN DESIGNATION:

GENERAL COMMERCIAL

EXISTING ZONING DESIGNATION:

NEIGHBORHOOD COMMERCIAL

PROPOSED ZONING DESIGNATION:

NEIGHBORHOOD COMMERCIAL
MEDIUM/HIGH DENSITY RESIDENTIAL (FOR CONDOMINIUM PURPOSES)

DRC Engineering, Inc.
Civil Engineering/Land Surveying/Land Planning
160 S. Old Springs Road
Suite 210
Anaheim Hills, CA 92808
714-685-6860

PREPARED UNDER DIRECT SUPERVISION

JAKE W. LAPPERT PLS 9303

DATE

MARK	REVISIONS	APPR.	DATE

DESIGNED BY RV DRAWN BY DB CHECKED BY JL

CITY OF LA QUINTA, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY CITY OF LA QUINTA

BRYAN MCKINNEY
CITY ENGINEER
R.C.E. NO. 49418 EXP DATE 9-30-24

DATE

PROJECT:
TENTATIVE TRACT MAP 38604
JEFFERSON SQUARE RESIDENTIAL
SWC OF JEFFERSON ST. & FRED WARING DR.

SCALE: AS NOTED

SHEET 1 OF 1

ELENAMC: M:\2021\21-177 Go Urban La Quinta Jackson Sq\TTM\21177 TTM.dwg, LAST SAVED: Dec 01 2022 13:33pm PLOTTED BY: EMCK, ON: Dec 01 2022 13:33pm, CPC

AERO COLLECTIVE
209 S MARKET ST
INGLEWOOD, CA 90301
323.553.2376

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GO URBAN DEVELOPMENT, LUIS GOMEZ, ONE WORLD TRADE CTR 8TH FLR LONG BEACH CA 90831

CONSULTANT:

DRC Engineering, Inc.
Civil Engineering/Land Surveying/Land Planning

FLORA
44155 JEFFERSON ST
LA QUINTA,CA 92253
22006

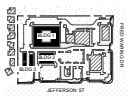
12/15/2022
SITE DEVELOPMENT PERMIT

STAMP:

NOT FOR CONSTRUCTION

NO.	ISSUE/REVISIONS	DATE
CITY SUBMITTAL		12/15/2022

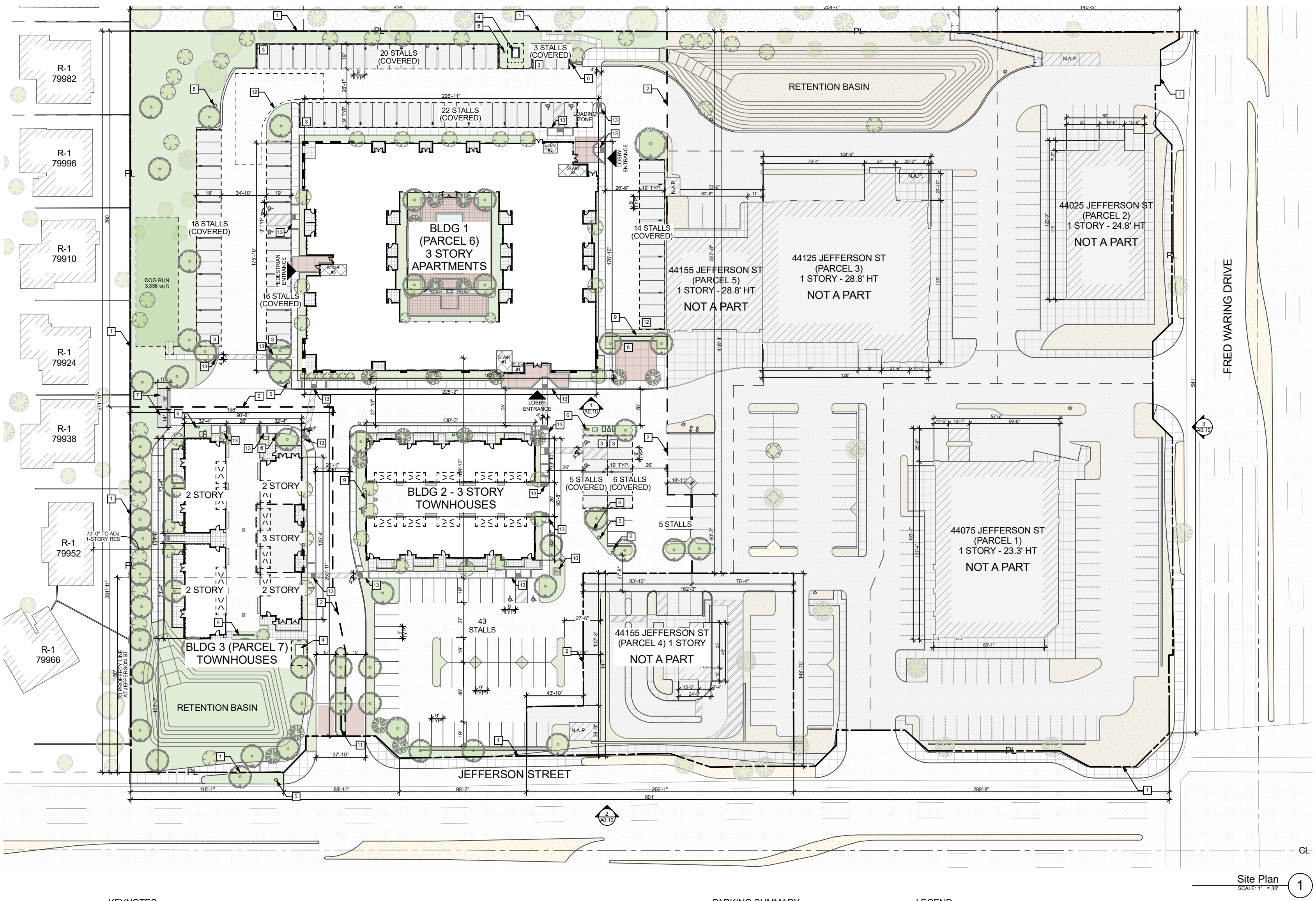
KEY PLAN



Tentative Tract Map

ISSUE DATE 12/15/2022

C4.10



Site Plan 1
SCALE: 1" = 30'

GENERAL NOTES

1. TEMPORARY PEDESTRIAN PROTECTION SHALL BE PROVIDED AS REQUIRED
2. PROVIDE CLEAR ACCESS AT GRADE IN FRONT OF EMERGENCY ESCAPE WINDOW FROM EVERY SLEEPING ROOM BELOW THE FOURTH STORY
3. REFER TO CIVIL DRAWINGS FOR UTILITIES AND SITEWORK
4. REFER TO CIVIL DRAWINGS FOR BUILDING PLACEMENT ON SITE
5. CONSTRUCTION WASTE TO BE HANDLED BY A CERTIFIED HAULER
6. GENERAL CONTRACTOR, FRAMING CONTRACTOR, AND SCAFFOLDING CONTRACTOR REQUIRED TO OBTAIN CA OSHA PERMITS PRIOR TO COMMENCEMENT OF WORK

KEYNOTES

1	PROPERTY LINE
2	LOT LINE
3	CARPORT
4	TRANSFORMER AT GRADE W/ BOLLARDS
5	FIRE HYDRANT
6	FDC AND PIV PER CIVIL DWGS
7	(E) TRASH ENCLOSURE
8	PLAZA
9	LOW WALLS, PER LANDSCAPE DWGS
10	STORM DRAIN, PER CIVIL DWGS
11	MONUMENTATION SIGNAGE UNDER SEPARATE SUBMITTAL
12	TURNING RADIUS
13	ADA SIDEWALK CURB RAMP, PER CIVIL DWGS

PARKING SUMMARY

PARKING PROVIDED:		
ACCESSIBLE SPACES	6	
COVERED RESIDENTIAL STALLS	134	SPACES
GUEST PARKING STALLS	44	
TOTAL PROVIDED RESIDENTIAL PARKING	**178**	**SPACES**

LEGEND

- PROPOSED BUILDINGS
- (E) ADJACENT BUILDING
- SIDEWALK
- STREET
- ACCESSIBLE CROSSWALK
- (E) SOFTSCAPE
- VERTICAL CIRCULATION
- PATIO / COURTYARD
- ACCENT PAVER, PER LANDSCAPE DWGS
- PLANTING AREA, PER LANDSCAPE DWGS

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CONSULTANT:

FLORA

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LA QUINTA, CA 92253
22006

12/15/2022
SITE DEVELOPMENT PERMIT

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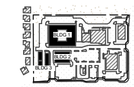
	CITY SUBMITTAL	12/15/2022

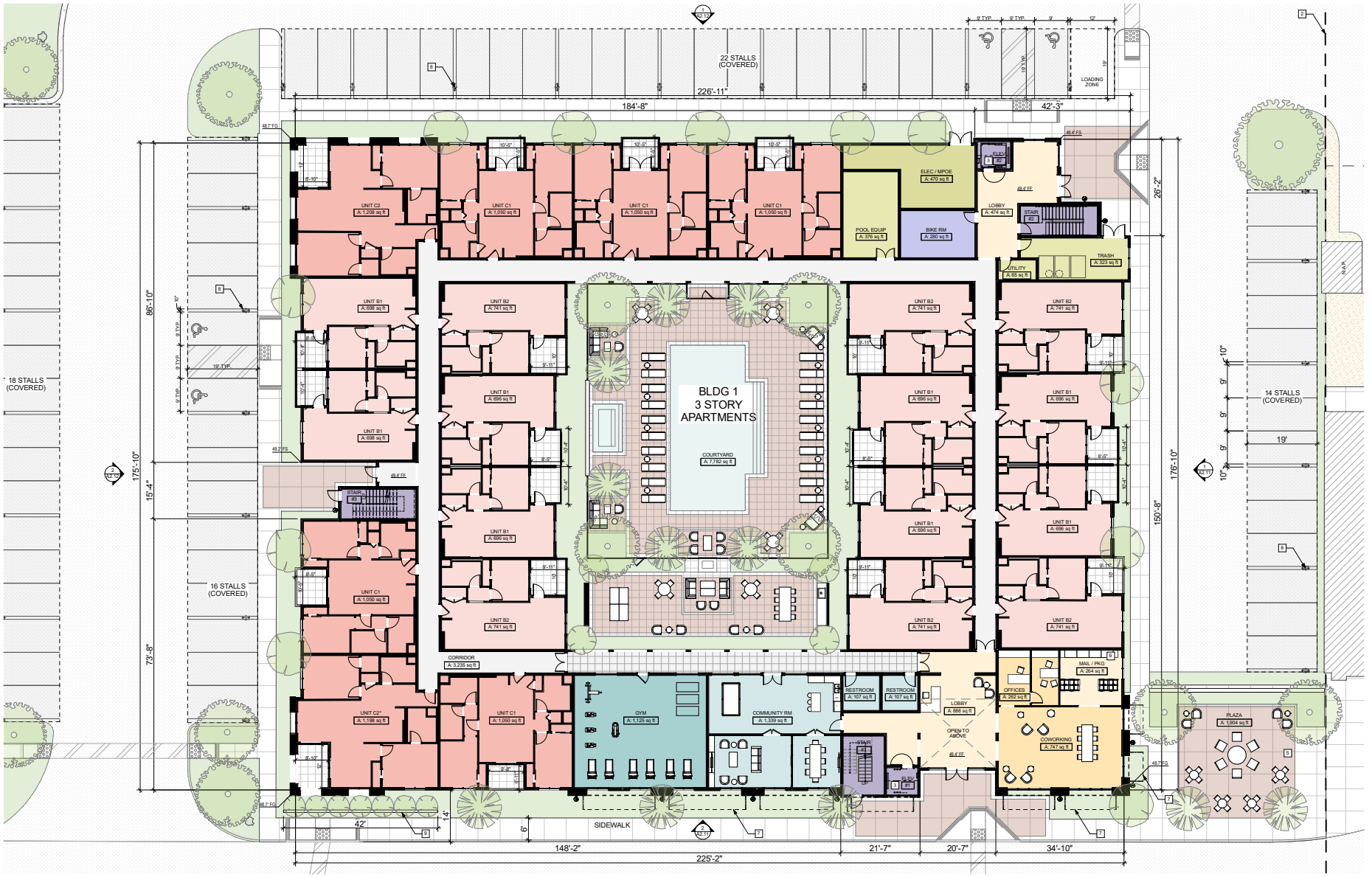
KEY PLAN



Site Plan

ISSUE DATE 12/15/2022

A0.00



Bldg 1 - 1st Floor
SCALE: 1" = 10'
1

GENERAL NOTES

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KEYNOTES

1. PROPERTY LINE
2. LOT LINE
3. ELEVATOR PER MFG SPECS
4. TRANSFORMER AT GRADE W/ BOLLARD
5. PLAZA, PER LANDSCAPE DWGS
6. RESIDENT PACKAGE LOCKERS
7. AWNING ABOVE SHOWN DASHED, TYP
8. CARPORT SUPPORT STRUCTURE TYP
9. LOW WALL, PER LANDSCAPE DWGS

LEGEND

- WALL
- LOW WALL
- (E) ADJACENT BUILDING
- SIDEWALK
- STREET
- ACCESSIBLE CROSSWALK
- (E) SOFTSCAPE
- PATIO / COURTYARD
- ACCENT PAVER, PER LANDSCAPE DWGS
- PLANTING AREA, PER LANDSCAPE DWGS
- DIRECTION OF SLOPE

AERO COLLECTIVE

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CONSULTANT:

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44155 JEFFERSON ST
LA QUINTA,CA 92253
22006

12/15/2022
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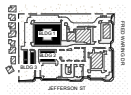
NO.	ISSUES/REVISIONS	DATE
CITY SUBMITTAL		12/15/2022

KEY PLAN



Bldg 1: 1st Floor Plan

ISSUE DATE 12/15/2022

A1.11

Bldg 1 - 2nd Floor
SCALE: 1" = 10'
1

GENERAL NOTES

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6. GENERAL CONTRACTOR, FRAMING CONTRACTOR, AND SCAFFOLDING CONTRACTOR REQUIRED TO OBTAIN CA OSHA PERMITS PRIOR TO COMMENCEMENT OF WORK

KEYNOTES

1. PROPERTY LINE
2. LOT LINE
3. AWNING BELOW
4. BALCONY
5. ELEVATOR PER MFG SPECS

LEGEND

- WALL
- LOW WALL
- (E) ADJACENT BUILDING
- BALCONY
- TILE ROOF
- FLAT ROOF

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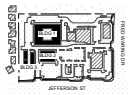
KEY PLAN



Bldg 1: 2nd Floor Plan

ISSUE DATE 12/15/2022

A1.12

Bldg 1 - 3rd Floor
SCALE: 1" = 10'
1

GENERAL NOTES

1. TEMPORARY PEDESTRIAN PROTECTION SHALL BE PROVIDED AS REQUIRED
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6. GENERAL CONTRACTOR, FRAMING CONTRACTOR, AND SCAFFOLDING CONTRACTOR REQUIRED TO OBTAIN CA OSHA PERMITS PRIOR TO COMMENCEMENT OF WORK

KEYNOTES

1. PROPERTY LINE
2. LOT LINE
3. AWNING BELOW
4. BALCONY
5. ELEVATOR PER MFG SPECS

LEGEND

- WALL
- LOW WALL
- (E) ADJACENT BUILDING
- BALCONY
- TILE ROOF
- FLAT ROOF

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12/15/2022
SITE DEVELOPMENT PERMIT

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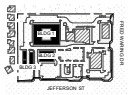
NO.	ISSUES/REVISIONS	DATE
	CITY SUBMITTAL	12/15/2022

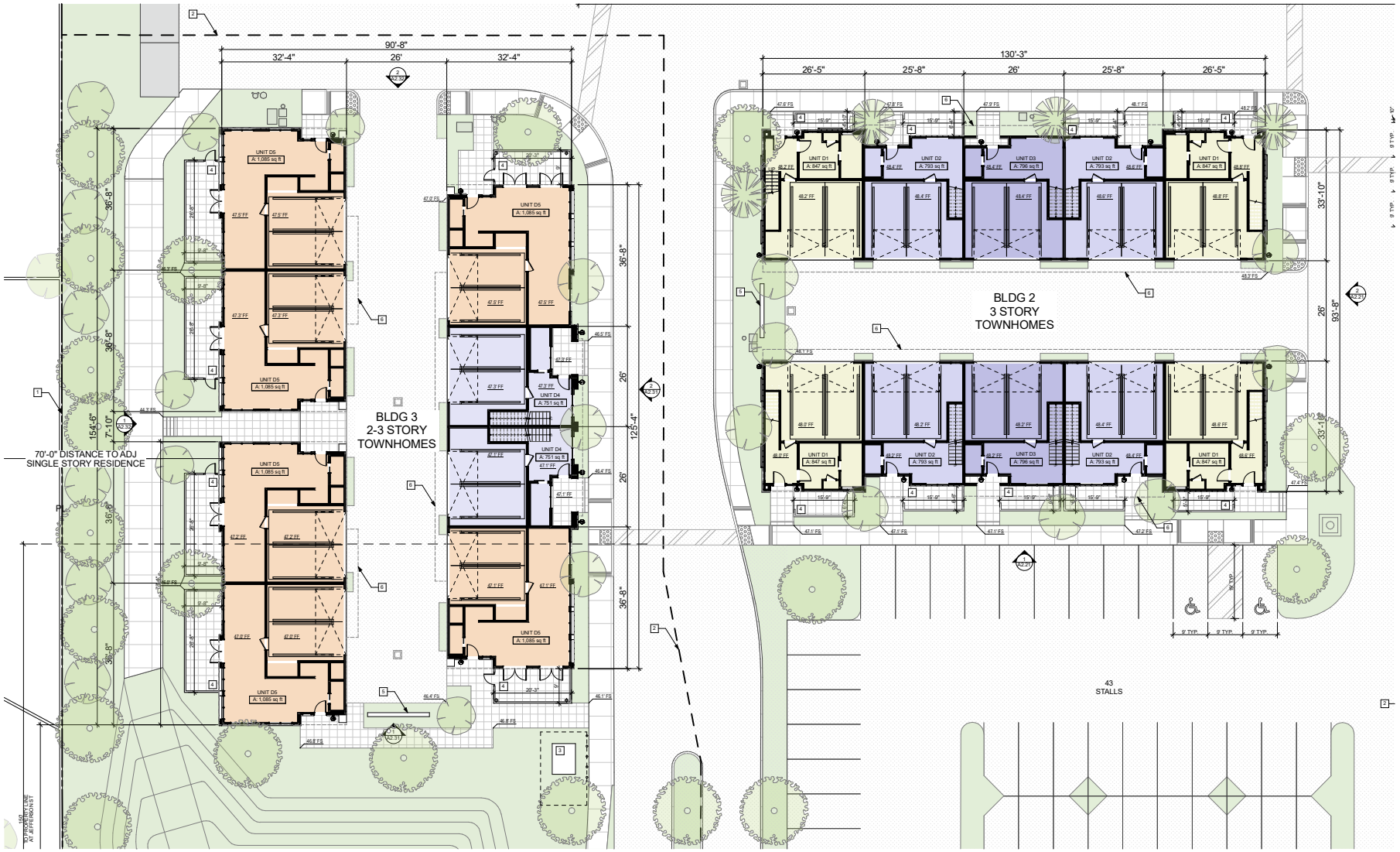
KEY PLAN



Bldg 1: 3rd Floor Plan

ISSUE DATE 12/15/2022

A1.13



Bldg 2/3 - 1st Floor
SCALE: 1" = 10'
1

GENERAL NOTES

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KEYNOTES

1. PROPERTY LINE
2. LOT LINE
3. TRANSFORMER AT GRADE W BOLLARDS
4. PATIO
5. LOW WALL, PER LANDSCAPE DWGS
6. ABOVE STORY SHOWN DASHED

LEGEND

- WALL
- LOW WALL
- (E) ADJACENT BUILDING
- SIDEWALK
- STREET
- ACCESSIBLE CROSSWALK
- (E) SOFTSCAPE
- PATIO / COURTYARD
- ACCENT PAVER, PER LANDSCAPE DWGS
- PLANTING AREA, PER LANDSCAPE DWGS
- DIRECTION OF SLOPE

AERO COLLECTIVE

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CONSULTANT:

FLORA
44155 JEFFERSON ST
LA QUINTA,CA 92253
22006

12/15/2022
SITE DEVELOPMENT PERMIT

STAMP:

NOT FOR CONSTRUCTION

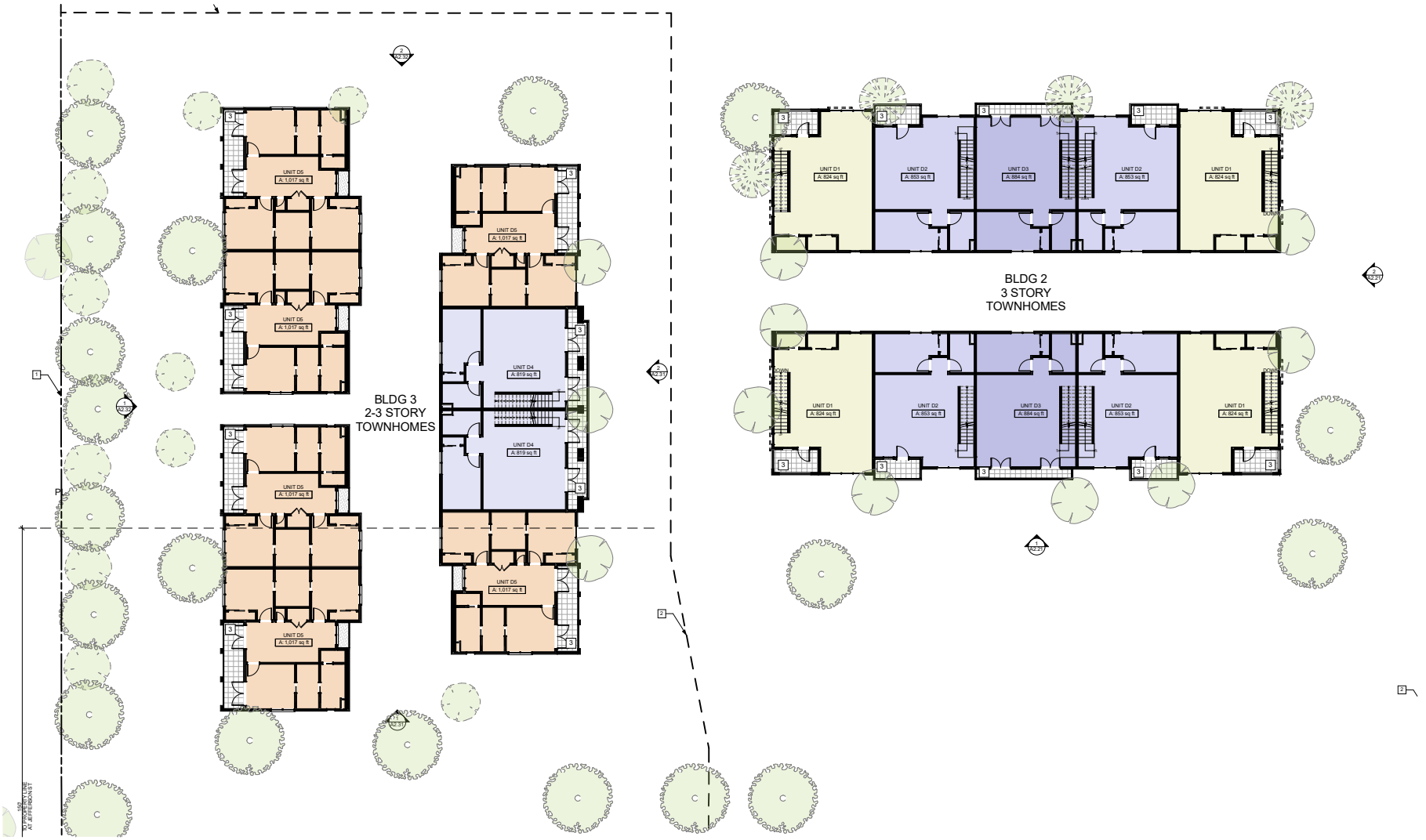
NO.	ISSUES/REVISIONS	DATE
CITY SUBMITTAL		12/15/2022

KEY PLAN

Bldg 2/3:
1st Floor
Plan

ISSUE DATE 12/15/2022

A1.21



Bldg 2/3 - 2nd Floor
SCALE: 1" = 10'
1

GENERAL NOTES

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KEYNOTES

1. PROPERTY LINE
2. LOT LINE
3. BALCONY

LEGEND

- WALL
- LOW WALL
- (E) ADJACENT BUILDING
- BALCONY
- TILE ROOF
- FLAT ROOF
- DIRECTION OF SLOPE

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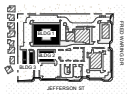
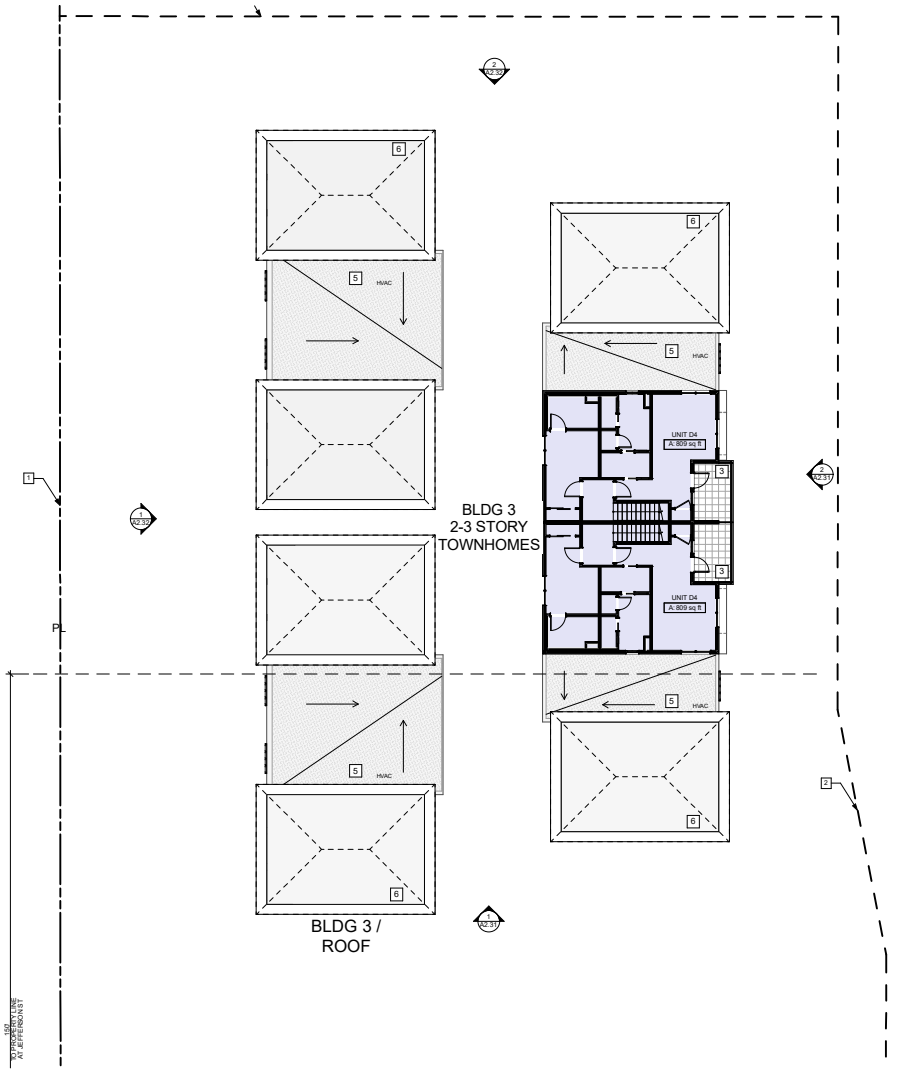
KEY PLAN

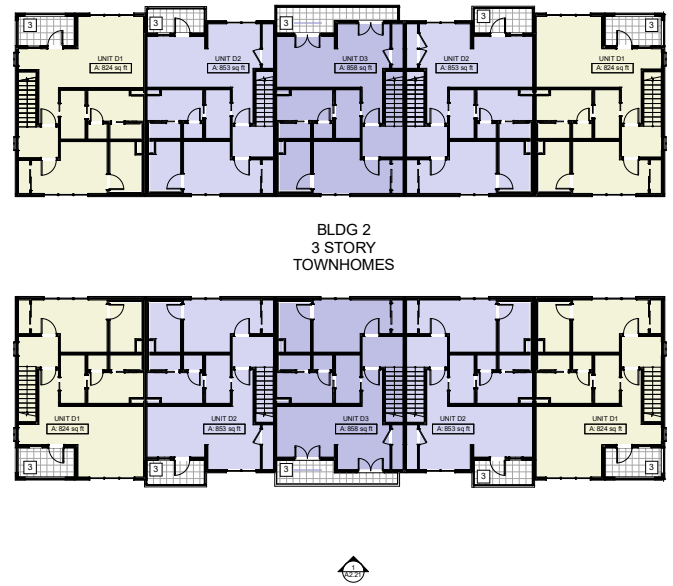


Bldg 2/3: 2nd Floor Plan

ISSUE DATE 12/15/2022

A1.22





Bldg 2/3 - 3rd Floor
SCALE: 1" = 10'
1

GENERAL NOTES

1. TEMPORARY PEDESTRIAN PROTECTION SHALL BE PROVIDED AS REQUIRED
2. PROVIDE CLEAR ACCESS AT GRADE IN FRONT OF EMERGENCY ESCAPE WINDOW FROM EVERY SLEEPING ROOM BELOW THE FOURTH STORY
3. REFER TO CIVIL DRAWINGS FOR UTILITIES AND SITEWORK
4. REFER TO CIVIL DRAWINGS FOR BUILDING PLACEMENT ON SITE
5. CONSTRUCTION WASTE TO BE HANDLED BY A CERTIFIED HAULER
6. GENERAL CONTRACTOR, FRAMING CONTRACTOR, AND SCAFFOLDING CONTRACTOR REQUIRED TO OBTAIN CA OSHA PERMITS PRIOR TO COMMENCEMENT OF WORK

KEYNOTES

1. PROPERTY LINE
2. LOT LINE
3. BALCONY
4. DOWNSPOUT
5. MECHANICAL EQUIPMENT
6. TILE ROOF

LEGEND

- WALL
- LOW WALL
- (E) ADJACENT BUILDING
- BALCONY
- TILE ROOF
- FLAT ROOF
- DIRECTION OF SLOPE

AERO COLLECTIVE

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CONSULTANT:

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LA QUINTA,CA 92253
22006

12/15/2022
SITE DEVELOPMENT PERMIT

STAMP:

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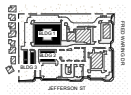
NO.	ISSUES/REVISIONS	DATE
CITY SUBMITTAL		12/15/2022

KEY PLAN



Bldg 2/3: 3rd Floor Plan

ISSUE DATE 12/15/2022

A1.23

Bldg 1 - East Elevation 2
SCALE: 1/8" = 1'-0"

Bldg 1 - North Elevation 1
SCALE: 1/8" = 1'-0"

GENERAL NOTES

1. REFER TO ENLARGED PLANS FOR ADDITIONAL WALL TYPE CALL-OUTS, DIMENSIONS, DOOR TAGS, AND DETAIL.

2. TYPICAL DIMENSIONS ARE TO FACE OF STRUCTURE WHICH IS FACE OF CONCRETE, FACE OF STUD, OR FACE OF SHEATHING AS OCCURS.

3. WHERE EXTRA LAYER OF GYPSUM BOARD IS REQUIRED FOR FIRE RATING ADD EXTRA LAYER TO ENTIRE LENGTH OF WALL, SO THERE IS NO JOG IN FINISHED SURFACE.

4. PROVIDE FIRE PARTITION IN ACCORDANCE WITH CBC 709.1 FOR:
   - -WALLS SEPARATING DWELLING UNITS
   - -CORRIDOR WALLS

5. REFER TO CIVIL DWGS FOR UTILITY LOCATIONS & CONNECTIONS.

KEYNOTES

1. SMOOTH FINISH STUCCO, WHITE
2. CORNICE SMOOTH FINISH, SEE COLOR MATERIAL BOARD
3. STONE, VENEER, CORONADO
4. LIGHT, LARGE SCONCES ACENT COLUMNS
5. TILE ROOF, SEE COLOR MATERIAL BOARD
6. ROOF PARAPET
7. FIBREX WINDOWS, FRAME COLOR BLACK, CLEAR GLASS
8. GLASS AND ALUMINUM STOREFRONT SYSTEM, BLACK
9. METAL GLASS AWNING
10. STAIR / ELEVATOR TOWER - EXEMPT FROM BLDG HEIGHT
11. FABRIC AWNING, SEE COLOR MATERIAL BOARD
12. RESIDENTIAL LOBBY ENTRANCE
13. METAL RAILING, BLACK
14. CEMENT BOARD DECORATIVE PANEL PAINTED, SEE COLOR MATERIAL BOARD

LEGEND

- STONE FACADE, SEE COLOR MATERIAL BOARD
- STUCCO, SEE COLOR MATERIAL BOARD
- CEMENT BOARD PANEL, SEE COLOR MATERIAL BOARD
- TILE ROOF, SEE COLOR MATERIAL BOARD

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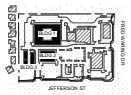
KEY PLAN



Bldg 1: Elevations

ISSUE DATE 12/15/2022

A2.11

Bldg 2 - North Elevation 2
SCALE: 1/8" = 1'-0"

Bldg 2 - East Elevation 1
SCALE: 1/8" = 1'-0"

GENERAL NOTES

1. REFER TO ENLARGED PLANS FOR ADDITIONAL WALL TYPE CALL-OUTS, DIMENSIONS, DOOR TAGS, AND DETAIL.

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   - -CORRIDOR WALLS

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KEYNOTES

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2. CORNICE / TRIM SMOOTH FINISH, SEE COLOR MATERIAL BOARD
3. STONE, SEE COLOR MATERIAL BOARD
4. ALUMINUM DOORS, FRAME COLOR BLACK, CLEAR GLASS
5. TILE ROOF, SEE COLOR MATERIAL BOARD
6. ROOF PARAPET
7. ALUMINUM WINDOWS, FRAME COLOR BLACK, CLEAR GLASS
8. CEMENT BOARD DECORATIVE PANEL PAINTED, SEE COLOR MATERIAL BOARD
9. WOOD TRELLIS
10. SCREEN WALL PER LANDSCAPE
11. LIGHT FIXTURE, SEE LIGHTING PLANS
12. METAL RAILING, BLACK
13. PATIO WALL
14. ENTRY PATIO

LEGEND

- STONE FACADE, SEE COLOR MATERIAL BOARD
- STUCCO, SEE COLOR MATERIAL BOARD
- CEMENT BOARD PANEL, SEE COLOR MATERIAL BOARD
- TILE ROOF, SEE COLOR MATERIAL BOARD

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CONSULTANT:

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22006

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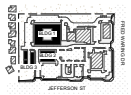
KEY PLAN



Bldg 2: Elevations

ISSUE DATE 12/15/2022

A2.21

Bldg 3 - North Elevation 2

SCALE: 1/8" = 1'-0"

Bldg 3 - East Elevation 1

SCALE: 1/8" = 1'-0"

GENERAL NOTES

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10. SCREEN WALL PER LANDSCAPE
11. LIGHT FIXTURE, SEE LIGHTING PLANS
12. METAL RAILING, BLACK
13. PATIO WALL
14. ENTRY PATIO

LEGEND

- STONE FACADE, SEE COLOR MATERIAL BOARD
- STUCCO, SEE COLOR MATERIAL BOARD
- CEMENT BOARD PANEL, SEE COLOR MATERIAL BOARD
- TILE ROOF, SEE COLOR MATERIAL BOARD

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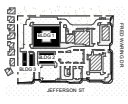
1		

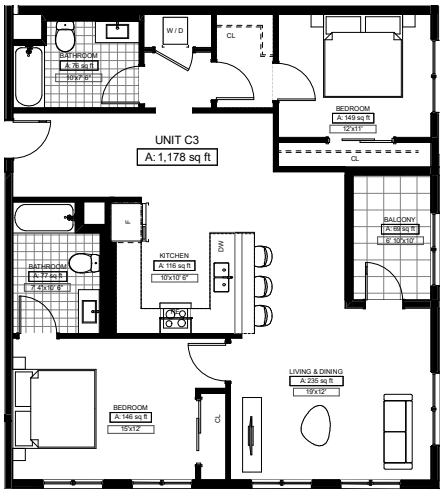
KEY PLAN



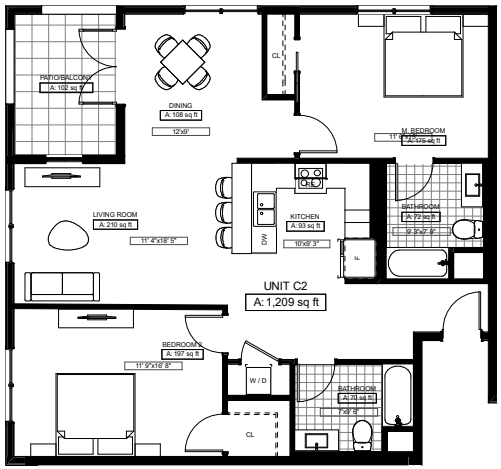
Bldg 3: Elevations

ISSUE DATE 12/15/2022

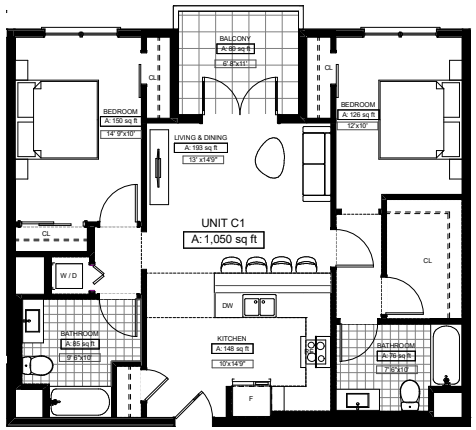
A2.31



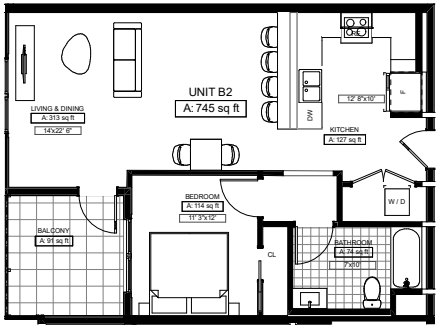
Unit C3
SCALE: 1/4" = 1'-0"
5



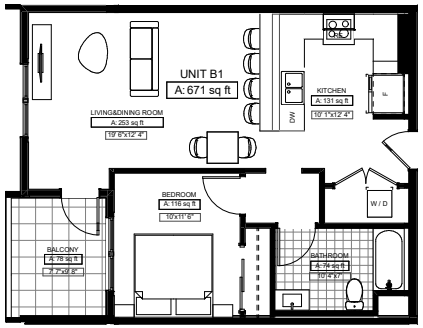
Unit C2
SCALE: 1/4" = 1'-0"
4



Unit C1
SCALE: 1/4" = 1'-0"
3



Unit B2
SCALE: 1/4" = 1'-0"
2



Unit B1
SCALE: 1/4" = 1'-0"
1

GENERAL NOTES

CONSTRUCTION NOTES

KEYNOTES

1 XX

LEGEND

WALL

LOW WALL

BALCONY

DIRECTION OF SLOPE

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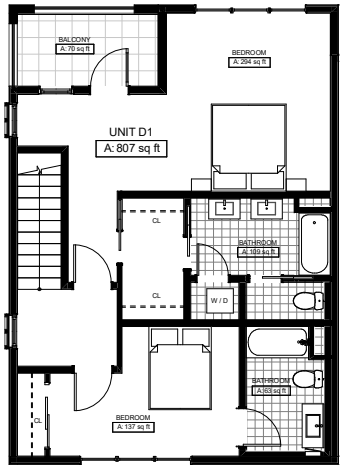
KEY PLAN

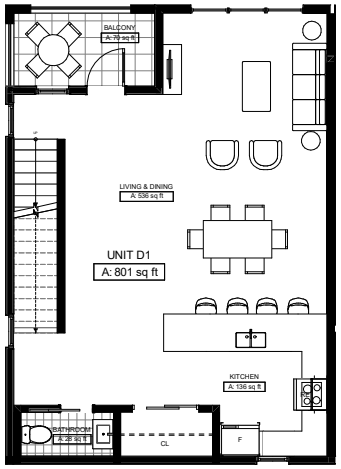
Bldg 1: Unit Plans

ISSUE DATE 12/15/2022

A4.11



Bldg 2 - Unit D1 - 3rd Flr (5)
SCALE: 1/4" = 1'-0"



Bldg 2 - Unit D1 - 2nd Flr (4)
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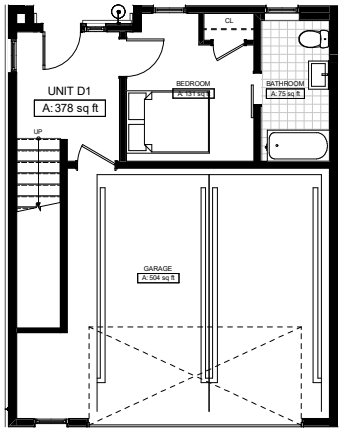
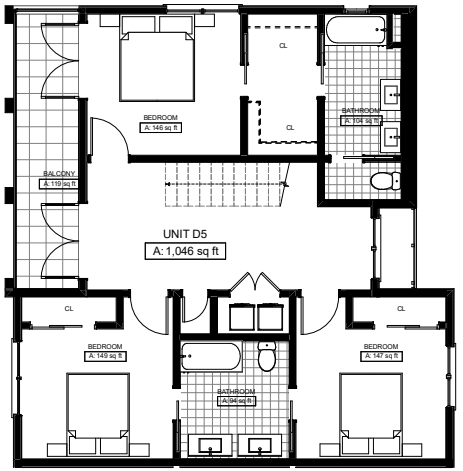


Bldg 2 - Unit D1 - 1st Flr (3)
SCALE: 1/4" = 1'-0"



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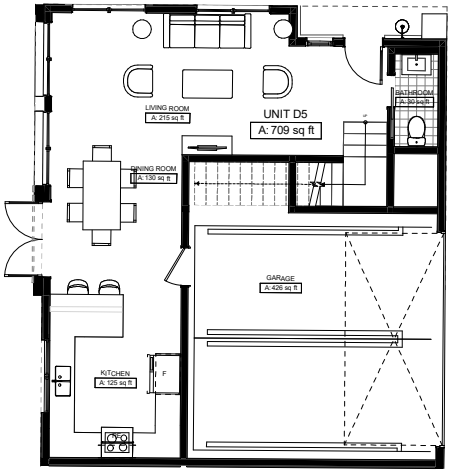

Bldg 3 - Unit D5 - 1st Flr (1)
SCALE: 1/4" = 1'-0"

GENERAL NOTES

CONSTRUCTION NOTES

KEYNOTES

1 XX

LEGEND

WALL

LOW WALL

BALCONY

DIRECTION OF SLOPE

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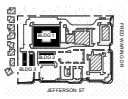
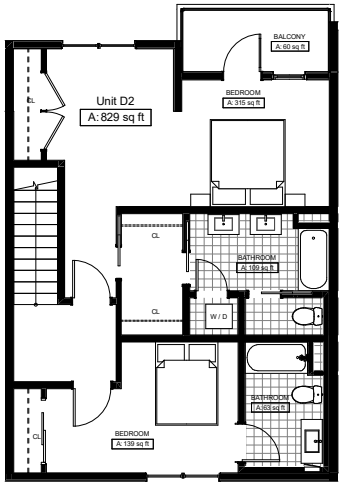
KEY PLAN



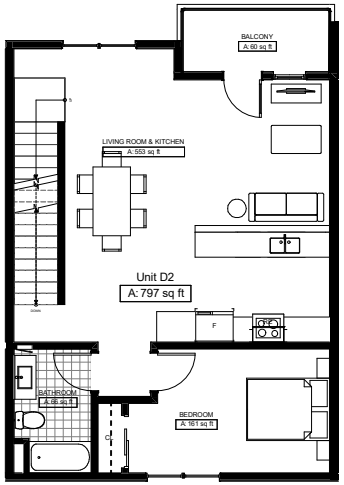
Bldg 2/3:
Unit Plans

ISSUE DATE 12/15/2022

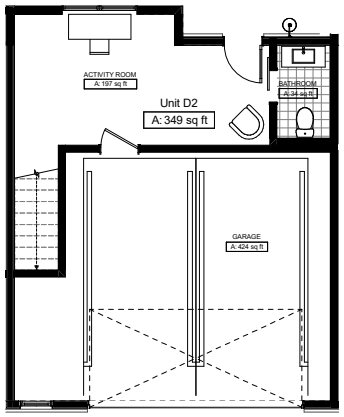
A4.12



Bldg 2 - Unit D2 - 3rd Flr (3)
SCALE: 1/4" = 1'-0"
*BLDG 2 - UNIT D3 &
BLDG 3 - UNIT D4 SIMILAR



Bldg 2 - Unit D2 - 2nd Flr (2)
SCALE: 1/4" = 1'-0"
*BLDG 2 - UNIT D3 &
BLDG 3 - UNIT D4 SIMILAR



Bldg 2 - Unit D2 - 1st Flr (1)
SCALE: 1/4" = 1'-0"
*BLDG 2 - UNIT D3 &
BLDG 3 - UNIT D4 SIMILAR

GENERAL NOTES

CONSTRUCTION NOTES

KEYNOTES

1 XX

LEGEND

WALL

LOW WALL

BALCONY

DIRECTION OF SLOPE

AERO COLLECTIVE

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BEACH CA 90831

CONSULTANT:

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44155 JEFFERSON ST
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DEVELOPMENT
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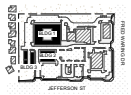
KEY PLAN



Bldg 2/3:
Unit Plans

ISSUE DATE 12/15/2022

A4.21

Jefferson Square Specific Plan 2002-062
Amendment No. 3

Adopted XX X, 2023

The City of La Quinta
78-495 Calle Tampico
La Quinta, CA 92253

Applicant
Beacon Realty
69-930 CA Hwy 111, Ste 203
Rancho Mirage, CA 92270

Design Team
goUrban Development
Aero Collective – Architect
DRC, Inc. – Civil Engineer
LandStudio 360 - Landscape Architect

Jefferson Square
Amended Specific Plan

Prepared for:

Beacon Realty
69-930 CA Hwy 111, Ste 203
Rancho Mirage, CA 92270

Prepared By:

goUrban Development
One World Trade Center. 8th Floor
Long Beach, CA 90802

December 2022

Previously Approved Versions
Approved Specific Plan - January 20, 2004
Amended Specific Plan - June 2005
Amended Specific Plan - May 2008

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I. INTRODUCTION

A. AUTHORITY AND SCOPE

Section 65450 of the California Government Code grants local planning agencies the authority to prepare a specific plan of development or specific plan amendment over a given piece of property. The Jefferson Square Specific Plan ("Specific Plan") is consistent with this authority is and developed in accordance with the City La Quinta (the "City") Zoning Code, Chapter 9.240: Specific Plans. To approve the Specific Plan, City Council must make findings required by the City Zoning Code, Chapter 9.240: Specific Plans.

B. PURPOSE AND INTENT

The City approved the Jefferson Square Specific Plan 2002-062 in 2004, followed by Amendment No. 1 in 2005 and finally Amendment No. 2 in 2008. Amendment No. 3 has been prepared in response to City wide planning policy changes resulting from the 2035 General Plan Update (the "2035 General Plan") adopted on February 19, 2013 and amended on November 19, 2023.

The purpose of the Specific Plan is to address the land use issues associated with future development of the Specific Plan area in sufficient detail to ensure that the Specific Plan area develops in a manner which is consistent with the General Plan; protects the public health, safety and general welfare; is compatible with zoning on adjacent properties; and is suitable and appropriate for the subject property.

The intent of the Specific Plan is to provide detailed direction for future development within the Specific Plan area. The Specific Plan establishes a conceptual site plan, design standards, and allowable land uses that are compatible with the surrounding residential neighborhoods and create the opportunity for mixed-use development on the site.

In cases where the zoning and development regulation is nonspecific within this document, the City's Zoning Ordinance will apply. Amendment No. 3 supersedes all prior Specific Plan documents, including Specific Plan 2002-062, Amendment No. 1 and Amendment No. 2, unless otherwise stated.

C. DOCUMENT ORGANIZATION

Amendment No. 3 is organized into six sections.

- Section I provides a regulatory context for the project and an overview of key project elements.
- Section II provides a context for project planning and design by briefly describing the project's existing setting in terms of regulatory land use designations and surrounding land uses.
- Section III presents the primary master plan components of the Specific Plan.
- Section IV describes the development standards to which the project must adhere.
- Section V contains design guidelines with respect to landscaping and architecture to ensure that the project is of a high quality and is well integrated into the community character.
- Section VI discusses key operational guidelines for the project.

D. PROJECT LOCATION

From a regional perspective, the Specific Plan area is located in the Coachella Valley within the City of La Quinta as shown in Figure 1: Regional Location Map. As shown in Figure 2: Vicinity Map, the Specific Plan area is located at the southwest corner of Fred Waring Drive and Jefferson Street. The project site is bounded by a residential development to the north; a commercial retail center within the City of Indio to the east; an existing well site, city park area, and retention basin buffer the site from residential along the west; and single family residential along the southern periphery of the site.

Amendment No. 3 divides the Specific Plan area into two planning areas, (i) Planning Area 1 ("PA1") and (ii) Planning Area 2 ("PA2") as illustrated on Figure 2: Vicinity Map. PA1 includes 5.17 acres of the northern portion of Specific Plan area and is currently occupied by five retail buildings varying in size and totaling approximately 39,000 square feet ("sq. ft."). PA2 includes 5.10 acres of the southern portion of the Specific Plan area and except for completed horizontal improvements, remains undeveloped. PA2 improvements include a driveway along Jefferson Street, parking lot, stormwater management system, utility infrastructure, landscape improvements, and two certified pads.

Figure 1: Regional Location Map

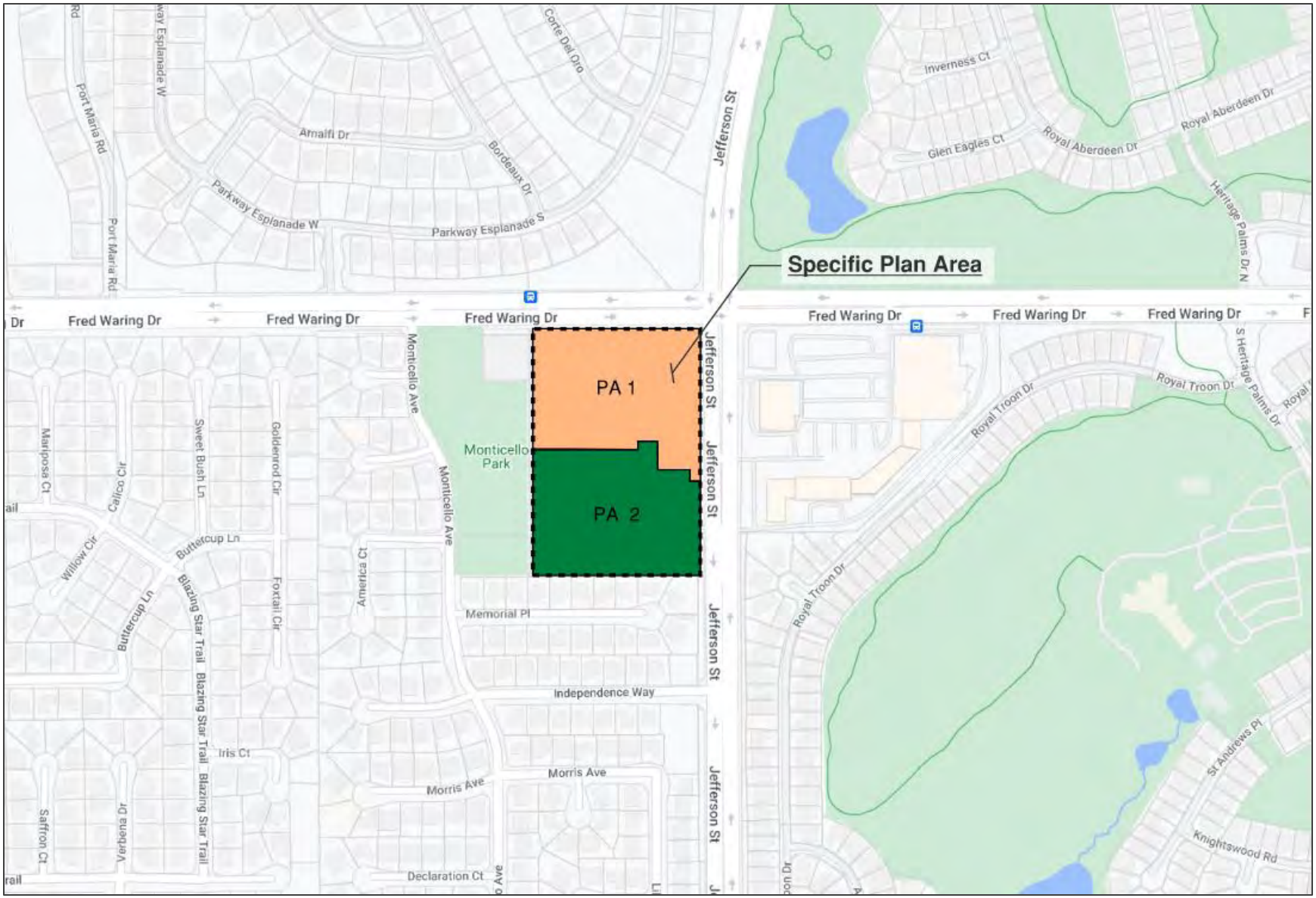


Figure 2: Vicinity Map

E. LAND USE AND ZONING

As shown in Figure 3: General Plan Land Use Designation, the 2035 General Plan Land Use Element designates the Specific Plan area as CG General Commercial.

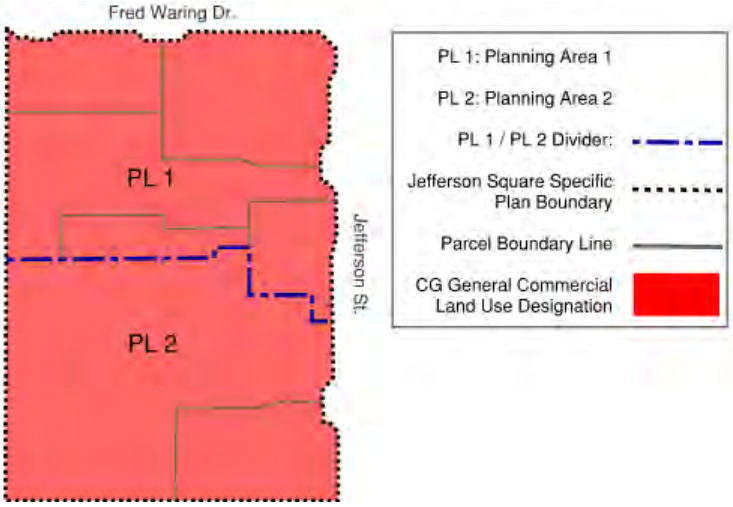


Figure 3: General Plan Land Use Designation

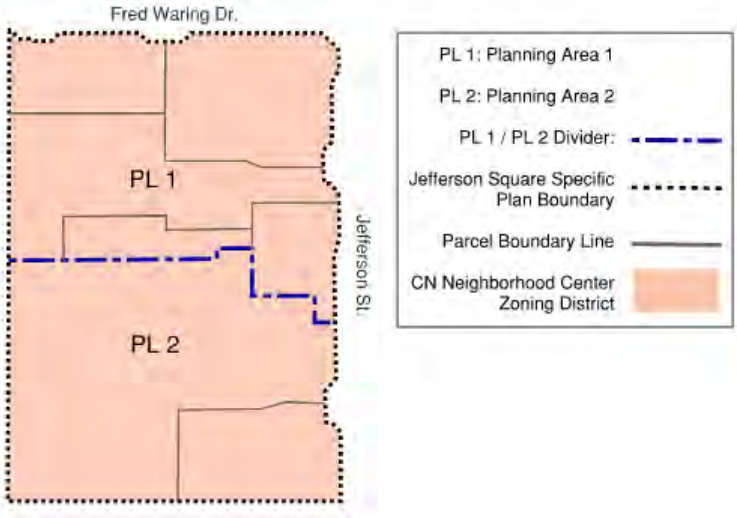


Figure 4: Zoning Map Designation

As shown in Figure 4: Zoning Map Designation, the City Zoning Map designates the Specific Plan area as CN Neighborhood Commercial.

Finally, the Specific Plan area is subject to the MU Mixed Use Overlay District Regulations as introduced in the 2035 General Plan and noted in the City's Zoning Code. The MU Overlay District Regulations apply to all zoning districts designated VC, CR, CP, CC, CN, CT and CO.

F. PROJECT HISTORY

The City approved the Jefferson Square Specific Plan 2002-062 in January 2004. In its initial form, the Specific Plan proposed a 113,173 sq. ft. commercial retail center on a 10.7-acre site. In

November 2005, Amendment No. 1 was approved whereby the site plan was altered and the proposed commercial retail area was reduced to 100,731 sq. ft. In May 2008, Amendment No. 2 was approved whereby the site plan was again altered and the proposed commercial retail area was once again reduced to 90,441 sq. ft. Concurrent with Amendment No. 2, the Planning Commission approved Site Development Permit 2007-898. A copy of the Amendment No. 2 site plan is provided as Figure 5: Amendment No. 2 Site Plan for reference purposes.

Construction of the Specific Plan area began in 2008. By 2009, four retail buildings were constructed in PA1 totaling approximately 38,000 sq. ft. Constructed retail buildings include those buildings identified in Figure 5: Amendment No. 2 Site Plan as Drug, Shops 2, Shops 3, and Fresh & Easy (note: to streamline the Specific Plan naming convention, all existing PA1 buildings have been renamed as depicted in Figure 11). Onsite and offsite horizontal improvements were also constructed throughout the entire Specific Plan area (PA1 and PA2), including three certified pads (one on PA1 and two on PA2) as identified in Figure 5: Amendment No. 2 Site Plan as Pad A, Shops 1 and Osh pads, parking lots, driveways, stormwater management system, utility infrastructure, landscape improvements, and public sidewalks and parkways.

In 2013, Parcel Map No. 36241 was approved and recorded, whereby the Specific Plan area was subdivided into seven legal parcels. Street and landscape dedications were included with Parcel Map No. 36241 which reduced the Specific Plan area from 10.79 to 10.27 acres. A summary of the subdivision is presented as Table 1: Jefferson Square Specific Plan Parcel Areas and Land Use.

In 2020, the Planning Commission approved Site Development Permit (SDA) 2020-0002, which allowed the development of a drive-thru coffee use (Dutch Bros Coffee Shop) on the pad formerly identified as Pad A. The drive-thru coffee use has since been constructed and is operational as of 2022.

As of December 2022, the formerly identified Osh and Shops 1 pads remain vacant and undeveloped. Figures 6, 7, and 8 provide historical aerials of the Specific Plan area starting from 2005 through 2021. Figure 9 depicts the Specific Plan area conditions as of 2022.

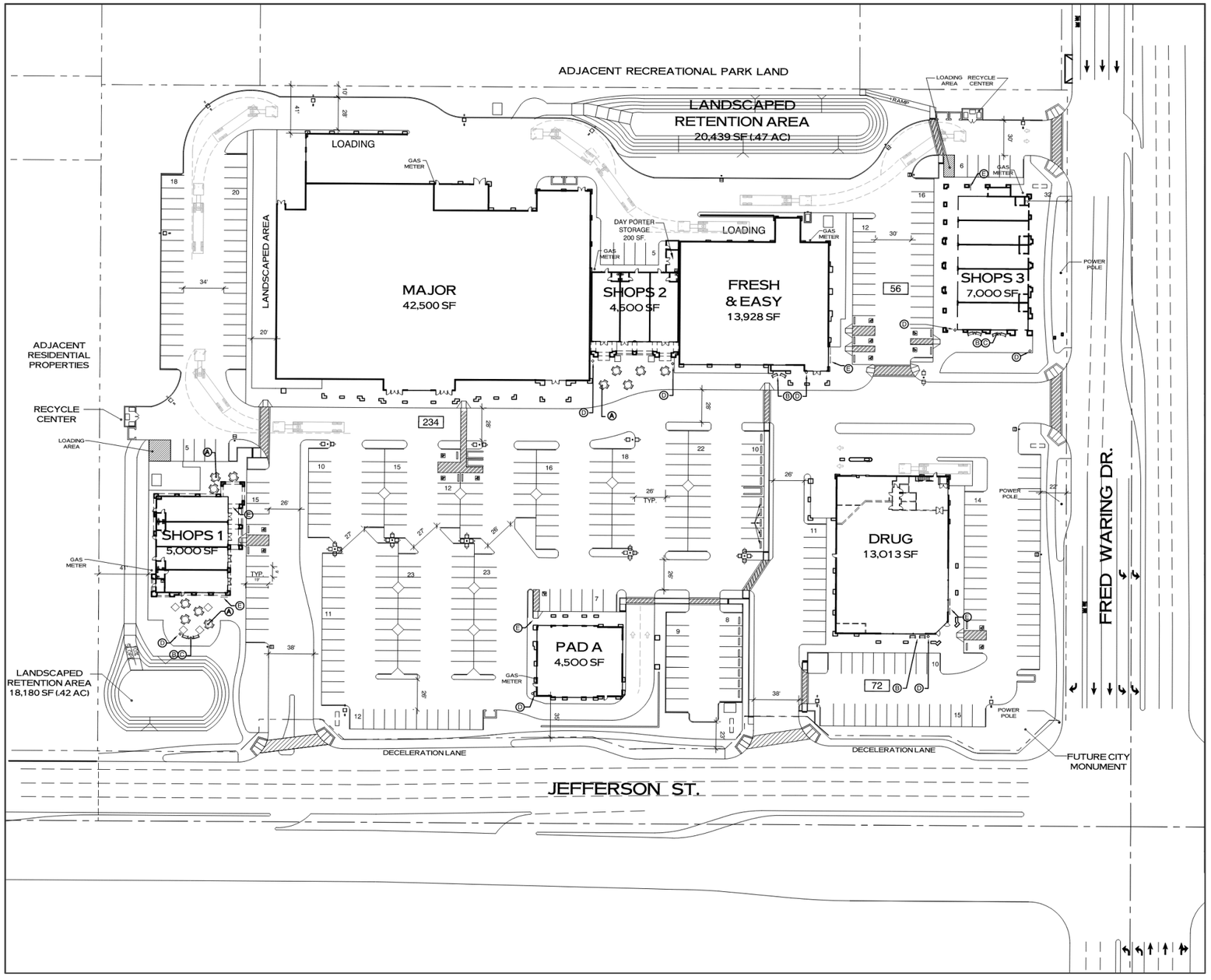


Figure 5:Amendment No. 2 Site Plan (for reference purposes)

Table 1: Jefferson Square Specific Plan Parcel Areas and Land Use

Parcel #	APN	Acreage	Building Area	Land Use
Parcel 1	604-521-007	1.47	13.0K	Retail (Pharmacy)
Parcel 2	604-521-009	0.81	6.7K	Retail
Parcel 3	604-521-010	1.86	14.0K	Retail
Parcel 4	604-521-011	0.58	0.9K	Food (drive thru coffee)
Parcel 5	604-521-012	0.45	4.3K	Vacant
Parcel 6	604-521-013	4.09	0	Vacant
Parcel 7	604-521-014	1.01	0	Vacant
Total		**10.27**	**38.9K**	

Figure 6: Site Aerial View on December 31, 2005, Source Google Earth

Figure 7: Site Aerial View on June 23, 2011, Source Google Earth

Figure 8: Site Aerial View on June 06, 2021, Source Google Earth

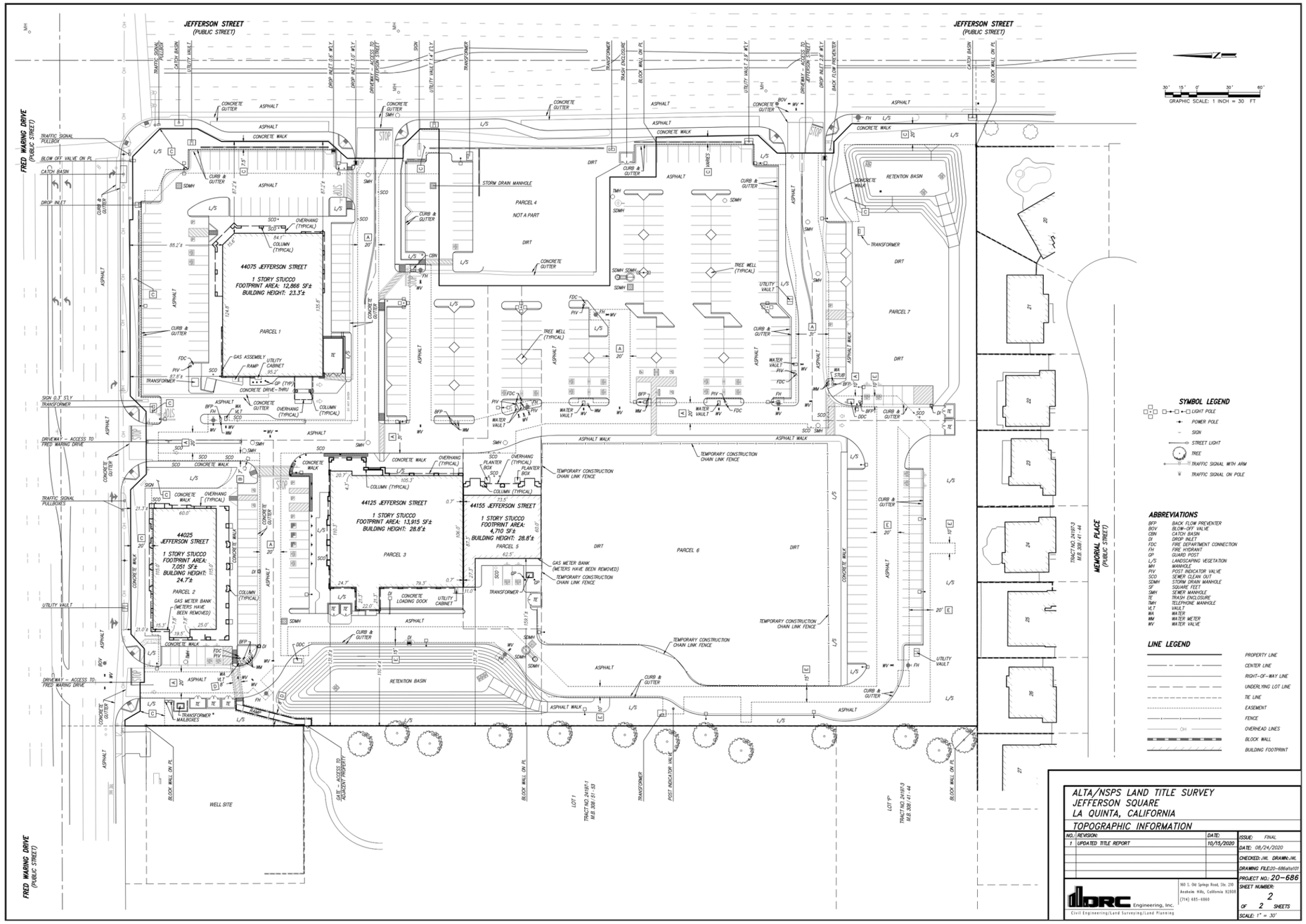


Figure 9: 2022 Site Conditions

G. PROJECT OVERVIEW

Since the approval of Amendment No. 2 in 2008, the retail industry has shifted considerably. Following the Great Recession of 2008, many once powerful retailers have filed for bankruptcy, including Fresh & Easy and Osh Hardware, two retailers that were slated to occupy the Specific Plan area. With the evolution of technology over the past 10 years, consumers have transitioned to online shopping and spend less time in brick-and-mortar stores. The Coronavirus Pandemic of 2020 further exacerbated this trend and has led to a substantial increase in retail vacancy throughout Southern California, particularly in the Coachella Valley. Meanwhile, housing shortages continue to grow California. In 2012, Southern California Association of Governments (SCAG) indicated through its Regional Housing Needs Assessment (RHNA) that La Quinta had a housing deficit of 364 dwelling units. In 2021, that number increased by 320 percent to 1,530 dwelling units.

While Amendment No. 2 limits the Specific Plan area (PA1 and PA2) to commercial uses, Amendment No. 3 allows the Specific Plan area to be developed as a horizontally mixed-use project. Horizontal Mixed-Use is envisioned in the Specific Plan area as retail uses located in PA1 and higher density residential in PA2 and are integrated through pedestrian connections and common areas. PA2 residential uses shall meet the City's Mixed-Use Overlay District's density standards of twelve to twenty-four units per acre. The catalyst for this change is the Mixed-Use Overlay District Regulations introduced by the City in the 2035 General Plan Update followed by the City Zoning Code Section 9.140.090.

H. PROJECT ENTITLEMENTS

Approval/certification of the following actions will be required to implement the Project:

Specific Plan Amendment No. 3: This document includes the land use and development standards, design guidelines, infrastructure needs and implementation strategies to fully implement the allowed uses of the Specific Plan. The Specific Plan shall be approved by City Council and adopted by resolution.

Mitigated Negative Declaration (MND): Pursuant to State and local CEQA guidelines, an Initial Study (IS) was prepared for Amendment No. 3 and determined that development pursuant to Amendment No. 3 could result in environmental impacts. The initial study identified specific mitigation measures that would mitigate any potential impacts resulting from implementation of development to below a level of significance. Consequently, a Mitigated Negative Declaration (MND) has been prepared for Amendment No. 3. The Site Development Permit requires separate public hearings before the Planning Commission and City Council.

Site Development Permit (SDP): An SDP is required by the City for final approval of a site plan, architectural design, and landscape design. The SDP requires separate public hearings before the Planning Commission and City Council.

Tentative Tract Map: A Tentative Tract Map shall be reviewed by the Planning Commission, with their recommendation, and ultimately reviewed by the City Council for a final determination.

Final Tract Maps, Grading Plans, Landscape Plans and Building Permits: Recordation of the final tract map(s) and landscape plans, issuance of grading and building permits, as needed, shall be obtained, for each phase or building, as required by the City.

II. PROJECT SETTING

A. LAND USE AND ZONING

The Specific Plan area's land use and zoning designations are CG General Commercial and CN Neighborhood Commercial, respectively. The Specific Plan area is also subject to the MU Mixed Use Overlay District Regulations.

The 2035 General Plan Land Use Element describes CG General Commercial uses as: *"The full range of commercial uses can occur within this designation, ranging from supermarkets and drugstores in a neighborhood shopping center, to major national retailers in large buildings. General Commercial uses also include professional offices, service businesses, restaurants, hotels or motels, research and development and warehousing or similar low impact quasi-industrial projects. As established in Policy LU-7.1, mixed use development is also appropriate in this designation. Mixed use project can include vertical mixed use – where retail/office occurs on the ground floor, with residential units above; horizontal mixed use – where retail/office and higher density residential occur next to each other and are integrated through pedestrian connections and common areas; or mixed use added to existing commercial development – where the residential project abuts or wraps around an existing commercial development."*

The City Zoning Code states that the purpose and intent of the CN Neighborhood Commercial Zone is: *"To provide for the development and regulation of small-scale commercial areas located at the intersections of arterial highways as shown on the General Plan. The CN district is intended to provide for the sale of food, drugs, sundries, and personal services to meet the daily needs of a neighborhood area."*

Finally, the City Zoning Code states that the purpose and intent of the MU Mixed Use Overlay Regulations is: *"to facilitate the development of mixed-use projects that include both multifamily residential and commercial components in a cohesively designed and constructed manner. The mixed-use overlay district will contribute to vehicle trip and associated air pollutant reductions by locating residents near services, employment, and transportation hubs, and by providing interconnected multi-purpose paths for alternative modes of transportation.*"

The proposed site plan, design standards, and allowable uses of the Specific Plan are consistent with the City's Land Use, Zoning, and Mixed-Use Overlay District regulations. A detailed General Plan consistency analysis is provided as Appendix A.

B. EXISTING SITE CHARACTERISTICS

Existing site characteristics are shown in Figure 9: 2022 Site Conditions. The subject property has been subdivided into seven legal parcels (Parcels 1 through 7) varying in size from 0.45 acres to 4.09 acres as listed in Table 1. Vertical improvements have been developed in PA1 (Parcels 1 through 5) and horizontal improvements have been constructed throughout the entire Specific Plan area (PA1 and PA2). Constructed site improvements include parking lots, driveways, stormwater retention systems, utility infrastructure, and landscape improvements. PA2 (Parcel 6 and 7) remain vacant with certified pads ready for vertical improvements. Offsite improvements include a traffic signal, and existing curb and gutter (with handicapped access) at the northeast corner of the Specific Plan area (Fred Waring Drive and Jefferson Street intersection), and four electrical transmission line poles, which flank the northern periphery of the site. The Specific Plan area is also bordered by 6-foot high masonry walls on the southern and western boundaries. Curb, gutter, and deceleration lane improvements have been installed on Jefferson Street past

the northern entry drive to the site. Public sidewalk and landscape improvements have been installed along the full lengths of Fred Waring Drive and Jefferson Street.

C. SURROUNDING LAND USE

Table 2: Specific Plan and Surrounding Land Use and Zoning Designations lists the Specific Plan area's surrounding land uses and zoning designations. Figure 10: Surrounding Developments illustrates existing uses surrounding the Specific Plan area. The Specific Plan area is bordered on the north by Fred Waring Drive, which is a six-lane primary arterial roadway with a 120-foot-wide right-of-way. The Esplanade single family residential subdivision is located directly across Fred Waring Drive, north of the Specific Plan area. The Specific Plan area is bordered on the east by Jefferson Street, a major arterial with a 120-foot-wide right-of-way. Property to the east of Jefferson Street is within the City of Indio's jurisdictional boundaries and has been developed as a retail center. The Heritage Palms Golf Resort is located across Jefferson Street to the southeast. Land use immediately west of the Specific Plan area includes an existing well site, City park, and an existing retention basin associated with the developed residential subdivision (Monticello) further to the west. The rear yards of approximately seven single family residences of the Monticello neighborhood exist along the southern periphery of the site. These homes are separated from the Specific Plan area by an elevated berm with a six-foot-high masonry block wall.

Table 2: Specific Plan and Surrounding Land Use and Zoning Designations

Area	Land Use Designation	Zoning Designation
Specific Plan area	CG General Commercial	CN Neighborhood Commercial
North	LDR Low Density Residential	RL Low Density Residential
South	LDR Low Density Residential	RL Low Density Residential
East	City of Indio / Neighborhood Commercial	City of Indio / Neighborhood Commercial
West	OS-R Open Space Recreation / MC Major Community Facilities	PR Parks and Recreation / MC Major Community Facilities

Figure 10: Surrounding Developments

III. PROJECT MASTER PLANS

A. CONCEPTUAL SITE PLAN

Figure 11: Conceptual Site Plan provides a conceptual site plan intended to illustrate a plausible development scenario resulting from the approval of Amendment No. 3. A final development plan and any subsequent site plan alterations shall be subject to the approval of an SDP as noted in Section I.E. In this plan, PA1 shall continue to serve as a commercial retail center and PA2 would be developed with 88 multifamily units varying from one and two bedroom attached units to three story attached townhomes with private garages. Detailed descriptions of PA1 and PA2 are provided below.

Planning Area 1

As of 2022, PA1 is built out with approximately 39,000 sq. ft. of building area. PA1 shall continue to serve as a neighborhood commercial center which is currently occupied by CVS Pharmacy, Dutch Bros Coffee and an assortment of other retail and service-oriented shops. Future uses would likely include restaurant tenants. PA1 provides parking areas totaling 176 spaces equating to a parking ratio of approximately one space per 225 sq. ft. of floor area. If the square footage of any of the retail buildings is changed, the number of required spaces will also change in accordance with the parking standards provided in Section IV of the Specific Plan.

A summary of the existing retail uses, as shown in Figure 11, are listed in Table 3: Retail Land Use Summary – Planning Area 1.

Table 3: Retail Land Use Summary – Planning Area 1

Parcel #	Site Area	Building Area[(1)]	Building Use[(1)]	Number of Stories	Floor Area Ratio[(1)]
1	63,903	13,013	Drug Store (Anchor) with Drive Thru	1	0.20
2	35,414	7,000	Retail Shops and Restaurant	1	0.20
3	80,978	13,969	Retail	1	0.17
4	25,047	852	Coffee Shop with Drive Thru	1	0.03
5	19,646	4,500	Retail Shops and Restaurant	1	0.23
Total	224,987	39,334			0.17

(1) Land use and building size may be modified, and/or reduced or enlarged in the future via an SDP. However, the maximum FAR of 0.25 will not be exceeded for the entire site, or at any individual lot.

It should be noted that drive-thru establishments are generally not allowed within the City's CN zoning district. The Specific Plan allows for drive-thru windows at the drug store and coffee drive-thru buildings.

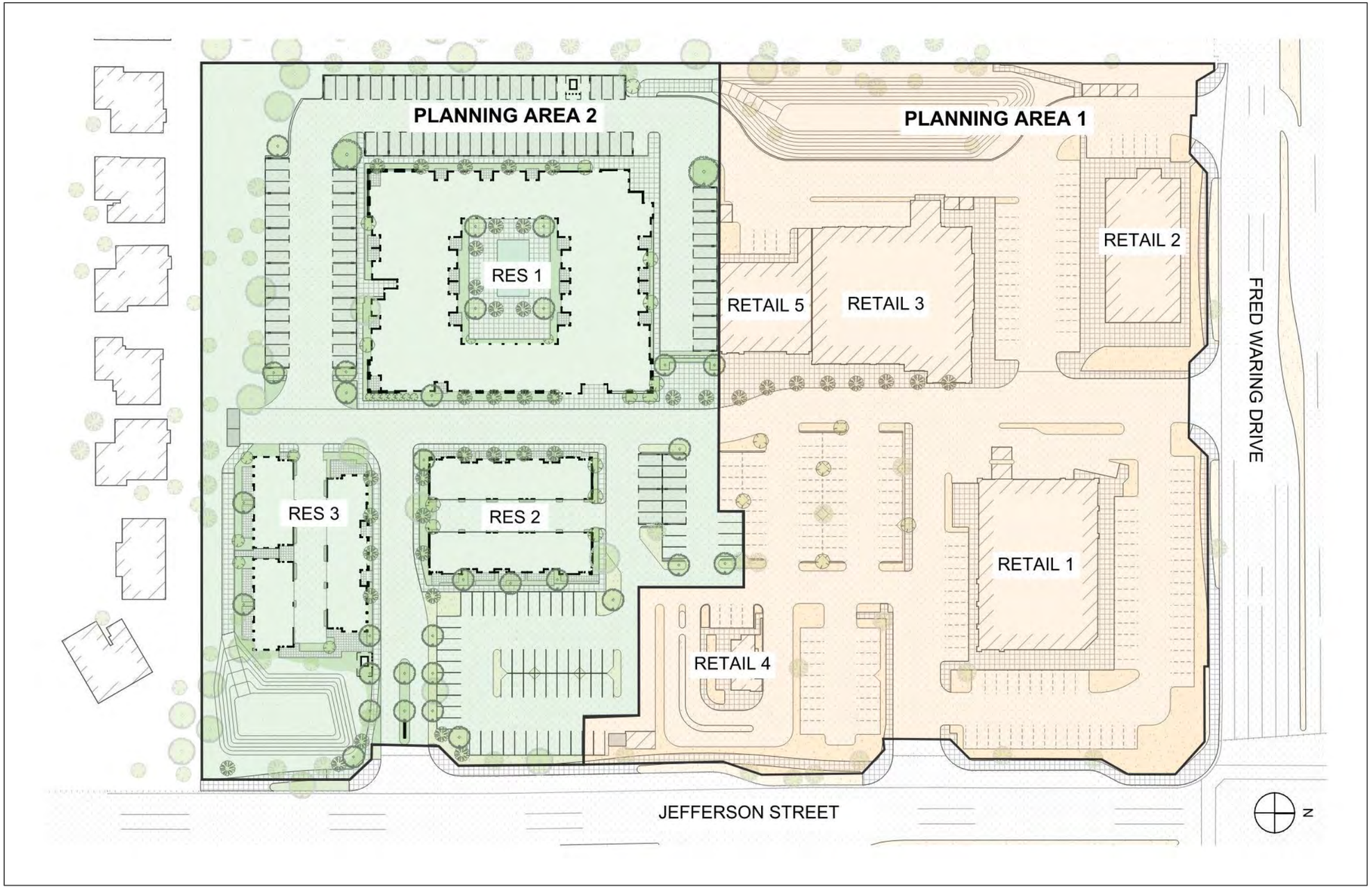


Figure 11: Conceptual Site Plan

Planning Area 2

The residential units located in PA2 are envisioned as a cluster of multifamily buildings fronting the southernmost Jefferson Street driveway that connects to the PA1 commercial uses. Pedestrian walkways connecting PA1 and PA2 shall encourage walkability and reduce vehicle miles travelled by PA2 residents. PA2 residents shall have access to common area recreational facilities that would include a pool, spa, gym, recreational room, co-office space, and dog park. An additional park access point shall be installed in PA2 to provide direct residential access to the Monticello City Park.

Res 1 is proposed as a three-story slab-on-grade wrap-around building with 70 one- and two-bedroom units. Res 2 is proposed as two rows of three-story three-bedroom townhomes totaling 10 units. Res 3 is proposed as three buildings totaling 8 units consisting of six, two-story three-bedroom units, and two, three-story three-bedroom units. All townhomes include an attached two-car garage. All Res 1 units shall be assigned one (one bedroom unit) to two (two bedroom unit) covered canopy parking stalls per unit. The total parking required for the PA2 conceptual site plan is 134 covered stalls and 44 guest parking stalls. As shown, the conceptual site plan proposes a surplus of 10 guest parking stalls. If the dwelling unit count changes, the number of required spaces will also change in accordance with the parking standards provided in Section IV of the Specific Plan.

A summary of the PA2 plan, as illustrated in Figure 11, is provided in Table 4: Multifamily Land Use Summary – Planning Area 2 below.

Table 4: Multifamily Land Use Summary – Planning Area 2

Building #	Dwelling Unit Count	Building Use	Number of Stories
Res. Bldg. 1	70	Multifamily / Apartments	3
Res. Bldg. 2	10	Multifamily / Townhomes	3
Res. Bldg. 3	8	Multifamily / Townhomes	2 and 3
Total	88		
Density	17.25 units /ac		

(1) Dwelling Unit Count may be modified, and/or reduced or enlarged during final design. However, the maximum dwelling unit density may not exceed 24 dwelling units per acre in aggregate, or at any individual lot.

Site Access

Ingress and egress for the site will be taken from two locations along Fred Waring Drive, and two locations from Jefferson Street. Left turn lanes from these roadways will be provided at the western access along Fred Waring Drive, and the southern access on Jefferson Street. Deceleration lanes will be provided at the two entrances on Jefferson Street, and at the eastern

entrance on Fred Waring Drive. The project will also provide a dedicated right turn lane for eastbound traffic using Fred Waring Drive turning south onto Jefferson Street.

Other Services

Domestic water services are extended to the site from an existing 18-inch water line at the northwest corner of the site along Fred Waring Drive, and an existing 12-inch water line near the southeast corner of the site at Jefferson Street. Sewer services are extended from an existing 10-inch sewer line on Jefferson Street. Onsite drainage is conveyed to two above-ground retention basins located on the south and west sides of the site, as well as to an underground retention system located directly east of RES 2. Trash enclosures will be located at various points within the project site and will be screened from view to the extent feasible by landscaping. The landscape plan maintains and enhances existing landscaped areas along Fred Waring Drive and Jefferson Street and will accent the project's architectural theme within the site.

B. PHASING PLAN

PA1 was developed in 2008 apart from Parcel 4, which was developed in 2021. PA2 is anticipated to be developed in two phases. Phase 1 will include the development of RES 1 and Phase 2 will include the development of RES 2 and RES 3. Development phases may be reversed or completed concurrently. Construction of Phase 1 is anticipated to be completed in 12 to 15 months. Construction of Phase 2 is anticipated to be completed in 9 to 12 months. Construction timelines may vary depending on the availability of labor and materials.

C. CONCEPTUAL LANDSCAPE PLAN

The purpose of the conceptual landscape plan is to establish standards that would contribute to the thematic project image and identity of the Specific Plan area. The Specific Plan landscape design establishes levels of hierarchy that will provide a varied and high-quality experience at the pedestrian and vehicular level within and surrounding the project.

Existing Specific Plan area landscape improvements include groundcover, shrubs, and trees along the full site perimeter, street frontages, parking lots, and drives aisles. These improvements reflect those specified in Amendment No. 2, Section III C. Landscape Plan. A copy of the Amendment No. 2 Preliminary Landscape Plan is provided as Figure 12. Existing landscape design utilizes ornamental material to provide a temperate environment. Uncovered parking areas are shaded with a combination of Palo Verde, and Desert Museum trees. Palm trees are used to provide vertical scale and aesthetic contrasts. Tipu Trees, Acacia, and Chitalpa trees are used to help screen views from adjacent residential areas.

Figure 13 illustrates a PA2 conceptual landscape plan that builds on the existing Specific Plan area landscape. The PA2 conceptual landscape plan proposes to create an entry statement at the primary PA2 entry drive through the introduction of a landscaped center median, enhanced paving band, and project identity sign. The primary P2 entry drive shall be lined with combination tree species including palms, Desert Willows, Palo Verdes or similar. Palm trees will be used along the primary drives to provide vertical scale and aesthetic contrasts. Palo Verde, Acacia, Sumac or similar tree species are proposed as canopy trees and to help screen views from the adjacent single family residential properties. Shrubs could include Agave, Aloe, Bougainvillea, Bottlebrush, Desert Cassia, Barrel Cactus, Brittlebush, Ocotillo, Red Yucca, Angelita Daisy and Sunset Lantana. Ground covers or gravel mulch shall fill in between the shrubs to protect the soil from the sun, evapotranspiration, and run-off.

The associated plant materials have been chosen for their adaptability to the desert climate of City, their relationship to the existing surrounding developments, and the intended use and function with the project. Species in addition to those listed above are encroached to increase biodiversity.

Figure 12: Amendment No. 2 Preliminary Landscape Plan

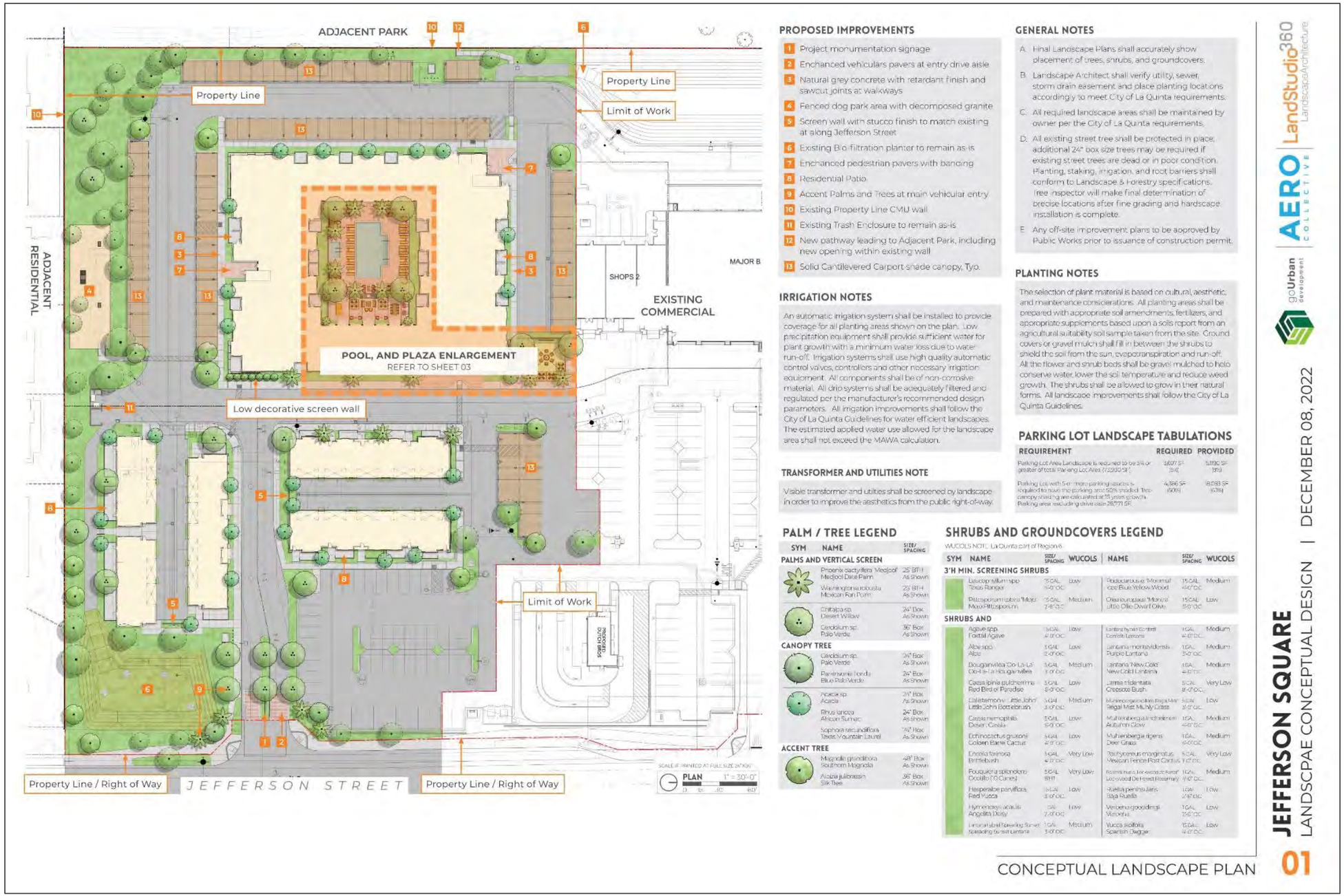


Figure 13: PA 2 Conceptual Landscape Plan

Sheet 1 of 3

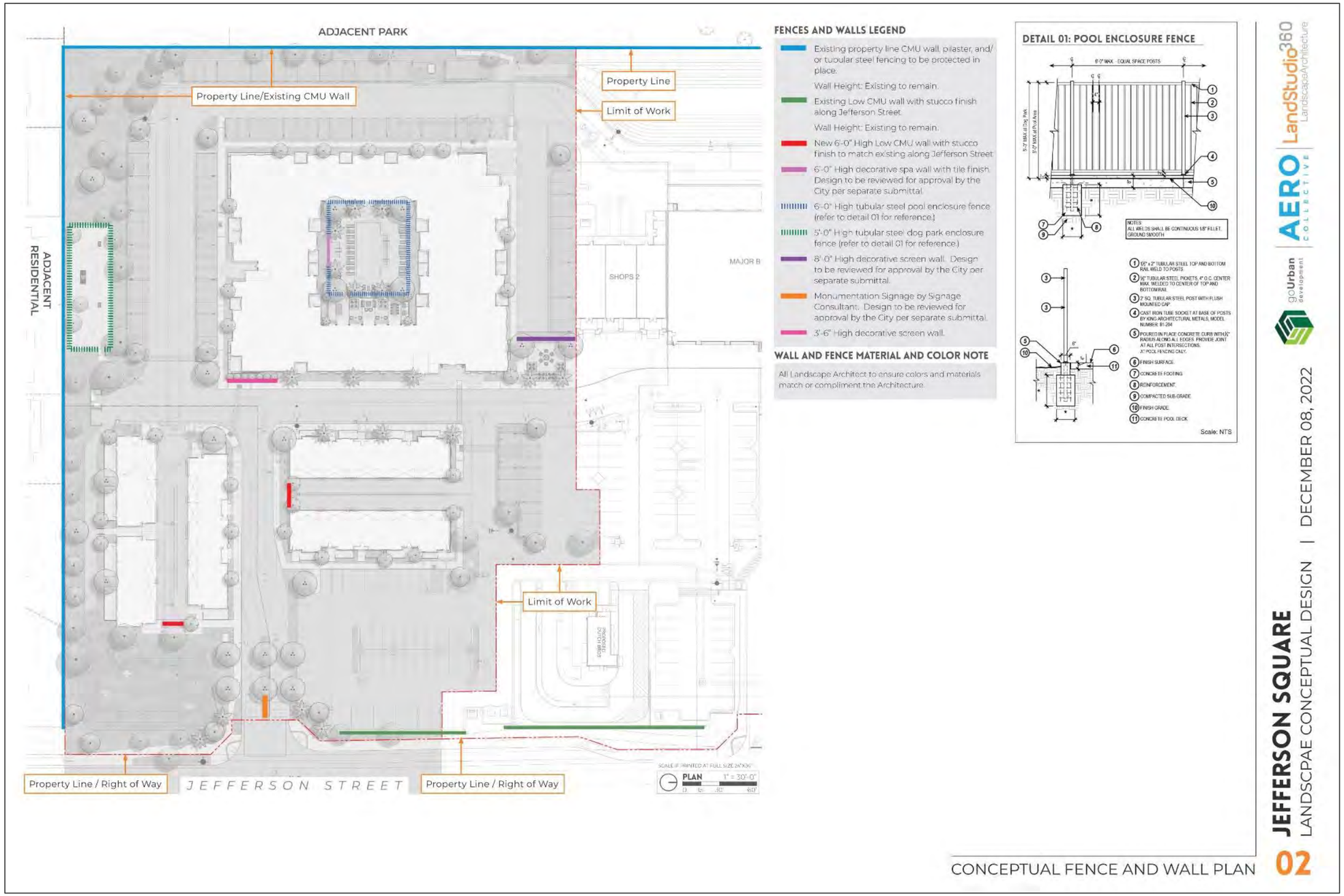


Figure 13: PA 2 Conceptual Landscape Plan

Sheet 2 of 3

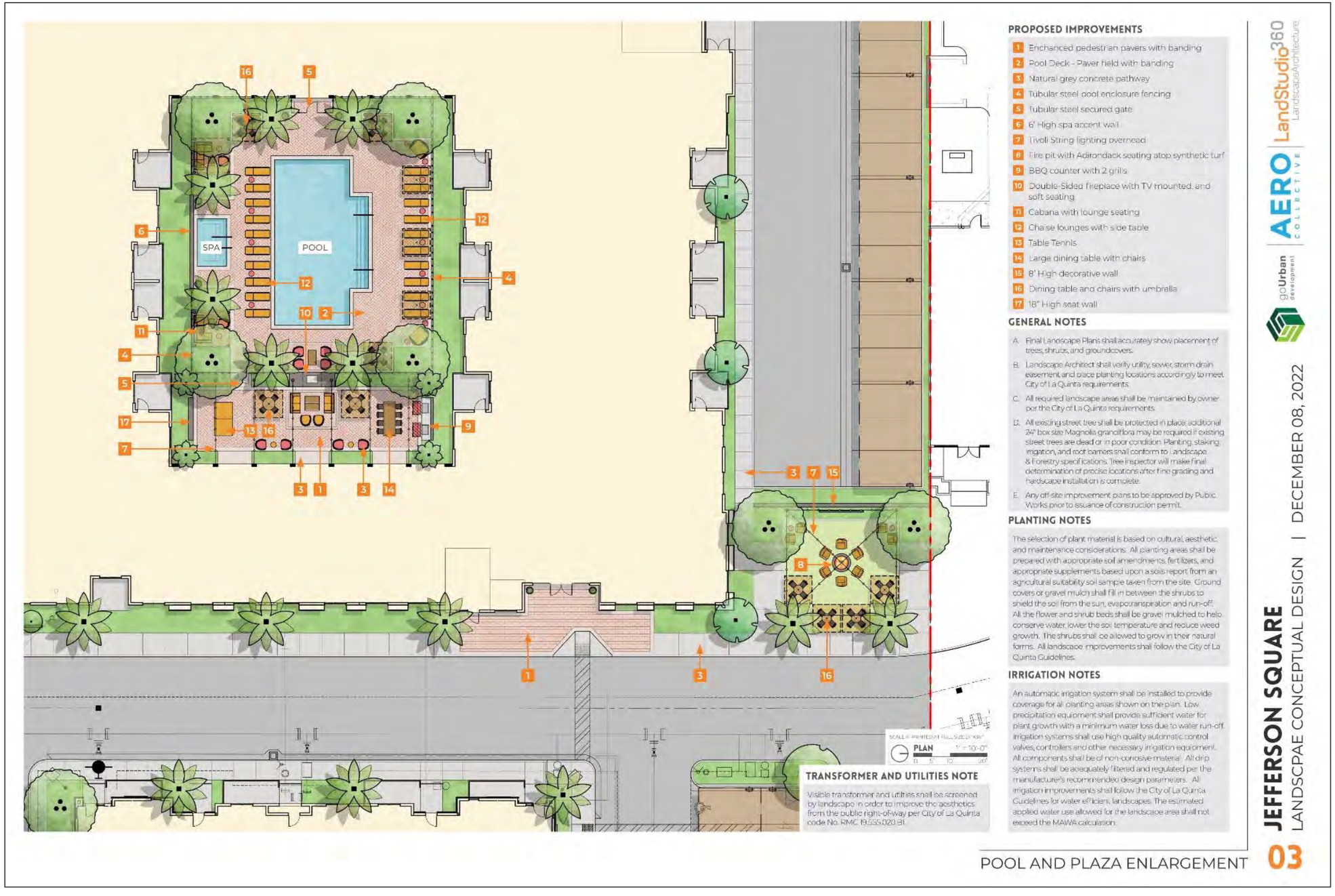


Figure 13: PA 2 Conceptual Landscape Plan

Sheet 3 of 3

D. CIRCULATION PLAN

As shown in Figure 14, the project Circulation Plan is typical of a mixed use center, with an internal system of sidewalks, walkways, primary drives, and access aisles serving the various buildings, parking areas, and patio locations. On site circulation provides for both vehicular and pedestrian movement throughout the site.

Vehicular Access

Vehicular access to the Specific Plan area is taken from two locations along Fred Waring Drive, and two locations along Jefferson Street. Deceleration lanes are provided at the two drives on Jefferson Street, and the eastern drive on Fred Waring Drive. The southernmost drive on Jefferson Street and the westernmost drive on Fred Waring Drive provide left turning lanes into the site from these peripheral roadways. The remaining two ingress and egress locations provide restricted, right in-right out access only. The project provides a dedicated right turn lane for eastbound traffic using Fred Waring Drive turning south onto Jefferson Street. On Jefferson Street, the left turning lane into the project is approximately 650 feet south of the intersection with Fred Waring Drive. On Fred Waring Drive the left turning lane is approximately 540 feet west of the intersection with Jefferson Street. Fred Warning Drive and Jefferson Street are designated in the general plan as a major arterials.

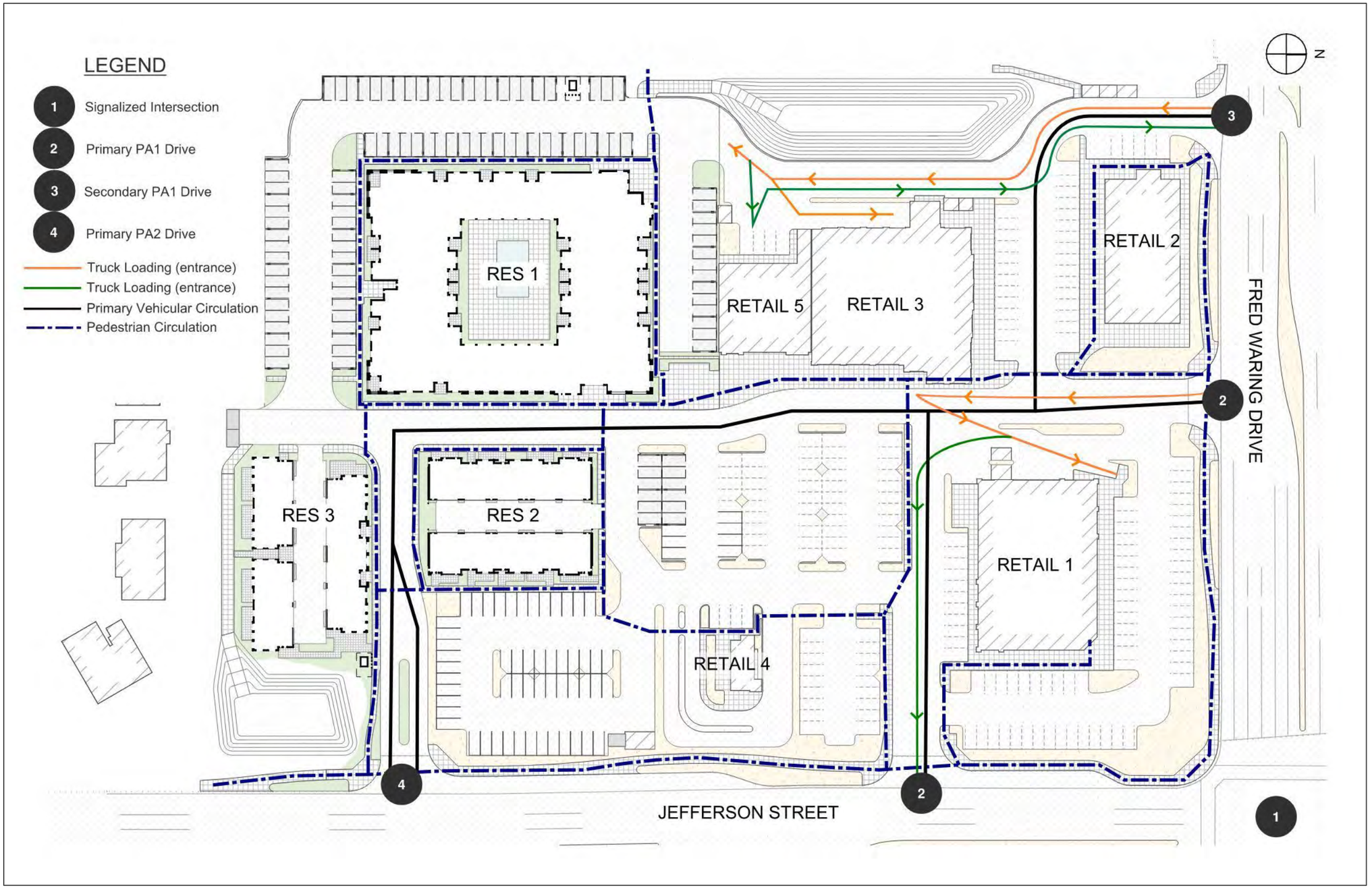


Figure 14: Circulation Plan

Internal Vehicular Circulation

Primary vehicular circulation drives serve as the backbone for vehicular circulation within the Specific Plan area. PA1 includes a total of 176 parking stalls protected by a reciprocal parking agreement. Stalls are evenly distributed throughout PA1, are accessed by drive aisles connecting to the primary vehicular drives, and generally front RETAIL 1, 2, 3, 4, and 5.

Direct access to the RETAIL 1 drive-thru lanes is taken from the primary PA1 drive on Jefferson Street. Drive thru access is provided via two 12-foot-wide drive-thru lanes located on the west side of RETAIL 1. Each lane provides enough stacking to accommodate up to seven automobiles (~120 feet), without obstructing the accessway. RETAIL 1 drive-thru traffic exits the property from the primary PA 1 drive on Jefferson Street. RETAIL 4 also has a double-stacked drive-thru lane. Direct access to RETAIL 4 is taken from the primary PA1 drive on Jefferson Street. To screen views of idling cars from the street, each drive thru has a four-foot wall or a combination of a wall and berm totaling four feet.

The secondary PA1 drive along Fred Waring Drive serves as the primary truck access for RETAIL 3 and 5. Delivery trucks access the loading docks at the rear of RETAIL 3 and 5 by entering the secondary PA1 drive on Fred Waring Drive, and exit the site from the same drive. The primary PA1 drive along Fred Waring Drive serves as the primary truck access for RETAIL 1. A service aisle is provided along the rear of the RETAIL 1, allowing for trucks to make a simple backing entry into dock areas, and exit the site from the primary PA1 drive on Jefferson Street.

The primary PA2 drive on Jefferson Street provides a direct route to PA2. PA2 residents shall proceed to their designated covered parking space(s). PA2 visitors shall park in the designated residential guest parking area located east of RES 2 fronting Jefferson Street.

Pedestrian Circulation

Pedestrian sidewalks and on-street bicycle lanes are provided along both the Fred Waring Drive and Jefferson Street frontages. Sidewalks are eight feet wide and on-street bicycle lanes are four feet wide. A functional network of sidewalks and walkways are provided within the Specific Plan area to link PA1 and PA2, and facilitate safe pedestrian movement throughout the development.

E. GRADING PLAN

Prior to the issuance of any grading permits, applicants shall require a PM10 Plan (dust control plan) in accordance with the applicable City and Southern California Air Quality Management District (SCAQMD) standards and codes. The Specific Plan area was constructed in accordance with the Conceptual Grading and Drainage Plan referenced in Amendment No. 2. A copy of this plan is provided as Figures 15. Minor grading and drainage adjustments are necessary to implement the PA2 mixed-use development design as provided in Figure 16 PA2 Conceptual Grading and Drainage Plan.

Precise grading for the overall site resulted in the development of seven building pads, an above and underground retention system, and associated parking areas designed to convey surface drainage flows to appropriate catch basins on site. The Specific Plan area was graded from the highest pad elevation of 48.5 feet in the southwestern corner of PA2 to low pad elevations of 44.5 feet at the Jefferson / Fred Waring corner.

Limited grading will be necessary for PA2, with a total of approximately 3,000 cubic yards of earthwork required. The demolition and removal of approximately 600 cubic yards of paving would be required to develop RES 2. Final grading would match finished elevations of the surrounding retail parcels and would not result in significant slopes. Precise grading plans are subject to review and approval by the City according to standard engineering protocols.

F. DRAINAGE PLAN

Specific Plan area drainage consists of direct surface runoff into several catch basins located throughout the site (see Figure 15, Conceptual Grading & Drainage Plan). Stormwater is conveyed from the individual catch basins into an underground storm drain system, and ultimately to an underground retention system located near the center of the site and to two above-ground retention basins located on the west and south sides of the site. All storm water is retained on site.

The PA2 drainage will flow into the existing project site drainage system. The exact size and design of the proposed storm drain facilities for the PA2 vertical improvements will be determined by the final engineering design and will be reviewed by the City through standard plan check protocols to ensure that PA2 drainage is adequately addressed. The project's construction contractor, in consultation with the City, shall be responsible for filing all required notices with the Regional Water Quality Control Board (RWQCB), preparing the Strom Water Pollution Prevention Plan (SWPPP), and implementing required Best Management Practices (BMPs) for future projects.

G. SEWER PLAN

Sewer service to the project is provided by the Coachella Valley Water District (CVWD) via an existing 10-inch sewer line within the right of way of Jefferson Street along the site's eastern property line. As shown in Figure 17, Conceptual Grading & Drainage Plan, the Specific Plan area is serviced by two 8-inch private sewer mains. One 8-inch main runs from Jefferson Street to the front side of the RES 1 pad along the primary PA2 drive. This line shall provide sewer service for all PA2 development as illustrated in Figure 18 PA 2 Conceptual Sewer and Water Plan. A second 8-inch sewer main is constructed on the northeast side of the Specific Plan area. This line extends from an existing manhole located on Jefferson Street and runs under the primary PA1 drive to where it terminates in front of RETAIL 3. From this point, the line extends north and south where retail laterals are connect to the line. Sewer laterals for RETAIL 1, 2, 3, 4, and 5 are connected to this sewer main.

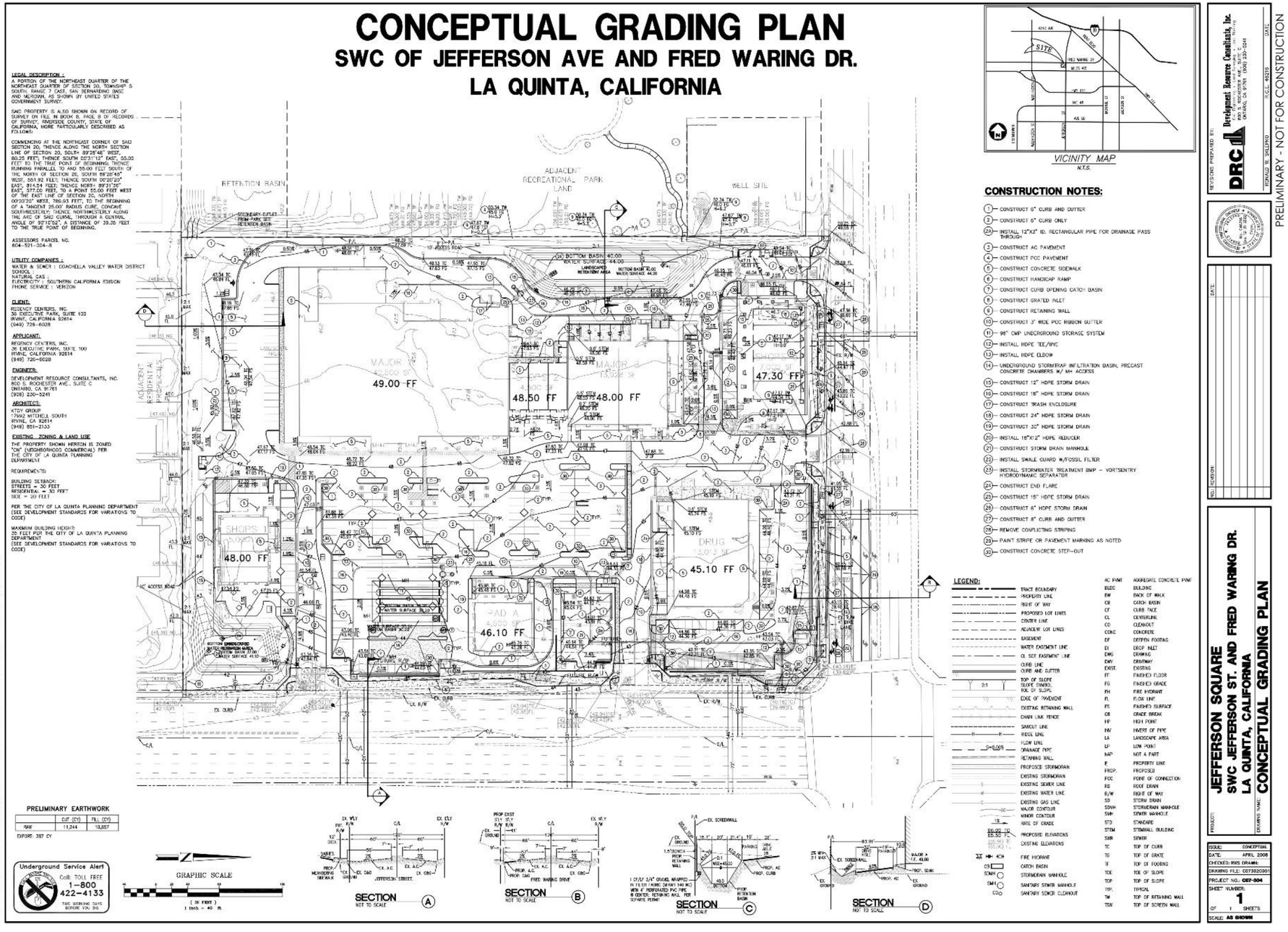


Figure 15: Conceptual Grading Plan

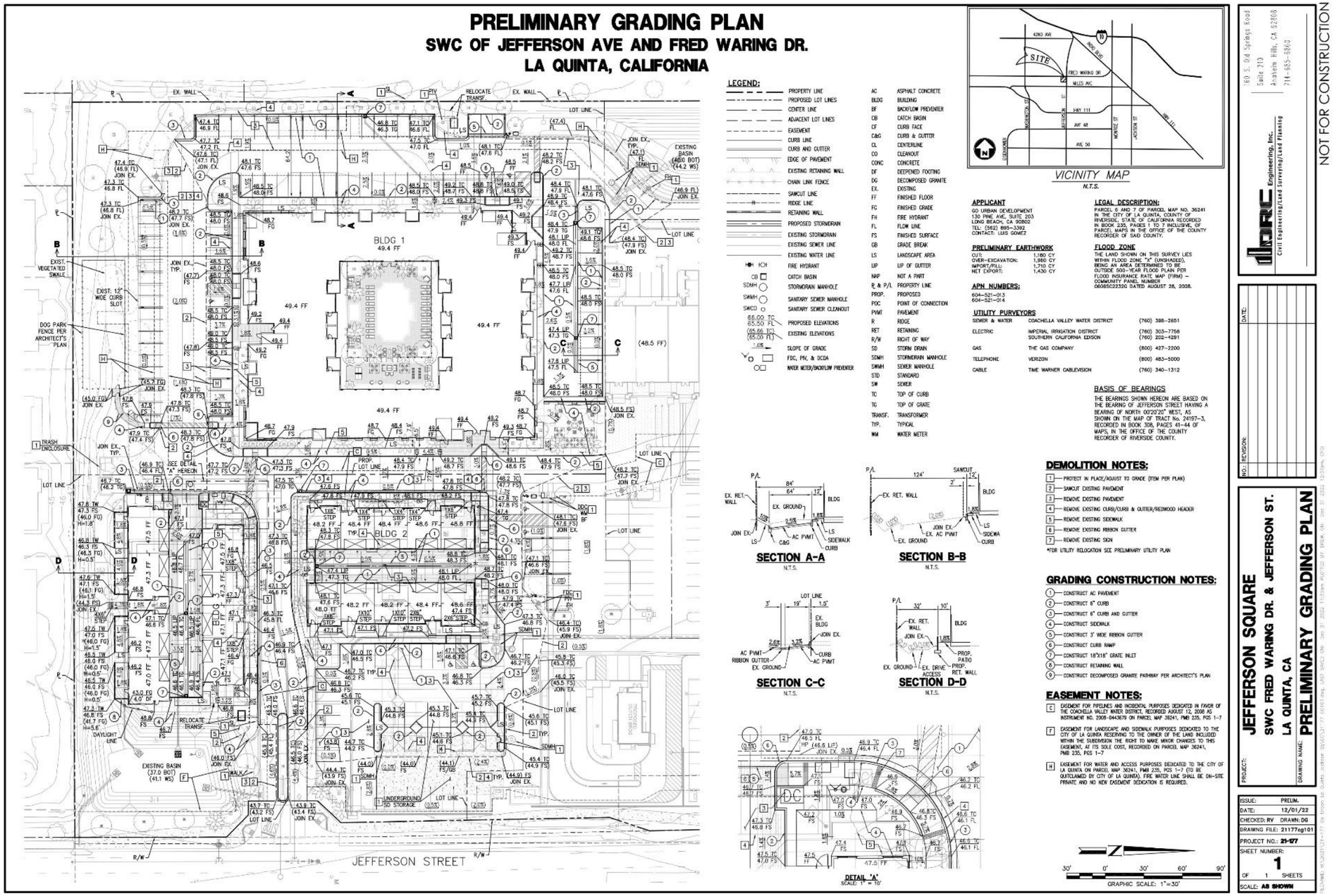


Figure 16: PA2 Conceptual Grading and Drainage Plan

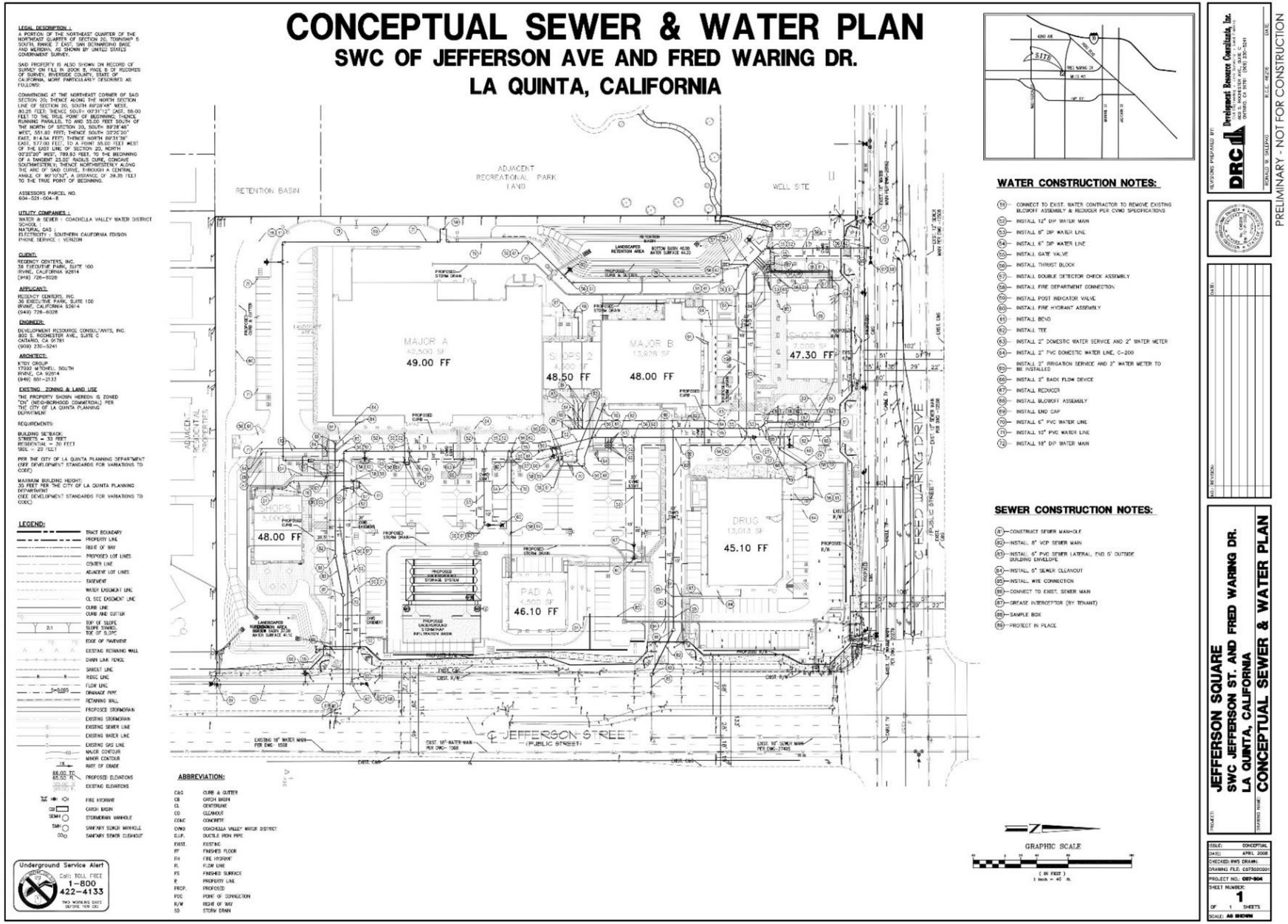


Figure 17: Conceptual Sewer and Water Plan

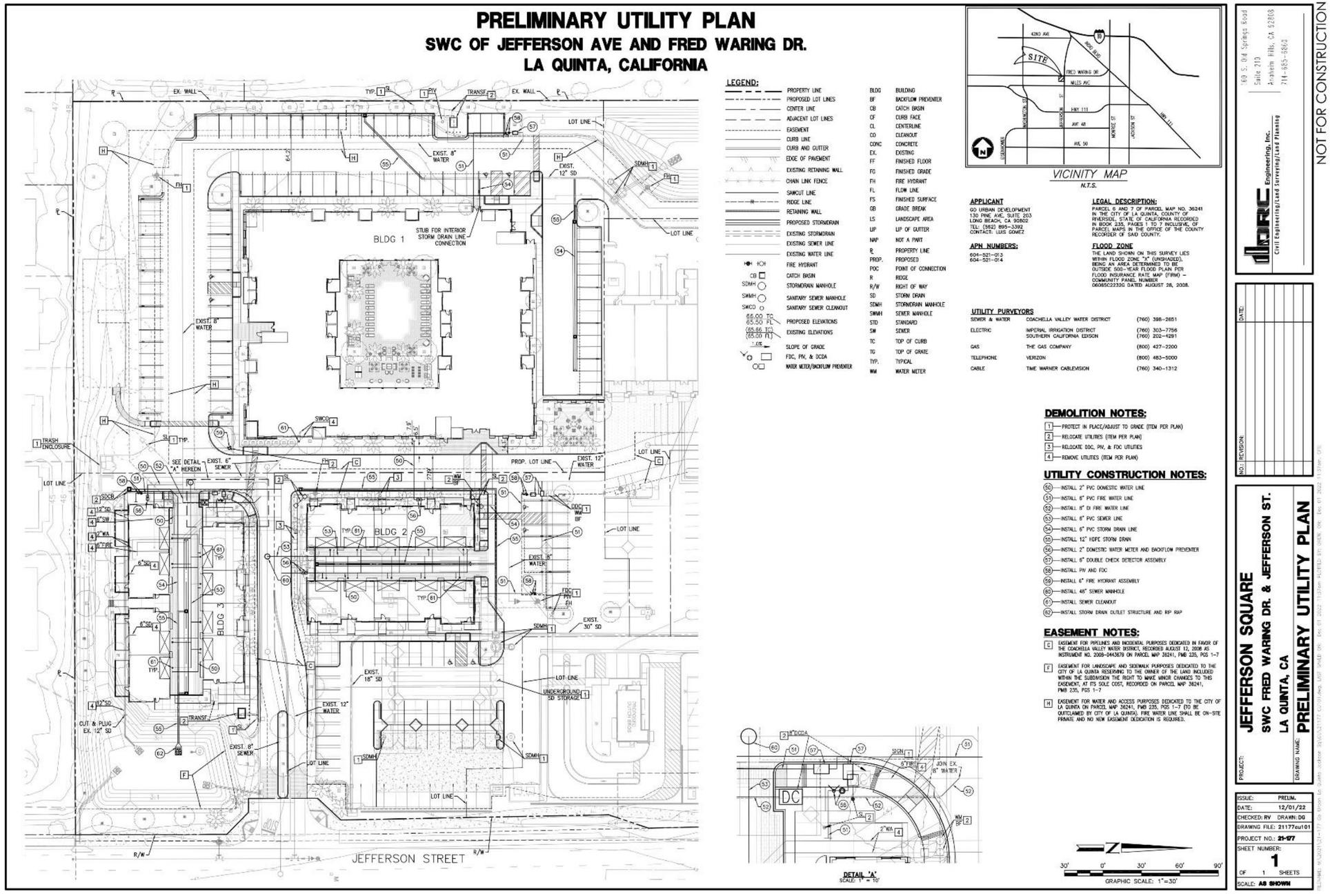


Figure 18: PA2 Conceptual Sewer and Water Plan

H. WATER PLAN

CVWD provides water service to the Specific Plan area via 18-inch water main located on Fred Waring Drive and a 12-inch water main located on Jefferson Street. Domestic, irrigation and fire flow water is taken from the street mains through a network of onsite pipelines consisting of 12-inch, 8-inch and 6-inch main lines. Refer to Figure 17, Conceptual Sewage and Water Plan for a detailed illustration of the existing onsite water system and existing retail laterals. Refer to Figure 18 for an illustration of the proposed PA2 water system.

I. OTHER UTILITY PLANS

Natural Gas

Natural gas service is provided to the Specific Plan area by The Gas Company, which currently maintains a 4-inch gas line within the right of way of Fred Waring Drive, at the project's northwest corner. The required extensions to facilitate service to the PA2 project would be routine and would be coordinated with The Gas Company through their design review and approval process prior to the issuance of grading permits for the project.

Electric

Electric service is provided to the Specific Plan area by the Imperial Irrigation District (IID), which currently maintains existing aboveground 92 kV and 12.5 kV transmission lines within the right of way of Fred Waring Drive along the project's northern property line.

Telephone

Telephone service is provided to the Specific Plan area by Verizon, which maintains existing telephone lines within the right of way of Fred Waring Drive approximately 400 feet west of the project limits.

Cable Television

Cable Television service is provided to the Specific Plan area by Time Warner Cable and is available to the property from existing cable within the right of way of Fred Waring Drive along the project's northern property line.

IV. LAND USE & DEVELOPMENT REGULATIONS

The development regulations contained herein provide specific standards relative to permitted land uses in addition to site design and construction regulations to be applied within the Specific Plan area. They are intended to protect the health, safety, and welfare of the public, and create a harmonious relationship with surrounding land uses. The development regulations of this Specific Plan are consistent with those of the City's CN and MU codes and regulations, unless otherwise specified. The proposed land uses are consistent with the GC land use designation in the City's 2035 General Plan. Should a development standard contained in this Specific Plan conflict with an equivalent standard contained in the City of La Quinta Zoning Code, the provisions of the Specific Plan shall take precedence. In instances where the Specific Plan does not address a particular regulation, the applicable portion of the City of La Quinta Zoning Code shall govern. The Community Development Director shall have the authority to approve minor adjustments during SDP review, so long as they determine such adjustments are consistent with the Specific Plan.

Land use and development regulations are specified for PA1 and PA2 below. It should be noted that if mixed-use development is not implemented within the Specific Plan area, then the PA1 land use and development regulations shall apply to the entire site.

A. PA1 LAND USE & DEVELOPMENT REGULATIONS

Permitted Uses

Permitted uses in PA1 shall include all uses specified by the City's Zoning Code, as listed in Table 9-5 Permitted Uses in Nonresidential Districts under the CN or equivalent zoning designation. Additionally, the drive thru use is allowed on RETAIL 1 and 4.

Development Standards

PA1 is a designated commercial development zone intend for typical neighborhood retail uses as permitted above. Commercial construction in PA1 shall adhere to the development standards listed in Table 5: PA1 Nonresidential Development Standards.

Table 5: PA1 Nonresidential Development Standards

Development Standard	Development Standard
Maximum structure height	35 ft.[1]
Max Structure Height within 150 ft. of Jefferson Street	22 ft.[2]
Maximum number of stories	1
Maximum Floor Area Ratio	0.25
Building Setbacks[3]	

From Jefferson Street	30 ft.
From Fred Waring Drive	30 ft.
Interior property lines	0 ft.
Landscape Setback[(4)]	
From Jefferson Street	20 ft.
From Fred Waring Drive	20 ft.
From Open Space/Park Districts	5 ft. minimum
From residential areas	15 ft.
Interior Landscape	
Parking areas	5% of project area
Non parking areas	5% of project area
Required Parking	
Retail Stores	Minimum of one space per 300 sq. ft gross floor area (GFA).
Restaurant	Minimum of one space per 300 sq. ft. of GFA, when restaurant is not more than 20% of shopping center GFA. For freestanding restaurants and non-freestanding restaurant space in excess of 20% of the total shopping center GFA, parking shall be computed separately using the applicable City restaurant parking ratio(s). A facility to accommodate a minimum of five bicycles shall be provided for any restaurant use.
Other Uses	The parking provisions of the City Zoning Code Section 9.150 shall apply.

Notes:

(1) Not including architectural appendages, such as a roof parapet or tower, up to 41 feet.
(2) Not including up to 10% of the building mass, which may extend up to 36 feet.
(3) Number given is minimum building setback depth from the Street right-of-way that existed prior to the processing of Parcel Map No. 36241. In addition to the required landscape setback, the building setback may contain parking, driveways, and similar facilities.
(4) Landscape setback shall consist of landscaped area within the building setback. Number given is minimum landscaped area from the street right-of-way that existed prior to the processing of Parcel Map No. 36241.

B. PA2 LAND USE & DEVELOPMENT REGULATIONS

Permitted Uses

Permitted uses in PA2 shall include all uses allowed in PA1 and all uses permitted by the City's Mixed Use Overlay Regulations.

Development Standards

PA2 is a designated mixed use development zone which permits the development of commercial, multifamily, or a combination thereof. Commercial construction in PA2 shall adhere to the development standards in Table 5: PA1 Nonresidential Development Standards. Multifamily construction in PA2 shall adhere to the development standards listed in Table 6: PA2 Mixed Use Development Standards. If both commercial and multifamily uses are constructed in PA2, then the development standards listed in both Table 5 and 6 shall apply.

Table 6: PA2 Multifamily Development Standards

Development Standard	Multifamily
Min. / Max. development intensity (du/ac)	12/24
Minimum project size (acre)	1
Maximum building width (ft.)	300
Minimum building separation (ft.)	6
Maximum structure height (ft.)	43.75[(1)]
Max structure height within 150 ft. of Jefferson Street (ft.)[(2)]	28[(3)]
Max structure height within 75 ft. of southern property line where adjacent to residential	28[(3)]
Maximum number of stories	3

Maximum number of stories within 75 ft. of southern property line where adjacent to residential	2
Minimum livable area excluding garage (sq. ft.)	600
Minimum common open area (% of net project area)[4]	20
Active recreation area (% of common open area)[5]	30
Maximum lot coverage (% of net lot area)[6]	60%
Building Setbacks[7]	
From Jefferson Street	30 ft.
From Fred Waring Drive	30 ft.
Interior property lines	0 ft.
Landscape Setback[8]	
From Jefferson Street	20 ft.
From Fred Waring Drive	20 ft.
From Open Space/Park Districts	5 ft. minimum
From residential areas	15 ft.
Interior Landscape	
Parking areas	5% of project area
Non parking areas	5% of project area
Residential garage minimum interior dimensions	Wall to wall dimensions of 9 ft. in width and 18 ft. in depth, provided the min. area is 180 sq. ft per vehicle parking space
Minimum Off-Street Parking Requirement	
Studio and one-bedroom	1 covered space per unit, plus 0.5 guest spaces per unit

Two- and three-bedroom	2 covered spaces per unit plus 0.5 guest spaces per unit
Four or more bedroom	3 covered spaces per unit plus 0.5 covered spaces per each bedroom over three, plus 0.5 guest spaces per unit
Senior Housing	1 covered space per unit, plus 0.5 guest spaces per unit

Notes:

(1) Not including architectural appendages, such as a tower, up to 48 feet.

(2) 150 ft. measurement shall be from the street right-of-way that existed prior to the processing of Parcel Map No. 36241.

(3) Not including up to 10% of the building mass, which may extend up to 36 feet.

(4) Common open area equals percent of net project area. Common open area shall consist of passive landscaped and active recreation area. Rights-of-way, parking areas, private patios, private yards and slopes steeper than twenty percent (20%) shall not count toward the common open area requirement. "Net project area" means all of the land area included within a development project excepting those areas which are designated as primary driveways, drive aisles, parking areas, stormwater retention system (above and underground), public parks, and other uses or easements which preclude the use of the land therein as part of the development project.

(5) Active Recreation Area equals the percent of common open area suitable for active recreational uses such as: swimming pool, spa and related facilities; clubhouse; tot lot with play equipment; court game facilities such as tennis, basketball or racquetball; improved softball or other playfields; or similar facilities for active recreational use.

(6) Lot coverage *means the cumulative ground floor area of the structures on a lot expressed as a percentage of the net lot area. For purposes of this definition, "ground floor area" means all enclosed area within the ground floor of a structure, including exterior walls and mechanical spaces. Carports, garages, accessory buildings and parking structures are included in ground floor area but swimming pools and unenclosed post-supported roofs over patios and walkways are not included and "net lot area" means the horizontal land area within a lot expressed in square feet, acres, or other area measurement.*

(7) Number given is minimum building setback depth from the Street right-of-way that existed prior to the processing of Parcel Map No. 36241. In addition to the required landscape setback, the building setback may contain parking, driveways, and similar facilities.

(8) Landscape setback shall consist of landscaped area within the building setback. Number given is minimum landscaped depth from the street right-of-way that existed prior to the processing of Parcel Map No. 36241.

(9) General Note: Deviations of up to 10 percent shall be allowed per LQMC § 9.60.290.

V. DESIGN GUIDELINES

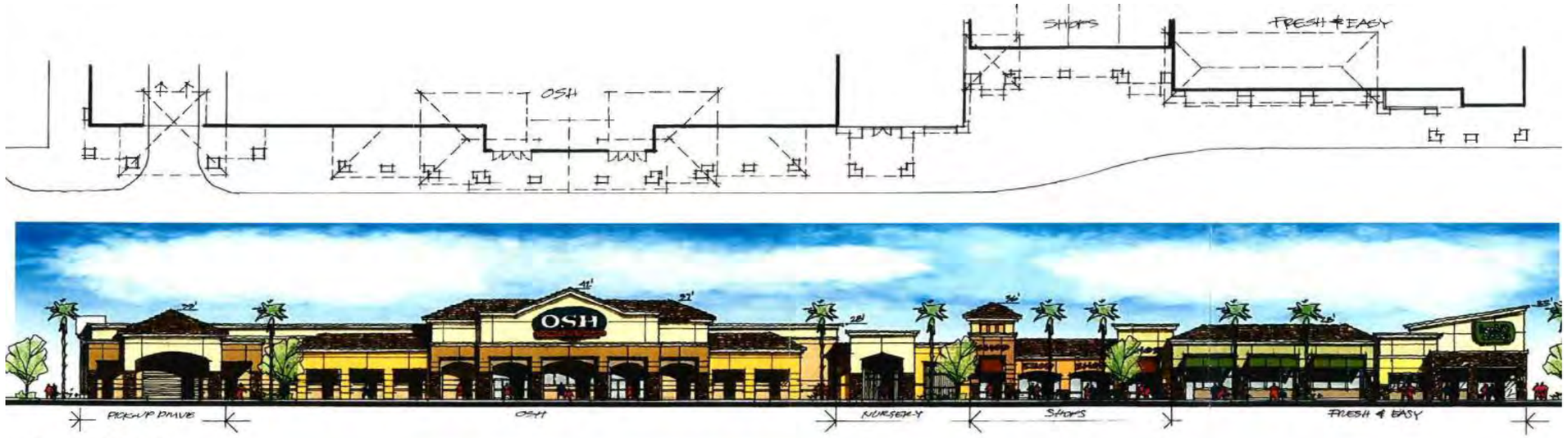
The Design Guidelines for the Specific Plan have been developed as a method of achieving a high quality and cohesive design character for the development of the Specific Plan area. They provide specific design criteria for the development of the project, as well as encourage creativity, imagination, and a high level of harmony and consistency within the surrounding community. Adherence to the Design Guidelines will create a desirable asset to the community and enhance the project's overall value.

These guidelines will govern the design quality of the project for application in the following ways:

- To provide the City of La Quinta with the necessary assurance that the Specific Plan area will develop in accordance with the quality and character proposed;
- To provide guidance to developers, builders, engineers, architects, landscape architects and other professionals in order to maintain the desired design quality;
- To provide guidance to City staff, the Planning Commission, and the City Council in the review of construction plans for the Specific Plan area.

A. RETAIL ARCHITECTURAL GUIDELINES (PA1 and PA2)

Retail architectural design shall strive to achieve a Mediterranean style architecture. In utilizing elements from this vernacular, the retail buildings should achieve a massing and scale that is comforting and pleasing. Textured plaster, deep canopies, and trellises allow for contrast and shade, while simplified cornice detailing and the use of color unifies the different building elements within the complex. Figures 19, 20, 21, and 22 illustrate the typical building elevations and use of the vernacular to unify and provide a sense of scale for the in-line tenants. The figures also illustrate the use of the vernacular for a typical outlying pad building and how the architectural style is continuous around the exterior of the pad building. The elevations used for the Specific Plan provide a basis for acceptable design and materials for the various buildings in PA1 and PA2 and do not deem to illustrate specific examples of building design or building occupants.



EAST ELEVATION
SCALE = 1/16":1'-0"

SOUTH ELEVATION
SCALE = 1/16":1'-0"

NORTH ELEVATION
SCALE = 1/16":1'-0"

WEST ELEVATION
SCALE = 1/16":1'-0"

Figure 19: Example of Inline Retail

NORTH ELEVATION

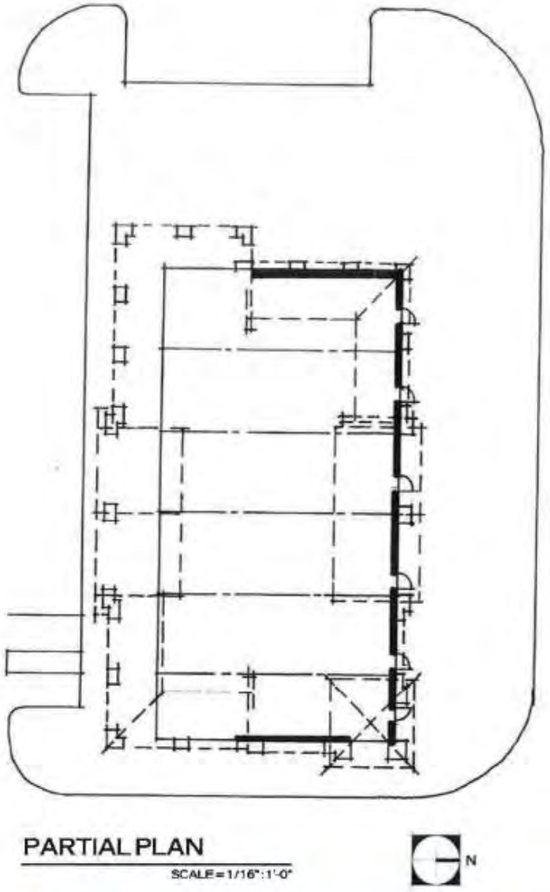
SCALE=1/16":1'-0"

EAST ELEVATION

SCALE=1/16":1'-0"

SOUTH ELEVATION

SCALE=1/16":1'-0"



PARTIAL PLAN

SCALE=1/16":1'-0"

N

WEST ELEVATION

SCALE=1/16":1'-0"

Figure 20: Example of Retail Shop Building

NORTH ELEVATION

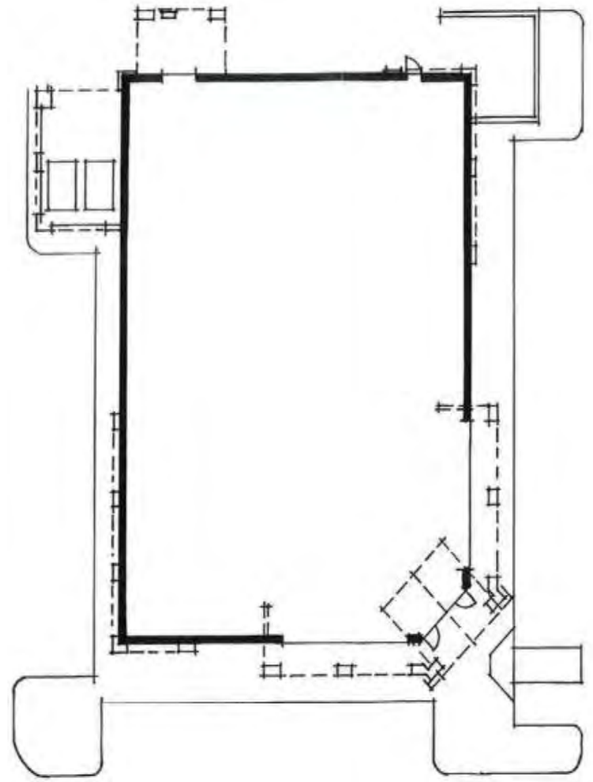
SCALE = 1/16":1'-0"

EAST ELEVATION

SCALE = 1/16":1'-0"

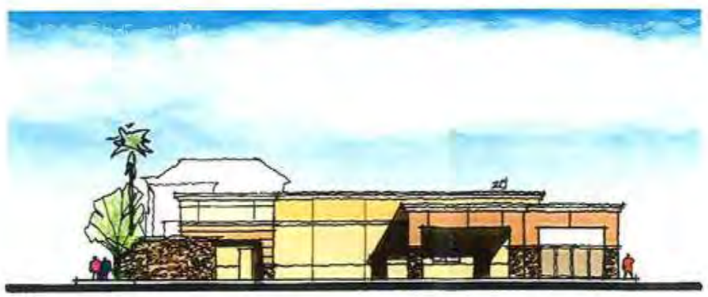
SOUTH ELEVATION

SCALE = 1/16":1'-0"



PARTIAL PLAN

SCALE = 1/16":1'-0"



WEST ELEVATION

SCALE = 1/16":1'-0"

Figure 21: Example of Corner Anchor Building

NORTH ELEVATION

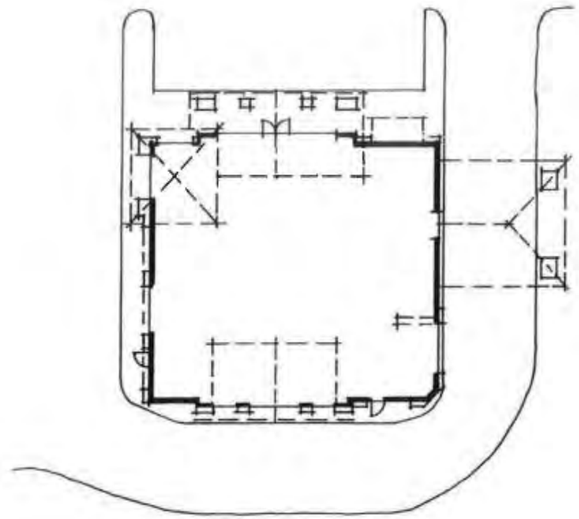
SCALE = 1/16":1'-0"

EAST ELEVATION

SCALE = 1/16":1'-0"

SOUTH ELEVATION

SCALE = 1/16":1'-0"



PARTIAL PLAN

SCALE = 1/16":1'-0"

WEST ELEVATION

SCALE = 1/16":1'-0"

Figure 22: Example of Retail Pad Building

Through the use of extensive canopies, trellises, landscaping, sidewalks, and patios, the Specific Plan area achieves a campus like environment, suitable for pedestrian movement between the various uses throughout the project area.

Mass & Scale

- Varied proportions are encouraged. Elements in facades should be spaced at regular intervals to create a visual rhythm, colonnade effect. Plaster pop-outs on the building sides, where not beneath an arcade, shall be 3'-5' in depth, or to the satisfaction of the Planning Director.
- Each building will incorporate a continuity of mass, scale, architectural features, and similar detailing.
- The facade of in-line retail stores shall be off-set to help break up building mass and give the appearance of multiple buildings.
- Accent features such as medallions, awnings, and color banding should be utilized/encouraged for continuity of scale between the elements/buildings.

Roof Treatments

- Appropriate use of flat, hip, shed, and pitched gable roof forms are encouraged.
- Flat roofs may be used with a parapet alone, or in combination with other roof forms.
- The use of variable ridge lines on a single structure is encouraged.
- Roof pitch may vary between buildings in the complex.
- Mechanical equipment may be placed only on flat portions of roofs provided that they are screened from public view and that the screening is incorporated into building design.
- Roof pitch on any one structure should be consistent within the limitations of the material being used.

Architectural Features and Details

- All mechanical equipment including fuse boxes, heating and cooling devices, and satellite dishes shall be screened from public view. The building parapet heights shall be adjusted so that roof elements are screened from view.
- The use of curtain walls is not allowed.
- Separate screening walls shall only be used as an exception and shall be designed to utilize building materials and colors.
- Exterior walls should emphasize shadow relief using recesses, medallions, covered walkways, trellises, and landscaping where appropriate.
- Building entryways should be visually emphasized and try to keep sense of pedestrian scale.
- Shaded walkways are encouraged in areas with high levels of pedestrian traffic.
- Conversion of first floor windows to exterior tenant entries is allowed subject to Staff approval of architectural details.
- Accent at corners of pad buildings by using small tower features is encouraged.

Walls and Fences

- Walls are encouraged to use materials and colors which match or compliment associated/adjacent buildings and context.
- Walls that create long, unbroken straight lines should be avoided when possible, by varying the parapets or with use of color and accents.

Materials & Colors

- The facade plays an integral role in building appearance and should use a continuous palette of similar materials and colors.
- Restraint should be exercised in the number of materials and colors selected for a given structure.
- Acceptable construction materials are steel, wood, stucco, concrete, plaster, ceramic tile, natural stone, aluminum, and glass.
- Architectural details should be painted to match the facade.
- The following identifies the general colors and materials which will serve as a working palette to provide a basis of establishing architectural cohesiveness for the project (changes may occur at time of Architectural review).
- It should be noted that the below mentioned colors are suggestions, and deviations are permitted with City approval.
- Trellis structures shall be color finished metal tube structures or canvas awnings.
- Paint Colors: (Manufacturer: Dunn Edwards Paint Company, Sherwin Williams, or equal)

  Main Building Colors: These colors would be used on large wall surfaces but could also be used as accents.

  Paint

  1. Amber Dawn #DE2277
  2. Biscuit #DE5330
  3. Golden Crest #DE5353
  4. Crossroads #DE5359
  5. Lustrous Yellow #DE5472
  6. Aloe Plant #DE5563
  7. Light Aspiration #DE6185
  8. Rattan Basket #DE6201
  9. Calico Rock #DE6229
  10. Union Springs #DE6243
  11. Mesa Tan #DEC718
  12. Adobe #DEC726
  13. Agreeable Gray SW 7029
  14. Downing Stone SW 2821
  15. Techno Gray SW 6170
  16. Dovetail SW 7018
  17. Studio Clay SW 9172
  18. Granite Peak SW 6250

  Trim Colors

1. Calla Lily #DE5498
2. Marble Dust #DE6156
3. Porous Stone #DE6220
4. Pepper Shake SWVS 435
5. Urbane Bronze SW 7048
6. Cocoon SW 6173

Stone
Eldorado Stone
Bouquet / Flintstone

Roof Tile
Monier Lifetile
Type: Slate
Color: Cherrywood

Metal Awnings
Berridge Double Rib Panel
Colors: Hartford Green & Colonial Red

Exterior Cement Plaster
Finish: Smooth, hand toweled and painted with elastomeric paint
Color: Refer to Paint Colors

Windows
Material: Steel or Aluminum Frames with true divided lights
Color: Ral #502 1
Glazing: Clear [Light to Medium Bronze Tint with prior written approval]

Hardscape Color Accents
Chromix
#C-26 Antique Cork
#C-27 Westwood Brown

Vents
Tricom Black SW 6258

B. MIXED USE ARCHITECTURAL GUIDELINES (PA2)

The mixed-use architectural guidelines provided in this section focus on multifamily design. Retail construction in PA2 would adhere to the architectural guidelines described in Section V. A. Retail Architecture Guidelines. Multifamily design shall strive to achieve a contemporary Mediterranean architecture, as opposed to the more traditional architecture sought in PA1. PA2 architecture shall utilize elements from the existing retail vernacular, but at a more residential scale. Multifamily developments shall achieve a massing and scale that is both comforting and pleasing. Textured plaster, deep balconies, and trellises allow for contrast and shade, while simplified cornice detailing and the use of color unify the different building elements within the complex. Figures 23, 24, 25 and 26 illustrate the typical building elevations and use of the vernacular to unify and provide a sense of scale. The figures also illustrate the use of the vernacular for a typical outlying townhome building and how the architectural style is continuous with the other multifamily

buildings. The elevations shown in this section provide a basis for acceptable design and materials for the various buildings in PA2 and do not deem to illustrate specific examples of building design.

Bldg 1 - East Elevation (2)

Bldg 1 - North Elevation (1)

GENERAL NOTES

1. REFER TO ENLARGED PLANS FOR ADDITIONAL WALL TYPE CALL-OUTS, DIMENSIONS, DOOR TAGS, AND DETAIL.
2. TYPICAL DIMENSIONS ARE TO FACE OF STRUCTURE WHICH IS FACE OF CONCRETE, FACE OF STUD, OR FACE OF SHEATHING AS OCCURS.
3. WHERE EXTRA LAYER OF GYPSUM BOARD IS REQUIRED FOR FIRE RATING ADD EXTRA LAYER TO ENTIRE LENGTH OF WALL, SO THERE IS NO JOG IN FINISHED SURFACE.
4. PROVIDE FIRE PARTITION IN ACCORDANCE WITH CBC 709.1 FOR:
   -WALLS SEPARATING DWELLING UNITS
   -CORRIDOR WALLS
5. REFER TO CIVIL DWGS FOR UTILITY LOCATIONS & CONNECTIONS.

KEYNOTES

1. SMOOTH FINISH STUCCO, WHITE
2. SMOOTH FINISH STUCCO, BEIGE
3. SMOOTH FINISH, TAN
4. STONE, FACADE LIGHT
5. ROOF, WOOD STRUCTURAL, BEIGE SAND
6. ROOF, TILE, SPANISH GREY
7. ROOF DECK
8. FIBREX WINDOWS, FRAME COLOR BLACK, CLEAR GLASS
9. GLASS AND ALUMINUM STOREFRONT SYSTEM, BLACK
10. METAL ADDRESS NUMBERS
11. STAIR / ELEVATOR TOWER - EXEMPT FROM BLDG HEIGHT
12. TRANSFORMER
13. RESIDENTIAL LOBBY ENTRANCE
14. METAL RAILING, BLACK
15.

LEGEND

- STONE, FACADE LIGHT
- STUCCO, WHITE
- ACCENT PANEL
- TILE, SPANISH GREY

Figure 23: Example of 3-Story Multifamily Building Elevation

Sheet 1 of 2

Bldg 1 - South Elevation (2)

Bldg 1 - West Elevation (1)

GENERAL NOTES

1. REFER TO ENLARGED PLANS FOR ADDITIONAL WALL TYPE CALL-OUTS, DIMENSIONS, DOOR TAGS, AND DETAIL.

2. TYPICAL DIMENSIONS ARE TO FACE OF STRUCTURE WHICH IS FACE OF CONCRETE, FACE OF STUD, OR FACE OF SHEATHING AS OCCURS.

3. WHERE EXTRA LAYER OF GYPSUM BOARD IS REQUIRED FOR FIRE RATING ADD EXTRA LAYER TO ENTIRE LENGTH OF WALL, SO THERE IS NO JOG IN FINISHED SURFACE.

4. PROVIDE FIRE PARTITION IN ACCORDANCE WITH CBC 709.1 FOR:
-WALLS SEPARATING DWELLING UNITS
-CORRIDOR WALLS

5. REFER TO CIVIL DWGS FOR UTILITY LOCATIONS & CONNECTIONS.

KEYNOTES

1. SMOOTH FINISH STUCCO, WHITE
2. SMOOTH FINISH STUCCO, BEIGE
3. SMOOTH FINISH, TAN
4. STONE, FACADE LIGHT
5. ROOF, WOOD STRUCTURAL, BEIGE SAND
6. ROOF, TILE, SPANISH GREY
7. ROOF DECK
8. FIBREX WINDOWS, FRAME COLOR BLACK, CLEAR GLASS
9. GLASS AND ALUMINUM STOREFRONT SYSTEM, BLACK
10. METAL ADDRESS NUMBERS
11. STAIR / ELEVATOR TOWER - EXEMPT FROM BLDG HEIGHT
12. TRANSFORMER
13. RESIDENTIAL LOBBY ENTRANCE
14. METAL RAILING, BLACK
15.

LEGEND

- STONE, FACADE LIGHT
- STUCCO, WHITE
- ACCENT PANEL
- TILE, SPANISH GREY

Figure 23: Example of 3-Story Multifamily Building

Sheet 2 of 2

Bldg 2 - North Elevation (2)

Bldg 2 - East Elevation (1)

GENERAL NOTES

1. REFER TO ENLARGED PLANS FOR ADDITIONAL WALL TYPE CALL-OUTS, DIMENSIONS, DOOR TAGS, AND DETAIL.

2. TYPICAL DIMENSIONS ARE TO FACE OF STRUCTURE WHICH IS FACE OF CONCRETE, FACE OF STUD, OR FACE OF SHEATHING AS OCCURS.

3. WHERE EXTRA LAYER OF GYPSUM BOARD IS REQUIRED FOR FIRE RATING ADD EXTRA LAYER TO ENTIRE LENGTH OF WALL, SO THERE IS NO JOG IN FINISHED SURFACE.

4. PROVIDE FIRE PARTITION IN ACCORDANCE WITH CBC 709.1 FOR:
-WALLS SEPARATING DWELLING UNITS
-CORRIDOR WALLS

5. REFER TO CIVIL DWGS FOR UTILITY LOCATIONS & CONNECTIONS.

KEYNOTES

1. SMOOTH FINISH STUCCO, WHITE
2. SMOOTH FINISH STUCCO, BEIGE
3. SMOOTH FINISH, TAN
4. STONE, FACADE LIGHT
5. ROOF, WOOD STRUCTURAL, BEIGE SAND
6. ROOF, TILE, SPANISH GREY
7. ROOF DECK
8. FIBREX WINDOWS. FRAME COLOR BLACK. CLEAR GLASS
9. GLASS AND ALUMINUM STOREFRONT SYSTEM, BLACK
10. METAL ADDRESS NUMBERS
11. STAIR / ELEVATOR TOWER - EXEMPT FROM BLDG HEIGHT
12. TRANSFORMER
13. RESIDENTIAL LOBBY ENTRANCE
14. METAL RAILING, BLACK
15.

LEGEND

- STONE, FACADE LIGHT
- STUCCO: WHITE
- ACCENT PANEL
- TILE, SPANISH GREY

Figure 24: Example of 3-Story Townhome Building Elevation

Bldg 3 - North Elevation 2

Bldg 3 - East Elevation 1

GENERAL NOTES

1. REFER TO ENLARGED PLANS FOR ADDITIONAL WALL TYPE CALL-OUTS, DIMENSIONS, DOOR TAGS, AND DETAIL.
2. TYPICAL DIMENSIONS ARE TO FACE OF STRUCTURE WHICH IS FACE OF CONCRETE, FACE OF STUD, OR FACE OF SHEATHING AS OCCURS.
3. WHERE EXTRA LAYER OF GYPSUM BOARD IS REQUIRED FOR FIRE RATING ADD EXTRA LAYER TO ENTIRE LENGTH OF WALL, SO THERE IS NO JOG IN FINISHED SURFACE.
4. PROVIDE FIRE PARTITION IN ACCORDANCE WITH CBC 709.1 FOR:
   -WALLS SEPARATING DWELLING UNITS
   -CORRIDOR WALLS
5. REFER TO CIVIL DWGS FOR UTILITY LOCATIONS & CONNECTIONS.

KEYNOTES

1. SMOOTH FINISH STUCCO, WHITE
2. SMOOTH FINISH STUCCO, BEIGE
3. SMOOTH FINISH, TAN
4. STONE, FACADE LIGHT
5. ROOF, WOOD STRUCTURAL, BEIGE SAND
6. ROOF, TILE, SPANISH GREY
7. ROOF DECK
8. FIBREX WINDOWS, FRAME COLOR BLACK, CLEAR GLASS
9. GLASS AND ALUMINUM STOREFRONT SYSTEM, BLACK
10. METAL ADDRESS NUMBERS
11. STAIR / ELEVATOR TOWER - EXEMPT FROM BLDG HEIGHT
12. TRANSFORMER
13. RESIDENTIAL LOBBY ENTRANCE
14. METAL RAILING, BLACK

LEGEND

- STONE, FACADE LIGHT
- STUCCO, WHITE
- ACCENT PANEL
- TILE, SPANISH GREY

Figure 25: Example of 2- & 3-Story Townhome Building Elevation

GENERAL NOTES

1. REFER TO ENLARGED PLANS FOR ADDITIONAL WALL TYPE CALL-OUTS, DIMENSIONS, DOOR TAGS, AND DETAIL.

2. TYPICAL DIMENSIONS ARE TO FACE OF STRUCTURE WHICH IS FACE OF CONCRETE, FACE OF STUD, OR FACE OF SHEATHING AS OCCURS.

3. WHERE EXTRA LAYER OF GYPSUM BOARD IS REQUIRED FOR FIRE RATING ADD EXTRA LAYER TO ENTIRE LENGTH OF WALL, SO THERE IS NO JOG IN FINISHED SURFACE.

4. PROVIDE FIRE PARTITION IN ACCORDANCE WITH CBC 709.1 FOR:
-WALLS SEPARATING DWELLING UNITS
-CORRIDOR WALLS

5. REFER TO CIVIL DWGS FOR UTILITY LOCATIONS & CONNECTIONS.

KEYNOTES

1. SMOOTH FINISH STUCCO, WHITE
2. SMOOTH FINISH STUCCO, BEIGE
3. SMOOTH FINISH, TAN
4. STONE, FACADE LIGHT
5. ROOF, WOOD STRUCTURAL, BEIGE SAND
6. ROOF, TILE, SPANISH GREY
7. ROOF DECK
8. FIBREX WINDOWS, FRAME COLOR BLACK, CLEAR GLASS
9. GLASS AND ALUMINUM STOREFRONT SYSTEM, BLACK
10. METAL ADDRESS NUMBERS
11. STAIR / ELEVATOR TOWER - EXEMPT FROM BLDG HEIGHT
12. TRANSFORMER
13. RESIDENTIAL LOBBY ENTRANCE
14. METAL RAILING, BLACK
15.

LEGEND

- STONE, FACADE LIGHT
- STUCCO, WHITE
- ACCENT PANEL
- TILE, SPANISH GREY

Figure 26: Example of 2-Story Townhome Building Elevation

Through the use of extensive balconies, trellises, landscaping, sidewalks, and patios, the Specific Plan area achieves a campus like environment, suitable for pedestrian movement between the various uses throughout the project area.

Mass & Scale

- Varied proportions are encouraged. Elements in facades should be spaced at regular intervals to create a visual rhythm. Plaster pop-outs on the building sides shall be to the satisfaction of the Planning Director.
- Each building will incorporate a continuity of mass, scale and architectural features and similar detailing.
- Accent features such as awnings and color banding should be utilized/encouraged, for continuity of scale between the elements/buildings.

Roof Treatments

- Appropriate use of flat, hip, shed, and pitched gable roof forms are encouraged.
- Flat roofs may be used with a parapet alone, or in combination with other roof forms.
- The use of variable ridge lines on a single structure is encouraged.
- Roof pitch may vary between buildings in the complex.
- Mechanical equipment may be placed only on flat portions of roofs provided that they are screened from public view and that the screening is incorporated into building design.
- Roof pitch on any one structure should be consistent within the limitations of the material being used.

Architectural Features and Details

- All mechanical equipment including fuse boxes, heating and cooling devices and satellite dishes shall be screened from public view. The building parapet heights shall be adjusted so that roof elements are screened from view.
- The use of curtain walls is not allowed.
- Separate screening walls shall only be used as an exception and shall be designed to utilize building materials and colors.
- Exterior walls should emphasize shadow relief using recesses, covered walkways, trellises, and landscaping where appropriate.
- Building entryways should be visually emphasized and try to keep sense of pedestrian scale.
- Accent at corners of pad buildings by using small tower features is encouraged.

Walls and Fences

- Walls are encouraged to use materials and colors which match or compliment associated/adjacent buildings and context.
- Walls that create long, unbroken straight lines should be avoided when possible, by varying the parapets or with use of color and accents.

Materials & Colors

- The facade plays an integral role in building appearance and should use a continuous palette of similar materials and colors.
- Restraint should be exercised in the number of materials and colors selected for a given structure.
- Acceptable construction materials are steel, wood, stucco, concrete, plaster, ceramic tile, natural stone, aluminum, and glass.
- Architectural details should be painted to match the facade.
- The following identifies the general colors and materials which will serve as a working palette to provide a basis of establishing architectural cohesiveness for the project (changes may occur at time of Architectural review).
- It should be noted that the below mentioned colors are suggestions, and deviations are permitted with City approval.
- Trellis structures shall be color finished metal tube structures or canvas awnings.
- Paint Colors: (Manufacturer: Dunn Edwards Paint Company, Sherwin Williams, or equal)

  Main Building Colors These colors would be used on large wall surfaces but could also be used as accents.

  Paint

  1. Amber Dawn #DE2277
  2. Biscuit #DE5330
  3. Golden Crest #DE5353
  4. Crossroads #DE5359
  5. Lustrous Yellow #DE5472
  6. Aloe Plant #DE5563
  7. Light Aspiration #DE6185
  8. Rattan Basket #DE6201
  9. Calico Rock #DE6229
  10. Union Springs #DE6243
  11. Mesa Tan #DEC718
  12. Adobe #DEC726
  13. Agreeable Gray SW 7029
  14. Downing Stone SW 2821
  15. Techno Gray SW 6170
  16. Dovetail SW 7018
  17. Studio Clay SW 9172
  18. Granite Peak SW 6250
  19. Whisper #DEW340 (Or equivalent)

  Trim Colors

  1. Calla Lily #DE5498
  2. Marble Dust #DE6156
  3. Porous Stone #DE6220
  4. Pepper Shake SWVS 435
  5. Urbane Bronze SW 7048
  6. Cocoon SW 6173

7. Stockhorse #DE6126 (Or equivalent)

Stone
Eldorado Stone
Bouquet / Flintstone
French Limestone: Country Beige (Or equivalent)

Roof Tile
Monier Lifetile
Type: Slate
Color: Cherrywood

Eagle Tile
Series: Malib
Color: SMM 8820 Santa Clara Blend (Or equivalent)

Awnings
Berridge Double Rib Panel
Colors: Hartford Green & Colonial Red

Sunbrella (Fabric)
Colors: 14617 Hogan Flame (Or equivalent)

Exterior Cement Plaster
Finish: Smooth, hand toweled and painted with elastomeric paint
Color: Refer to Paint Colors

Windows
Material: Steel or Aluminum Frames with true divided lights
Color: Black
Glazing: Clear

Material: Aluminum Storefront Window
Color: Black
Glazing: Clear

Hardscape Color Accents
Chromix
#C-26 Antique Cork
#C-27 Westwood Brown

C. SITE SIGN GUIDELINES

A detailed sign program for the Specific Plan area will be submitted under a separate sign permit following Specific Plan approval. The developer shall secure the sign permit from the City's Building and Safety Department by submitting three (3) copies of the fully dimensioned scaled drawings as follows:

a) A site plan showing the location of the occupant space on the site.

b) An elevation of the occupant space drawn to scale, showing sign placement and occupant space width.
c) A detailed elevation of the sign drawn to scale and showing all colors, materials, dimensions, and copy.
d) Fabrication and installation details, including structural and engineering data, UL electrical specification, and type and intensity of illumination (for electrical signs).
e) Any other drawing, details, and information as required by the City.

Since the Jefferson Square Specific Plan site is located at a secondary gateway into the City, the project will provide an approximate 468 square foot area at the northeast corner of the site for a City monument sign. The design and ultimate construction of the City's monument sign will be the City's responsibility and will be completed after development of the Specific Plan at the City's discretion. Landscaping and continued landscape maintenance within the sign area shall be the responsibility of the project's Building Management Association.

D. SITE LIGHTING GUIDELINES

- Exterior lighting, when used, should enhance the building design and the adjoining landscape.
- Lighting standards and building fixtures should be of a design and size compatible with the building and adjacent areas.
- Lighting shall be restrained in design and excessive brightness (night glow) avoided.
- Standard design techniques will be employed to shield parking light fixtures from adjacent land uses and control direct glare and spill light emanating from these fixtures.
- Parking lot light poles will be equipped with a recessed lamp and a flush lens and shall not exceed a maximum height of 18 feet throughout the site.
- The average foot candles (fc) for the project site would be 1.8 fc, with a maximum of 4.9 fc and a minimum of 0.7 fc.

E. SITE LANDSCAPE GUIDELINES

The guidelines presented herein are not intended to discourage creative design or individuality. Rather, they are intended to assist in providing the continuity and desired image which will make the Specific Plan area a unique and special mixed use project.

General Guidelines

- Ground covers or gravel mulch should be used to enhance the appearance of the Specific Plan area and protect soil from erosion. Acceptable groundcover includes gravel, rocks or living plant materials. Tree bark and shredded wood products, which are lightweight and subject to wind and water erosion, are prohibited in unprotected areas.
- Water efficient landscape materials, including native plants, with drip irrigation should be used wherever possible as a means of conserving scarce water resources and minimizing maintenance costs.
- Landscaping should be designed to screen above ground utility equipment, service areas and trash containers. Homogenous, visually subtle plant materials should be selected for use in these areas in order not to focus attention on the objectionable items.

Entryways

- Areas which serve as a focus of vehicular traffic, such as project entries, should be accented by the use of colorful shrubs and ground covers for enhanced visual interest. These shrubs and ground covers may include Aloe, Angelita Daisy, Bougainvillea, Golden Barrel Cactus, Purple and gold Lantana, Verbena, and Yucca.
- Project entries should utilize vertical accents such as palm trees to provide a sense of arrival to the facility with California Fan Palms of matched or varying heights.
- Plant materials at project entries should be located so as to avoid interfering with motorist sight lines. Plant combinations shall leave an area from 30 inches above grade open to allow for unobstructed vision of approaching vehicles and pedestrians.

Buildings

- Plant materials should be used to soften long stretches of blank wall surface.
- Landscape materials shall be selected with colors and textures which enhance architectural elements.

Streetscapes

- Streetscapes should incorporate informal masses of trees and shrubs.
- Streetscapes fronting the project should maintain a plant palette and design concept which is compatible with surrounding finished street frontages.

Parking Lots

- Plant material will consist of Lantana groundcover, Palo Verde and Desert Museum trees, and Desert Cassia, Texas Ranger, Muhlenbergia, and Red Yucca shrubs which will allow sight line over shrubs yet provide islands that are green.
- The design of parking lots should include provisions for canopy trees to provide shade for parked vehicles.
- Parking areas should be screened from adjacent roadways by the use of low walls, landscaping, or berms.

VI. OPERATIONAL GUIDELINES

A. HOURS OF OPERATION

The retail uses on site will operate from 6:00 AM to 12:00 AM, Monday through Sunday. Any Market or Drug Store would also be open 24 hours a day, seven days a week.

B. TRANSPORTATION DEMAND MANAGEMENT

According to the guidelines contained in the City's Transportation Demand Ordinance (Section 9.180.030), this project may be required to make provisions for transportation demand management. If the City deems necessary, the project shall incorporate the following measures:

- The project shall make provisions for bicycle racks in accordance with City Zoning Code.
- The project shall identify a Transportation Demand Coordinator to promote participation in TOM programs among employees.
- The TDM Coordinator shall encourage ride sharing, bus ridership, telecommuting, flexible work schedules, and other TOM programs as feasible and appropriate.

C. MAINTENANCE

Maintenance of buildings, parking facilities, common walkways and landscaped areas, sewers, drainage facilities, utilities, and any other improvements not dedicated to public use shall be maintained by the project's Building Management Association. On site facilities and landscaping shall be maintained in a clean, attractive, and safe condition in accordance with City regulations.

Appendix A
GENERAL PLAN CONSISTENCY ANALYSIS

LAND USE ELEMENT		
Policy No.	**Policy**	**Consistency**
Goal LU-1	Land use compatibility throughout the City.	
Policy LU 1.1	The Land Use Map shall implement the goals and policies of the Land Use Element and the other Elements of this General Plan.	The Specific Plan area is located at the southwest corner of Fred Waring Drive and Jefferson Street. The Specific Plan area Land Use designation is CG General Commercial. The Specific Plan area shall serve as a mix of commercial and multifamily uses in conformance with the CG General Commercial Land Use designation.
Goal LU-2	High quality design that complements and enhances the City.	
Policy LU 2.1	Changes and variations from the Zoning Ordinance in a Specific Plan will be offset by high quality design, amenities and mix of land uses.	This Specific Plan includes land use and development regulations (Section IV) and design guidelines (Section V) that will ensure a mix of commercial and multifamily uses of high quality and cohesive design character. Architectural design guidelines require a Mediterranean architecture with the use of high-quality finishes and materials, and lush landscape improvements. The Specific Plan area shall include pedestrian connections with a plaza and other pedestrian friendly features. Residents shall benefit from a variety of amenities including a swimming pool, indoor gym, and clubhouse. Pedestrian walkways shall be well landscaped.
Policy LU 2.2	Specific Plans shall be required for projects proposing the integration of recreation, tourist commercial and residential uses; and for all projects proposing flexible development standards that differ from the Zoning Ordinance.	The Specific Plan approval dates back nearly 20 years, followed by the approval of Specific Plan Amendment No. 1 and Specific Plan Amendment No. 2 in 2005 and 2008, respectively. Planning Area 1 is fully built out with nearly 39,000 sq. ft. of commercial retail. Planning Area 2 has remained vacant for nearly 15 years as retail demand has faltered over the past 10 years. Specific Plan Amendment No. 3 provides flexible design standards that differ from the Zoning Ordinance but remain in-line with the City's mixed use overlay development standards.
Policy LU 2.3	The City's outdoor lighting ordinance will be maintained.	The outdoor lighting contained within the site will not produce significant light or glare that would adversely affect day or nighttime views in the area. New light sources will be similar to the existing lighting patterns in the area and will comply with the City's lighting ordinance.
Goal LU-3	Safe and identifiable neighborhoods that provide a sense of place.	

Policy LU 3.1	Encourage the preservation of neighborhood character and assure a consistent and compatible land use pattern.	The Specific Plan area is located at the southwest corner of Fred Waring Drive and Jefferson Street, two major arterial roadways with 120-foot-wide rights-of-way. The Esplanade single family residential subdivision is located directly across Fred Waring Drive, north of the Specific Plan area. The property to the east of Jefferson Street is within the City of Indio's jurisdictional boundaries and has been developed as a retail center. The Heritage Palms Golf Resort is located across Jefferson Street to the southeast. Land use immediately west of the site includes an existing well site, City park, and a retention basin associated with the residential Monticello subdivision, which is located further to the west and directly south. The Specific Plan area is separated from the Monticello subdivision and neighboring park by a six-foot-high masonry wall and landscape improvements. The Specific Plan places its housing component (Planning Area 2) to the south of the project to serve as a buffer between the commercial uses and Monticello subdivision. Canopy trees shall line the southern property line to provide privacy between the proposed 2-story townhome units (RES 3) and the existing single-family homes. Planning Area 2 shall be developed with high quality Mediterranean architecture that complements the surrounding communities and existing retail uses.
Policy LU 3.3	Maintain residential development standards including setbacks, height, pad elevations and other design and performance standards that assure a high quality of development in the Zoning Ordinance.	Planning Area 2 of the Specific Plan is a designated mixed-use zone that allows multifamily housing in addition to commercial uses. Section IV B outlines land use and development standards including setbacks, height, pad elevations and other design and performance standards that assure a high quality of development.
Goal LU-4	Maintenance and protection of existing neighborhoods.	
Policy LU 4.1	Encourage compatible development adjacent to existing neighborhoods and infrastructure.	The Specific Plan area is located at the southwest corner of Fred Waring Drive and Jefferson Street, two major arterial roadways. The Specific Plan area is surrounded by single-family residential to the north and south, a city park to the west and retail to the east. The Specific Plan designates two Planning Areas: (i) Planning Area 1 which is located on the northern half of the site closest to the high traffic intersection and designated for commercial retail uses, and (ii) Planning Area 2 which is

		located on the southern half of the site closest to the Monticello subdivision and designated for multifamily or commercial retail uses. Planning Area 2 serves as a buffer between the commercial uses and Monticello subdivision. Water, sewer, electrical, gas and telecommunication utilities are currently stubbed to the site and readily available for future development.
Goal LU-5	A broad range of housing types and choices for all residents of the City.	
Policy LU 5.2	Consider changes in market demand in residential product type to meet the needs of current and future residents.	The City updated the Housing Element in 2022. The City's RHNA is 1,530 units for the 2022–2029 planning period. The RHNA includes housing planning goals for very low, low, moderate, and above-moderate income households. Table II-30 of the 2022 Housing Element indicates that as of 2019, 78 percent of the City's housing stock consists of single family detached units. Multifamily projects in the form of five or more units accounted for a mere 6.5 percent of the City's housing stock. The Specific Plan designates Planning Area 2 as potential multifamily project area which would help further diversify the City's housing offerings with apartments, condominiums, or townhomes. These units will incorporate current market trends that include the "work from home" spaces, recreational amenities, electric vehicle plugin stations, and water and power efficient fixtures.
Goal LU-6	A balanced and varied economic base which provides a broad range of goods and services to the City's residents and the region.	
Policy LU 6 1	Commercial land use designations shall allow a full range of retail, office, resort, and institutional businesses in the City.	Planning Area 1 of the Specific Plan area is an established retail center that offers a wide variety of goods and services.
Goal LU-7	Innovative land uses in the Village and on Highway 111.	
Policy LU-7.1	Encourage the use of mixed-use development in appropriate locations.	The Specific Plan proposes a horizontally mixed-use development project in an existing commercial retail center. Planning Area 2 of the Specific Plan area remains undeveloped due to low demand for retail uses at this location. The Specific Plan designates Planning Area 2 as a mixed-use zone with the potential for fully integrated multifamily uses on the site.
Policy LU-7.4	Develop incentives for Mixed Use project. Program LU-7.4a: Consider density bonuses, modified parking requirements, expedited entitlement and building permit processing and fee waivers for Mixed Use projects.	The Specific Plan specifies reduced covered parking standards and parking garage design dimensions. See Table 6.

CIRCULATION ELEMENT		
Policy No.	**Policy**	**Consistency**
Goal CIR-1	A transportation and circulation network that efficiently, safely, and economically moves people, vehicles, and goods using facilities that meet the current demands and projected needs of the City.	
Policy CIR 1.12	As a means of reducing vehicular traffic on major roadways and to reduce vehicle miles traveled by traffic originating in the City, the City shall pursue development of a land use pattern that maximizes interactions between adjacent or nearby land uses.	The Specific Plan allows multifamily in Planning Area 2. A mixed-use development project would provide inter-connections between uses, which would allow residents and businesses to co-exist without conflict and provide residents with adjacent work and shopping opportunities that do not necessitate vehicle travel. Having commercial uses close by inherently encourages walking and bicycle-riding rather than driving a car.
Goal CIR-2	A circulation system that promotes and enhances transit, alternative vehicle, bicycle, and pedestrian networks.	
Policy CIR-2.3	Develop and encourage the use of continuous and convenient pedestrian and bicycle routes and multi-use paths to places of employment, recreation, shopping, schools, and other high activity areas with potential for increased pedestrian, bicycle, golf cart /NEV modes of travel.	The project shall provide inter-connections between uses, allowing residents and businesses to co-exist without conflict, and providing residents with work and shopping opportunities that do not include their cars. Having commercial uses close by inherently encourages walking and bicycle-riding rather than driving a car. Multifamily development amenities would include bicycle storage room to further encourage the use of bicycles. Finally, nearby Sunline Transit stops are located on Fred Warning Drive. The project also provides a direct pedestrian connection to Monticello Park for guests and residents.

LIVABLE COMMUNITY ELEMENT		
Policy No.	**Policy**	**Consistency**
Goal SC-1	A community that provides the best possible quality of life for all its residents.	
Policy SC 1.2	Reduce water consumption at a minimum consistent with the Greenhouse Gas Reduction Plan (also see Air Quality Element).	The development will meet the CALGreen code which requires water conservation, high efficiency plumbing fixtures and fittings such as toilets, water heaters and faucets. Water efficient landscape materials, including native plants, with drip irrigation will be used wherever possible as a means of conserving scarce water resources.
Policy SC 1.3	Encourage the use of more environmentally friendly storm water management techniques such as bioswales, permeable surfaces and other methods as they are developed, in all new development.	This Specific Plan area's storm water management system incorporate two above ground retention ponds as well as one underground infiltration basin. Refer to Section III. F. Drainage Plan for more detailed information.

Policy SC 1.5	All new development shall include resource efficient development principles.	The development will meet CALGreen and California Building Energy Efficiency Standards. These codes are designed to provide increasingly stringent energy efficiency standards, leading to eventual requirements for net zero construction.

ECONOMIC DEVELOPMENT ELEMENT		
Policy No.	**Policy**	**Consistency**
Goal ED-1	A balanced and varied economic base which provides fiscal stability to the City, and a broad range of goods and services to its residents and the region.	
Policy ED-1.1	The Land Use Element shall maintain a balance of land use designations to address economic needs, meet market demand, and assure a wide range of development opportunities.	The Specific Plan provides mixed use development standards and design guidelines that provide development flexibility to assure future projects are designed to meet market demand and provide a wide range of development opportunities.

HOUSING ELEMENT		
Policy No.	**Policy**	**Consistency**
Goal H-1	Provide housing opportunities that meet the diverse needs of the City's existing and projected population.	
Policy H 1.3	Direct new housing development to viable areas where essential public facilities can be provided and employment opportunities, educational facilities, and commercial support are available.	The Specific Plan area is located in an established neighborhood in close proximity to employment opportunities, educational facilities, and commercial goods and services. Existing onsite uses offer commercial goods and services, and a commercial retail center is located directly adjacent to the site. Public elementary and middle schools are within 1.0 mile of the Specific Plan area and La Quinta High School is approximately 1.6 miles from the site. Desert Sands Unified School District office, La Quinta Resort and Walmart Supercenter, the City's three largest employers are all located within 6.0 miles from the site.
Goal H-2	Assist in the creation and provision of resources to support housing for lower and moderate-income households.	
Policy H 2.1	Increase housing choices for lower and moderate-income households in areas of higher need and throughout the community. Address disproportionate housing needs and alleviate disproportionate cost burdens on lower and moderate-income households by providing more affordable housing units.	As of 2019, 78% of the City's housing stock was made up of single-family detached product type. This product type is typically the more expensive than other product types (condominiums, townhomes, and apartments). The Specific Plan will provide opportunity for underserved, less expensive housing opportunities (condominiums, townhomes, and apartments).
Goal H-3	Create a regulatory system that does not unduly constrain the maintenance, improvement, and development of housing affordable to all La Quinta residents.	

Policy H 3.1	Remove unnecessary regulatory constraints to enable the construction or rehabilitation of housing that meets the needs of La Quinta residents, including lower income and special needs residents.	The Specific Plan will allow the development of underserved, less expensive housing types (condominiums, townhomes, and apartments) in the City.
Goal H-6	Provide a regulatory framework that facilitates and encourages energy and water conservation through sustainable site planning, project design, and green technologies and building materials.	
Policy H 6.1	Promote higher density and compact developments that increase energy efficiency and reduce land consumption.	The Specific Plan allows high density residential development (12 – 24 units per acre) on site. The PA2 conceptual multifamily plan shows a clustering of units of varying product types in a compact footprint designed to increase energy efficiency and reduce land consumption.
Policy H-6.4	Focus sustainability efforts on measures and techniques that also assist the occupant in reducing energy costs; therefore, reducing housing costs.	The Specific Plan will incorporate CALGreen and California Building Energy Efficiency Standards. Housing will incorporate high efficiency plumbing fixtures, energy efficient lighting fixtures and appliances, energy efficient windows and drought tolerant landscaping with low flow watering systems. Additionally, electric vehicle plug in stations will be provided for select residential units.

AIR QUALITY ELEMENT		
Policy No.	**Policy**	**Consistency**
Goal AQ-1	A reduction in all air emissions generated within the City.	
Policy AQ 1.3	Work to reduce emissions from mobile sources by encouraging a decrease in the number of vehicle trips and vehicle miles traveled.	Mixed-use development in the Specific Plan area would reduce the amount of vehicle trips and VMT by locating residents in proximity to services, employment, and public transportation. Additionally, alternative forms of travel (walking and cycling) shall be encouraged through use of pedestrian connections provided to surrounding areas. Providing a pedestrian access network to link areas of the project site encourages people to walk instead of drive. The project would provide a pedestrian access network that internally links all uses and connects to all existing or planned external streets and pedestrian facilities contiguous with the project site.
Policy AQ 1.5	Ensure all construction activities minimize emissions of all air quality pollutants.	All construction activities will abide by construction requirements set forth by the City including the Fugitive Dust Control regulations.
Policy AQ 1.6	Proposed development air quality emissions of criteria pollutants shall be analyzed under CEQA.	The project will be analyzed under the provisions of CEQA.

Policy AQ 1.7	Greenhouse gas emissions associated with a development project shall demonstrate adherence to the City's GHG Reduction Plan.	The proposed PA2 multifamily plan has been analyzed for greenhouse gas emissions. The project is expected to result in GHG emissions totaling 646.43 MTCO2e per year from construction, area, energy, mobile sources, waste, and water usage sources, which is considerably below the pertinent screening level of 3,000 MTCO2e per year in compliance with AB 32, EO S-3-05, and the City's GHG Reduction Plan. As a result, the project is not expected to conflict with any applicable plan, policy, or regulation for the purpose of reducing GHG emissions.

BIOLOGICAL RESOURCES ELEMENT		
Policy No.	**Policy**	**Consistency**
Goal BIO-1	The protection and preservation of native and environmentally significant biological resources and their habitats.	
Policy BIO 1.4	Comply with the requirements of the Migratory Bird Treaty Act (MBTA).	Development projects shall comply with the requirements of the Migratory Bird Treaty Act (MBTA).
Policy BIO 1.6	Native desert plant materials should be incorporated into new development projects to the greatest extent possible. Invasive, non- native species shall be discouraged.	The Landscape Guidelines for this Specific Plan include a California native and drought tolerant landscape palette. The landscaping will be consistent and compatible with the surrounding context.

CULTURAL RESOURCES ELEMENT		
Policy No.	**Policy**	**Consistency**
Goal CUL- 1	The protection of significant archaeological, historic and paleontological resources which occur in the City.	
Policy CUL 1.1	All reasonable efforts should be made to identify archaeological and historic resources in the City.	On November 15, 2022, CRM Tech conducted a field inspection of the PA2 project area. At that time, no historical/archaeological features or artifact deposits were encountered on the ground surface, which has been extensively disturbed by past grading, excavation, and other development activities. Currently an asphalt-paved parking lot occupies the northeastern and southwestern portions of the project area, with engineered earthen pads making up the rest of the acreage. Although the most recent field survey did not find any evidence of any cultural resources, the site has been sensitive for archaeological resources and could potentially contain additional subsurface archaeological resources. Therefore, mitigation in the form of a qualified

		archaeological and Tribal monitor during the excavation of RES 2 shall be required. With this mitigation measure, impacts to historical and archaeological resources are less than significant.

WATER RESOURCES ELEMENT		
Policy No.	**Policy**	**Consistency**
Goal WR-1	The efficient use and conservation of the City's water resources.	
Policy WR 1.4	Protect storm water from pollution and encourage its use to recharge the aquifer.	The development is required to prepare a Storm Water Pollution Prevention Plan (SWPPP) that complies with the La Quinta Drainage Area Management Plan (DAMP).

NOISE ELEMENT		
Policy No.	**Policy**	**Consistency**
Goal N-1	A healthful noise environment which complements residential and resort character.	
Policy N 1.1	Noise standards in the City shall be consistent with the Community Noise and Land Use Compatibility scale described in this Element.	Block walls (noise barriers) will be provided to protect neighboring homes from noise sources. Mechanical ventilation systems will be installed to permit windows to remain closed for prolonged periods of time to ensure traffic noise will not exceed interior noise standards.
Policy N 1.2	New residential development located adjacent to any roadway identified in Table IV-4 as having a build out noise level in excess of 65 dBA shall continue to be required to submit a noise impact analysis in conjunction with the first Planning Department application, which demonstrates compliance with the City's noise standards.	The project will comply with City noise standards.
Policy N 1.3	New non-residential development located adjacent to existing residential development, sensitive receptors or residentially designated land, shall be required to submit a noise impact analysis in conjunction with the first Planning Department application, which demonstrates that it will not significantly impact the adjacent residential development or residential land.	LSA Consulting Group completed Noise Impact Analysis to identify the Specific Plan's noise impacts on the neighboring sensitive receptors. The Noise Impact Analysis demonstrates the proposed PA2 development will generate less than significant impacts on those sensitive receptors subject to mitigation measures. These mitigation measures will be implemented during construction and in the project design.

Policy N 1.4	All Mixed Use projects shall be required to submit a noise impact analysis in conjunction with the first Planning Department application, which demonstrates compliance with the City's noise standards.	The project will comply with City noise standards.
Policy N 1.5	All noise impact analysis will include, at a minimum, short-term construction noise and noise generated by the daily operation of the project at build out.	LSA Consulting Group completed Noise Impact Analysis to identify the Specific Plan's noise impacts on the neighboring sensitive receptors. The analysis includes a review of short-term construction noise and noise generated by the daily operation of the PA2 multifamily project at build out. The analysis demonstrates the proposed PA2 development will generate less than significant impacts on those sensitive receptors subject to mitigation measures. These mitigation measures will be implemented during construction and in the project design.

SOILS AND GEOLOGY ELEMENT		
Policy No.	**Policy**	**Consistency**
Goal GEO-1	Protection of the residents' health and safety, and of their property, from geologic and seismic hazards.	
Policy GEO 1.4	The City shall require that all new structures be built in accordance with the latest adopted version of the Building Code.	All new development will require building permits subject to the latest California Building Code Standards.

FLOODING AND HYDROLOGY ELEMENT		
Policy No.	**Policy**	**Consistency**
Goal FH-1	Protection of the health, safety, and welfare of the community from flooding and hydrological hazards.	
Policy FH 1.6	Major drainage facilities, including debris basins, retention/detention basins, and flood control facilities shall provide for the enhancement of wildlife habitat and community open space to the greatest extent feasible, while still maintaining their functional qualities.	The existing above ground drainage retention basins will remain in place. The basins are not designed for recreational use but will remain open to wildlife habitat.

EMERGENCY SERVICES ELEMENT		
Policy No.	**Policy**	**Consistency**
Goal ES-1	An effective and comprehensive response to all emergency service needs.	

Policy ES 1.2	New development proposals shall continue to be routed to the Fire Department to assure that project access and design provide for maximum fire and life safety.	All construction permits shall be subject to Fire Department review to assure necessary safety standards are met.
Policy ES 1.6	New development proposals shall continue to be routed to the Police Department to assure that project access and design provide for defensible space and maximum crime prevention while maintaining City design standards and codes.	Development proposals shall be reviewed by the Police Department to assure necessary safety standards are met.

WATER, SEWER AND OTHER UTILITIES ELEMENT		
Policy No.	**Policy**	**Consistency**
Goal UTL-1	Domestic water facilities and services which adequately serve the existing and long-term needs of the City.	
Policy UTL 1.3	New development shall reduce its projected water consumption rates over "business-as-usual" consumption rates.	All development is required to meet CALGreen requirements with the required use of low-flow fixtures and water efficient landscape and irrigation.
Goal UTL-2	Sanitary sewer facilities and services which adequately serve the existing and long-term needs of the City.	
Policy UTL 2.1	All new development should be required to connect to sanitary sewer service.	All development within the Specific Plan area will connect to sanitary sewer service.

NOTICE OF PUBLIC HEARING

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

www.rcaluc.org

A PUBLIC HEARING has been scheduled before the Riverside County Airport Land Use Commission (ALUC) to consider the applications described below.

Any person may submit written comments to the ALUC before the hearing or may appear and be heard in support of or opposition to the project at the time of hearing. **Information on how to participate in the hearing will be available on the ALUC website at www.rcaluc.org.** The ALUC holds hearings for local discretionary permits within the Airport Influence Area, reviewing for aeronautical safety, noise and obstructions. ALUC reviews a proposed plan or project solely to determine whether it is consistent with the applicable Airport Land Use Compatibility Plan. For more information please contact **ALUC Planner Jackie Vega at (951) 955-0982.**

The City of La Quinta Planning Department should be contacted on non-ALUC issues. For more information please contact City of La Quinta Planner Nicole Criste at (760) 341-4800.

The proposed project application may be viewed by a prescheduled appointment and on the ALUC website www.rcaluc.org. Written comments may be submitted at the Riverside County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, California 92501, Monday through Friday from 8:00 a.m. to 3:30 p.m., or by e-mail to javega@rivco.org. Individuals with disabilities requiring reasonable modifications or accommodations, please contact Barbara Santos at (951) 955-5132.

PLACE OF HEARING:	**Riverside County Administration Center** **4080 Lemon Street, 1st Floor Board Chambers** **Riverside California**
DATE OF HEARING:	**July 13, 2023**
TIME OF HEARING:	**9:30 A.M.**

CASE DESCRIPTION:

ZAP1091BD23 – Beacon Realty Advisors (Representative: GoUrban Development) – City of La Quinta Planning Department Case Nos. 2023-0001 (SP2022-0004 [Specific Plan Amendment SP2002-062], TTM2022-0003 [Tentative Tract Map No. 38604], SDP2022-0015 [Site Development Permit]). A proposal to construct an 88-unit multi-family apartment/townhome complex on 5.1 acres, located westerly of Jefferson Street and southerly of Fred Waring Drive. The applicant also proposes amending the Jefferson Square Specific Plan, creating two Planning Areas (PA1 and PA2) to allow the specific plan area to be developed as a mixed-use project, which includes the existing commercial development in PA1, and the residential uses (which will meet the Mixed-Use Overlay District density criteria of 12 to 24 dwelling units per acre) in PA2. The applicant also proposes to create one lot for PA2 (Airport Compatibility Zone E of the Bermuda Dunes Airport Influence Area)

RIVERSIDE COUNTY
AIRPORT LAND USE COMMISSION

APPLICATION FOR MAJOR LAND USE ACTION REVIEW

ALUC STAFF ONLY

ALUC Case Number: ZAP1091BD23 Date Submitted: 4/18/23

AIA: Bermuda Dunes Zone: E Public Hearing ☐ Staff Review ☑

Applicant

Applicant Full Name: Omar Hussein

Applicant Address: 69-930 Hwy 111, Ste 203 Rancho Mirage, CA 92270

Phone: (214) 923-3246 **Email:** omar@beaconrealtyadvisors.com

Representative/ Property Owner Contact Information

Representative: Luis Gomez (goUrban Development) **Email:** lagomez@gourbandev.com

Phone: (562) 895-3392

Address: 1 World Trade Center, 8th Floor, Long Beach CA 90831

Property Owner: AABC Beacon Jefferson Square, LLC, a North Carolina limited liability company **Email:** omar@beaconrealtyadvisors.com

Phone: (214) 923-3246

Address: 69-930 Hwy 111, Ste 203 Rancho Mirage, CA 92270

Local Jurisdiction Agency

Agency Name: City of La Quinta Phone: (760) 341-4800

Staff Contact: Nicole Criste **Email:** consultingplanner@laquintaca.gov

Address: 78495 Calle Tampico, La Quinta, CA 92253

Local Agency Case No.: Master Project # 2023-0001, SP2022-0004,TTM2022-0003,SDP22022-0015

Project Location

Street Address: N/A Gross Parcel Size.: 5.1 Acres

Assessor's Parcel No.: 604-521-013, 604-521-014

Solar

Is the project proposing solar Panels? Yes ☑ No ☐ If yes, please provide solar glare study. (only if in Zone C or higher)

Data

Site Elevation:(above mean sea level)	59 ft
Height of Building or structures:	45' 4"
What type of drainage basins are being proposed and the square footage:	2 above-ground retention basins (8,100 SF + 14,400 SF) and 1 underground retention basin (4,800 SF)

Notice

A. NOTICE: Failure of an applicant to submit complete or adequate information pursuant to Sections 65940 to 65948 inclusive of the California Government Code, MAY constitute grounds for disapproval of actions, regulations, or permits.

B. REVIEW TIME: Estimated time for "staff level review" is approximately 30 days from date of submittal. Estimated time for "commission level review" is approximately 45 days from date of a complete application submittal to the next available commission hearing meeting.

C. SUBMISSION PACKAGE:

Please submit all application items DIGITALLY via USB or CD:

- Completed ALUC Application Form
- Plans Package: site plans, floor plans, building elevations, grading plans, subdivision maps
- Exhibits of change of zone, general plan amendment, specific plan amendment
- Project description of existing and proposed use

Additionally, please provide:

- ALUC fee payment (Checks made out to Riverside County ALUC)
- Gummed address labels of all surrounding property owners within a 300-foot radius of project site. (Only required if the project is scheduled for a public hearing).

Riverside County Airport Land Use Commission, County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, CA 92501, Phone: 951-955-5132 Fax: 951-955-5177 Website: www.rcaluc.org

RIVERSIDE COUNTY
AIRPORT LAND USE COMMISSION

STAFF REPORT

AGENDA ITEM:	3.2
HEARING DATE:	July 13, 2023
CASE NUMBER:	ZAP1092BD23 – Pulte Home Company, LLC (Representative: David Dewegeli)
APPROVING JURISDICTION:	City of Indio
JURISDICTION CASE NO:	DR22-06-503 (Specific Plan), TTM38470 (Tentative Tract Map)
LAND USE PLAN:	2004 Bermuda Dunes Airport Land Use Compatibility Plan
Airport Influence Area:	Bermuda Dunes Airport
Land Use Policy:	Compatibility Zone E
Noise Levels:	Below 55 CNEL from aircraft
MAJOR ISSUES:	None

RECOMMENDATION: Staff recommends that the Commission find the Specific Plan Amendment CONSISTENT, with the 2004 Bermuda Dunes Airport Land Use Compatibility Plan and also find the Tentative Tract Map CONSISTENT, subject to the conditions included herein.

PROJECT DESCRIPTION: A proposal to establish the Desert Retreat Specific Plan to create age-restricted community containing 1,500 single-family homes on 378 acres. The applicant also proposes dividing 378 acres into 1,500 single-family lots.

PROJECT LOCATION: The site is located northerly of 40th Avenue, easterly of Jefferson Street, westerly of Madison Street, and southerly of 38th avenue, approximately 5,595 feet northerly of Runway 10-28 at Bermuda Dunes Airport.

BACKGROUND:

Residential Density/Non-Residential Intensity: Pursuant to the 2004 Bermuda Dunes Airport Land Use Compatibility Plan, the project site is located within Compatibility Zone E, which does not restrict residential density or non-residential intensity.

Prohibited and Discouraged Uses: The applicant does not propose any uses specifically prohibited or discouraged in Compatibility Zone E of the Bermuda Dunes Airport Influence Area.

Noise: The site is located below the 55 CNEL contour range from aircraft noise. Therefore, no

special measures are required to mitigate aircraft-generated noise.

Part 77: The elevation of Runway 10-28 at its easterly terminus is approximately 73 feet above mean sea level (AMSL). At a distance of approximately 5,595 feet from the runway, FAA review would be required for any structures with top of roof exceeding 129 feet AMSL. The project's site elevation is 45 feet AMSL, and the maximum height of the existing building is 50 feet, for a maximum top point elevation of 95 feet AMSL. Therefore, review of the buildings for height/elevation reasons by the FAA Obstruction Evaluation Service (FAAOES) was not required.

Hazards to Flight: Land use practices that attract or sustain hazardous wildlife populations on or near airports significantly increase the potential of Bird Aircraft Strike Hazards (BASH). The FAA strongly recommends that storm water management systems located within 5,000 or 10,000 feet of the Airport Operations Area, depending on the type of aircraft, be designed and operated so as not to create above-ground standing water. To facilitate the control of hazardous wildlife, the FAA recommends the use of steep-sided, rip-rap lined, narrow, linearly shaped water detention basins. All vegetation in and around detention basins that provide food or cover for hazardous wildlife should be eliminated. (FAA Advisory Circular 5200-33C). The nearest portion of the project is located 5,595 feet from the runway, and therefore would be subject to the above requirement.

The project includes a 650,000 square foot infiltration basin. Pursuant to the study "Wildlife Hazard Management at Riverside County Airports: Background and Policy", October 2018, by Mead & Hunt, which is the basis of the brochure titled "Airports, Wildlife and Stormwater Management", such limited basins are permissible with the appropriate criteria: vegetation is selected carefully so as not to provide food, shelter, nesting, roosting, or water for wildlife. The project has been conditioned to be consistent with the basin criteria (as well as providing 48-hour draw down of the basin).

Specific Plan: The applicant proposes a new Desert Retreat Specific Plan creating an age-restricted community containing 1,500 single-family homes, that will allow for an average density of 4.1 dwelling units per acre in that area. The proposed amendments would be as, or more, consistent with the Compatibility Plan as the underlying compatibility zone does not restrict density or intensity.

CONDITIONS:

1. Any outdoor lighting installed shall be hooded or shielded to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.

2. The following uses shall be prohibited:

    (a) Any use or activity which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.

    (b) Any use or activity which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.

    (c) Any use or activity which would generate smoke or water vapor or which would

attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses include landscaping utilizing water features, aquaculture, outdoor production of cereal grains, sunflower, and row crops, composting operations, wastewater management facilities, artificial marshes, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, and incinerators.)

(d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.

(e) Any use which results in a hazard to flight, including physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations.

3. The attached "Notice of Airport in Vicinity" shall be provided to all prospective purchasers and occupants of the property.

4. Any proposed stormwater basins or facilities shall be designed and maintained to provide for a maximum 48-hour detention period following the design storm, and remain totally dry between rainfalls. Vegetation in and around the basins that would provide food or cover for birds would be incompatible with airport operations and shall not be utilized in project landscaping. Trees shall be spaced so as to prevent large expanses of contiguous canopy, when mature. Landscaping in and around the basin(s) shall not include trees or shrubs that produce seeds, fruits, or berries.

   Landscaping in the stormwater basin, if not rip-rap, should be in accordance with the guidance provided in ALUC "LANDSCAPING NEAR AIRPORTS" brochure, and the "AIRPORTS, WILDLIFE AND STORMWATER MANAGEMENT" brochure available at RCALUC.ORG which list acceptable plants from Riverside County Landscaping Guide or other alternative landscaping as may be recommended by a qualified wildlife hazard biologist.

   A notice sign, in a form similar to that attached hereto, shall be permanently affixed to the stormwater basin with the following language: "There is an airport nearby. This stormwater basin is designed to hold stormwater for only 48 hours and not attract birds. Proper maintenance is necessary to avoid bird strikes". The sign will also include the name, telephone number or other contact information of the person or entity responsible to monitor the stormwater basin.

NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances [can vary from person to person. You may wish to consider what airport annoyances], if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. Business & Professions Code Section 11010 (b)(13)(A)

NOTICE

THERE IS AN AIRPORT NEARBY.

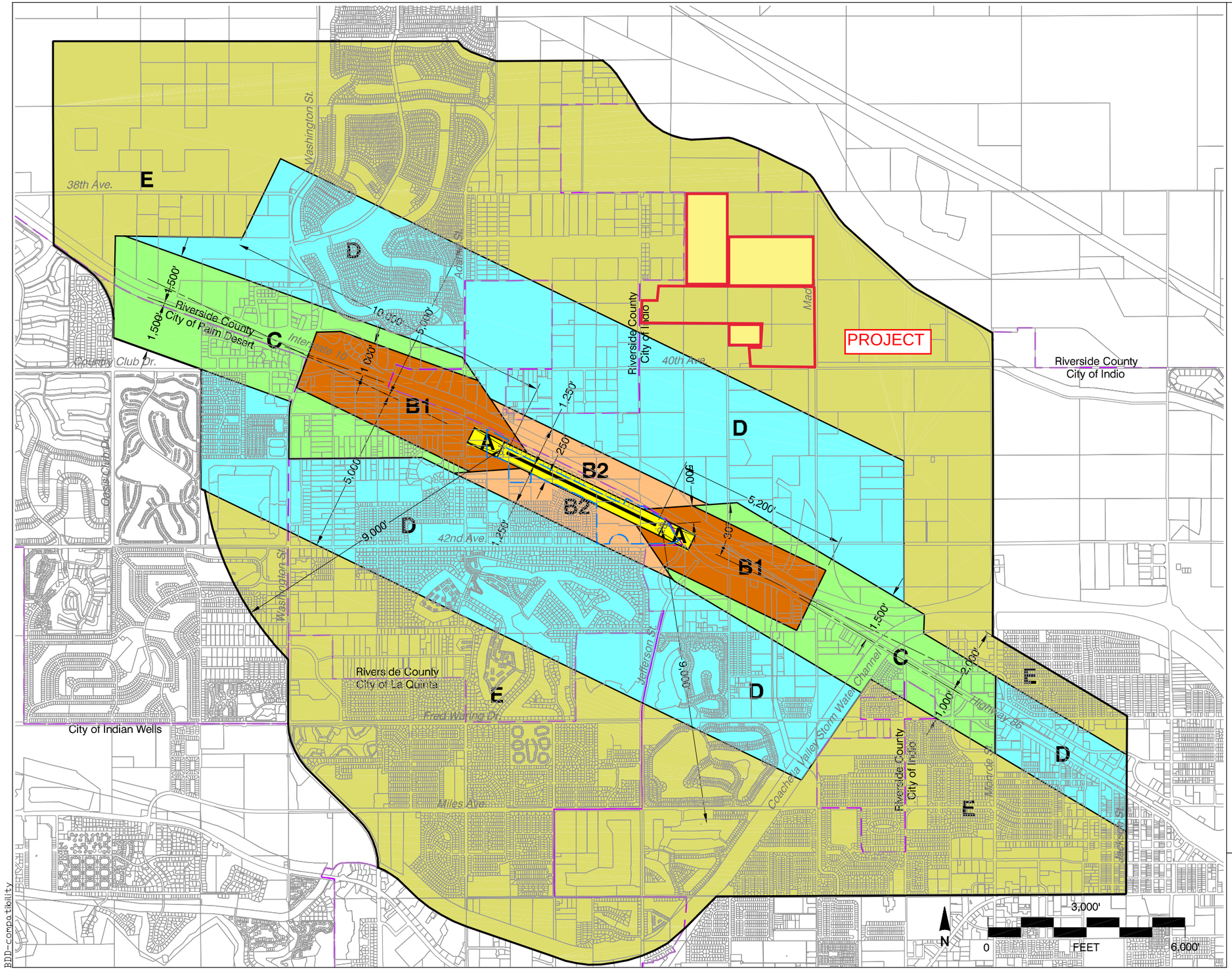
THIS STORM WATER BASIN IS DESIGNED TO HOLD STORM WATER FOR ONLY 48 HOURS AND NOT TO ATTRACT BIRDS

PROPER MAINTENANCE IS NECESSARY TO AVOID BIRD STRIKES

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION ALUC

IF THIS BASIN IS OVERGROWN, PLEASE CONTACT:

Name: _____ Phone: _____



Legend

Compatibility Zones

- Airport Influence Area Boundary
- Zone A
- Zone B1
- Zone B2
- Zone C
- Zone D
- Zone E

Boundary Lines

- Airport Property Line
- City Limits

Note

Southwestern edge of Airport Influence Area boundary measured from a point 200 feet beyond runway ends in accordance with FAA airspace protection criteria (FAR Part 77). All other dimensions measured from runway ends and centerlines.

See Chapter 2, Table 2A for compatibility criteria associated with this map.

Riverside County
Airport Land Use Commission

Riverside County
Airport Land Use Compatibility Plan
Policy Document

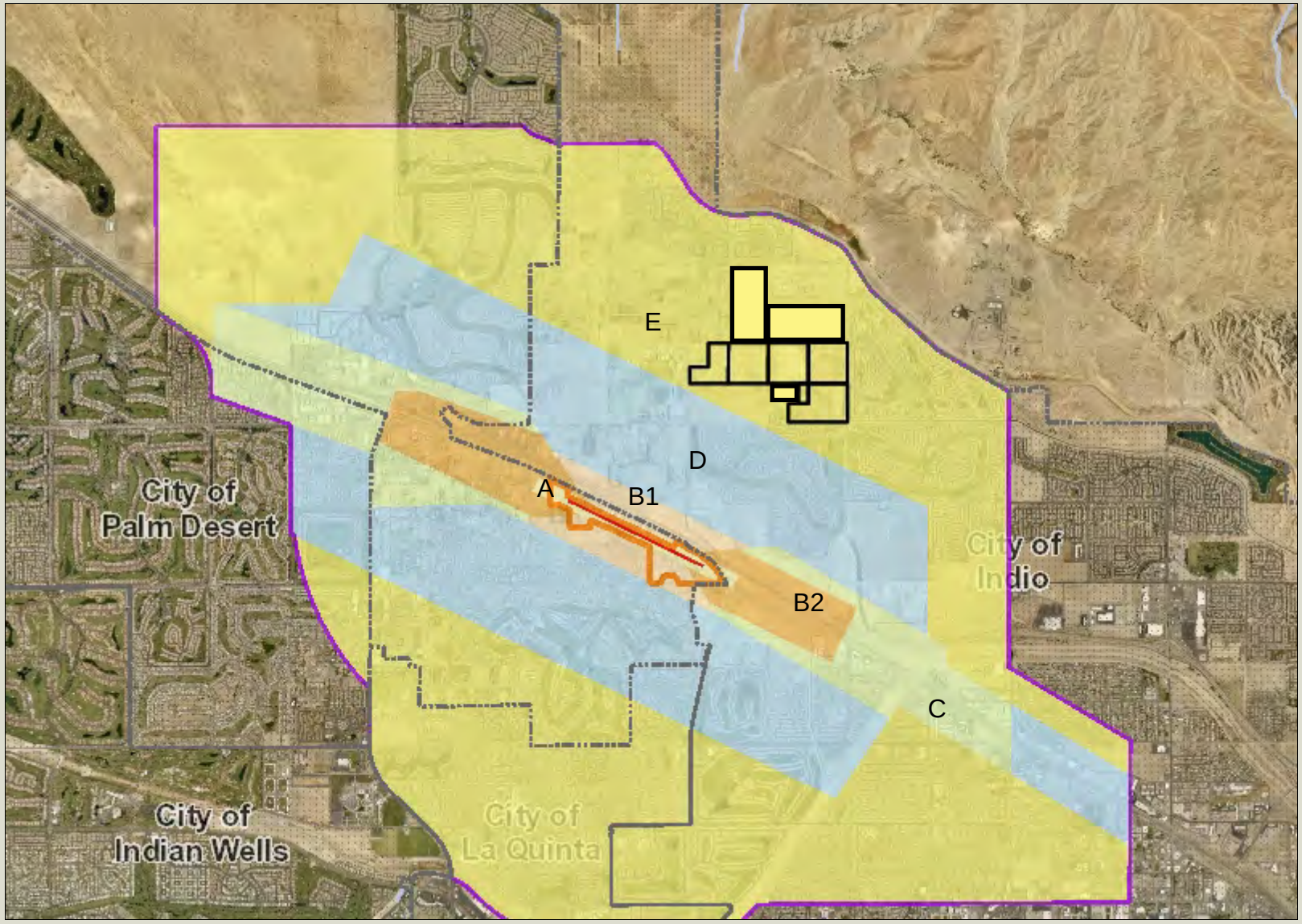
(Adopted December 2004)

Map BD-1

Compatibility Map

Bermuda Dunes Airport

Map My County Map



Legend

- Runways
- Airports
- Airport Influence Areas
- Airport Compatibility Zones
  - OTHER COMPATIBILITY ZONE
  - A
  - A-EXC1
  - B1
  - B1-APZ I
  - B1-APZ I-EXC1
  - B1-APZ II
  - B1-APZ II-EXC1
  - B1-EXC1
  - B2
  - B2-EXC1
  - C
  - C1
  - C1-EXC1
  - C1-EXC3
  - C1-EXC4
  - C1-HIGHT
  - C2
  - C2-EXC1
  - C2-EXC2
  - C2-EXC3
  - C2-EXC5
  - C2-EXC6

RCIT

0 6, 12,314 Feet

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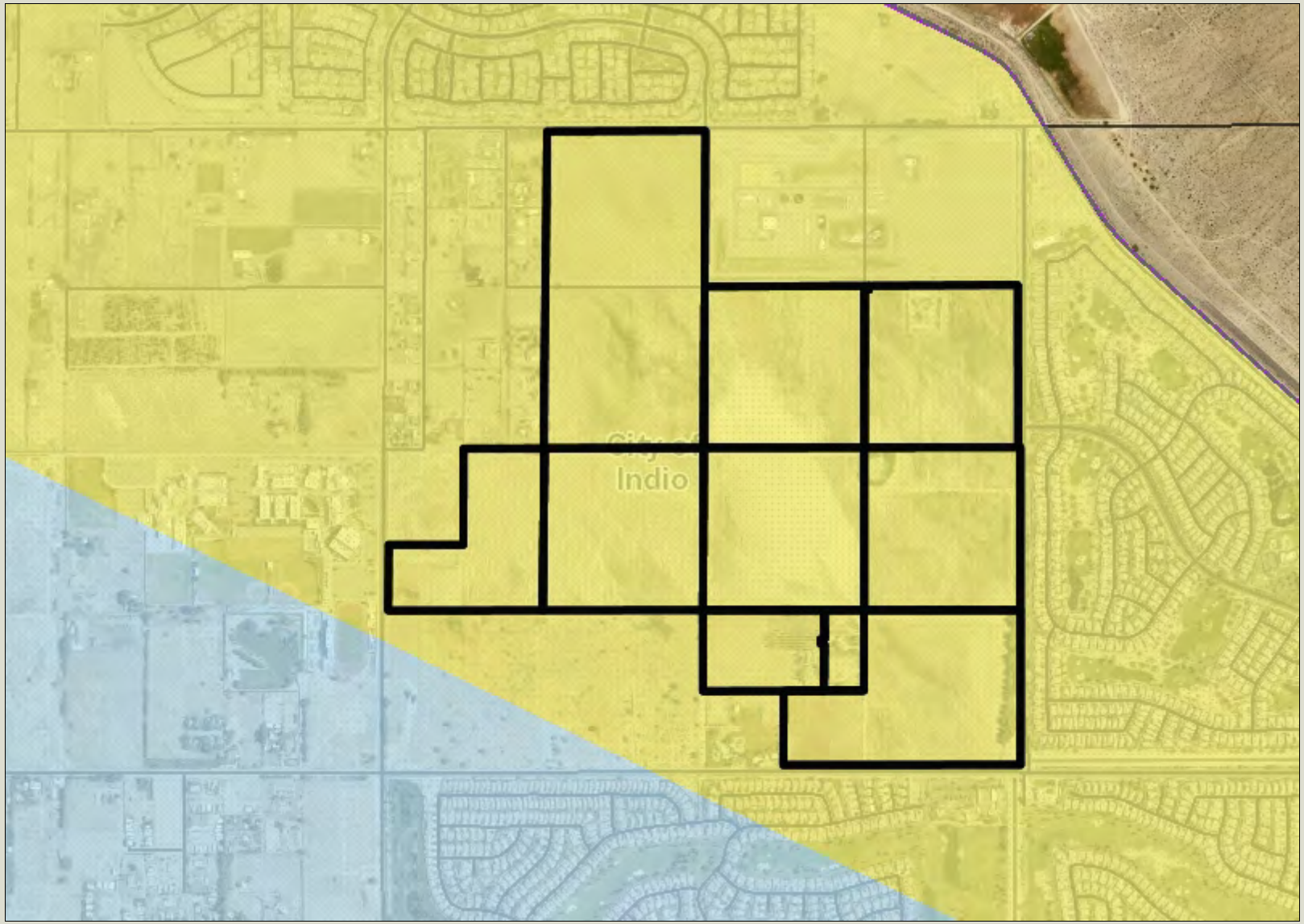

Legend

- Runways
- Airports
- Airport Influence Areas
- Airport Compatibility Zones
  - OTHER COMPATIBILITY ZONE
  - A
  - A-EXC1
  - B1
  - B1-APZ I
  - B1-APZ I-EXC1
  - B1-APZ II
  - B1-APZ II-EXC1
  - B1-EXC1
  - B2
  - B2-EXC1
  - C
  - C1
  - C1-EXC1
  - C1-EXC3
  - C1-EXC4
  - C1-HIGHT
  - C2
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  - C2-EXC3
  - C2-EXC5
  - C2-EXC6

RCIT

0 1,539 3,079 Feet

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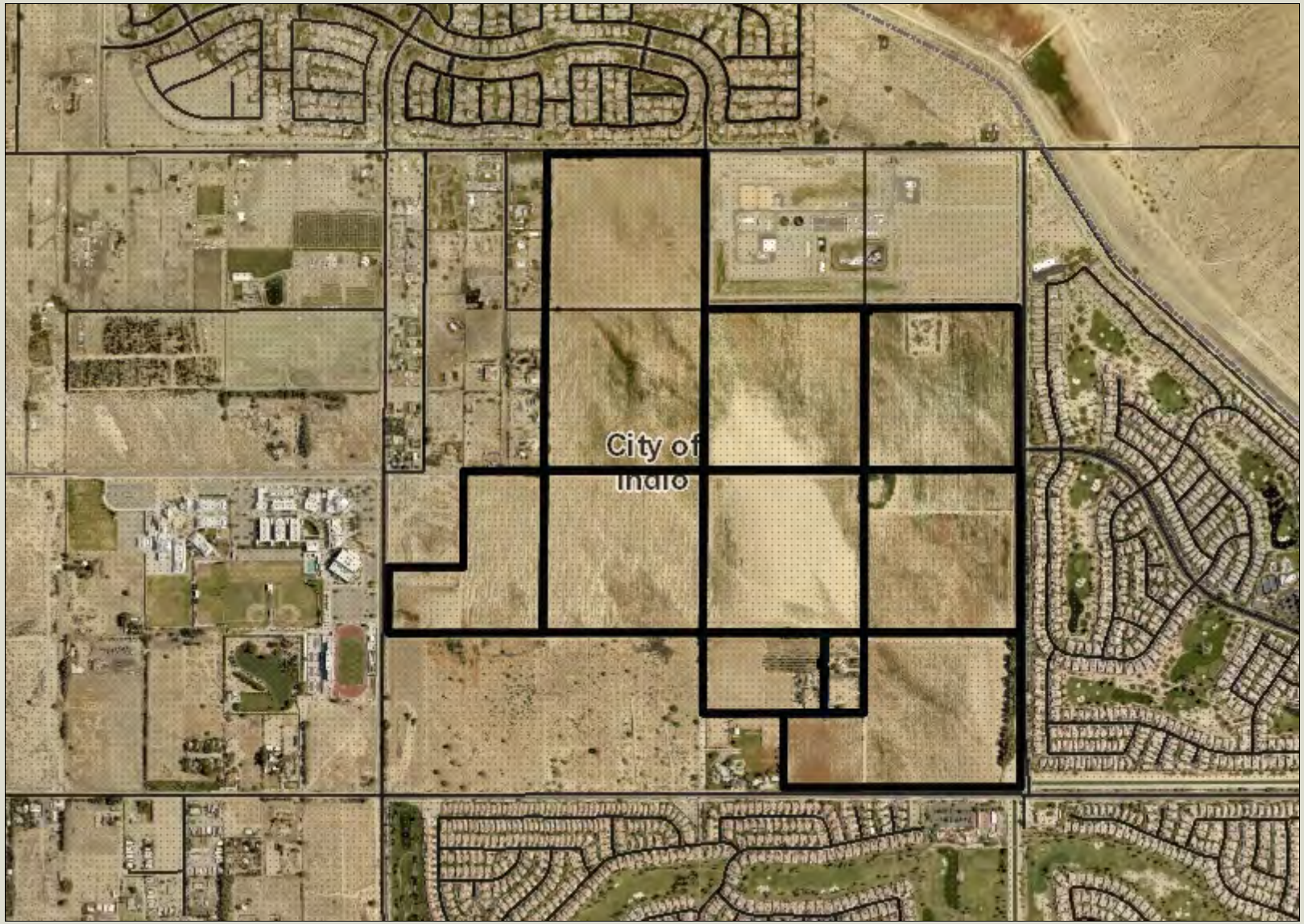

Legend

- County Centerline Names
- County Centerlines
- Blueline Streams
- City Areas
- World Street Map

0 1,539 3,079 Feet

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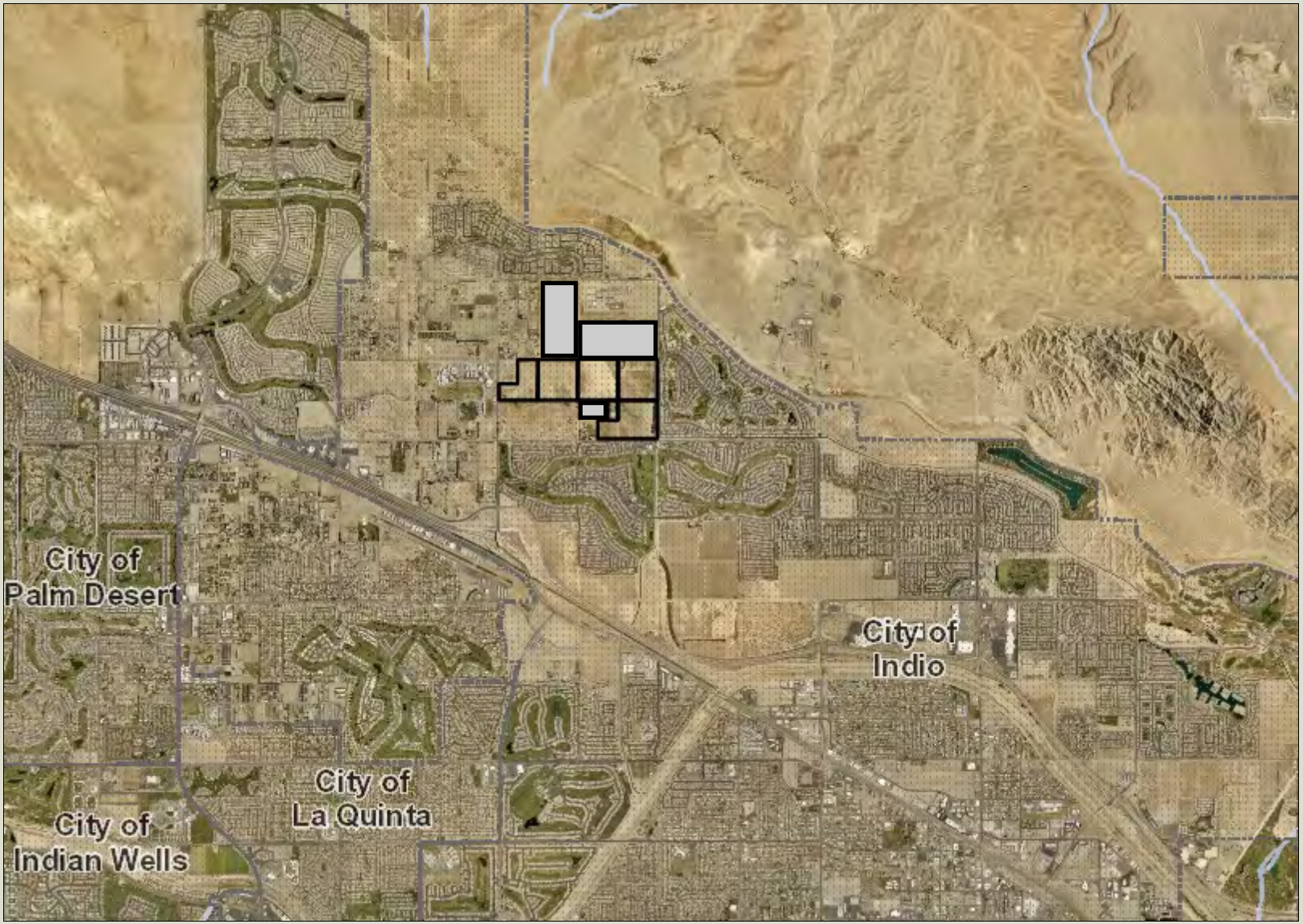

Legend

- Blueline Streams
- City Areas
- World Street Map

0 6, 12,314 Feet
157

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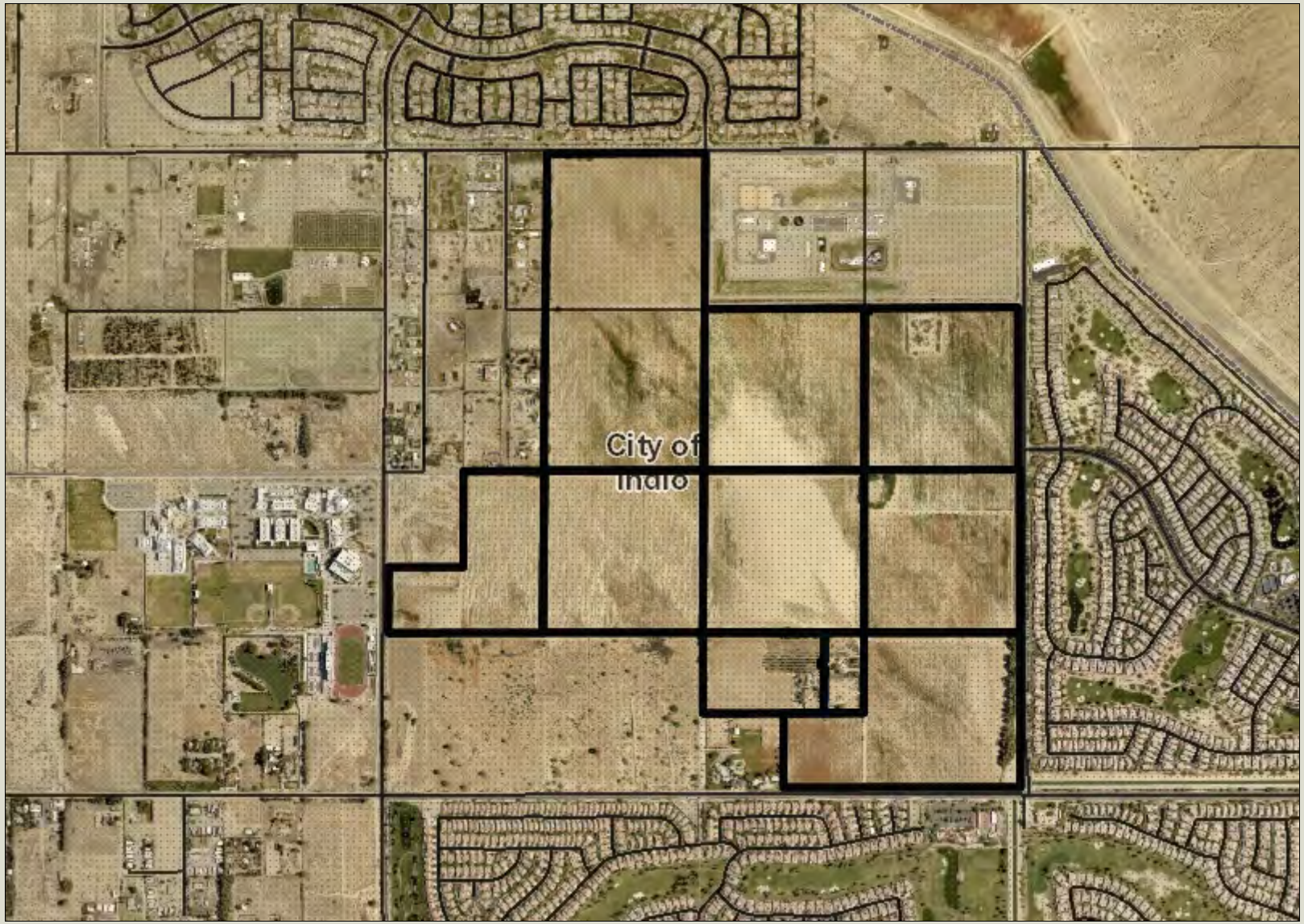

Legend

- County Centerline Names
- County Centerlines
- Blueline Streams
- City Areas
- World Street Map

0 1,539 3,079 Feet

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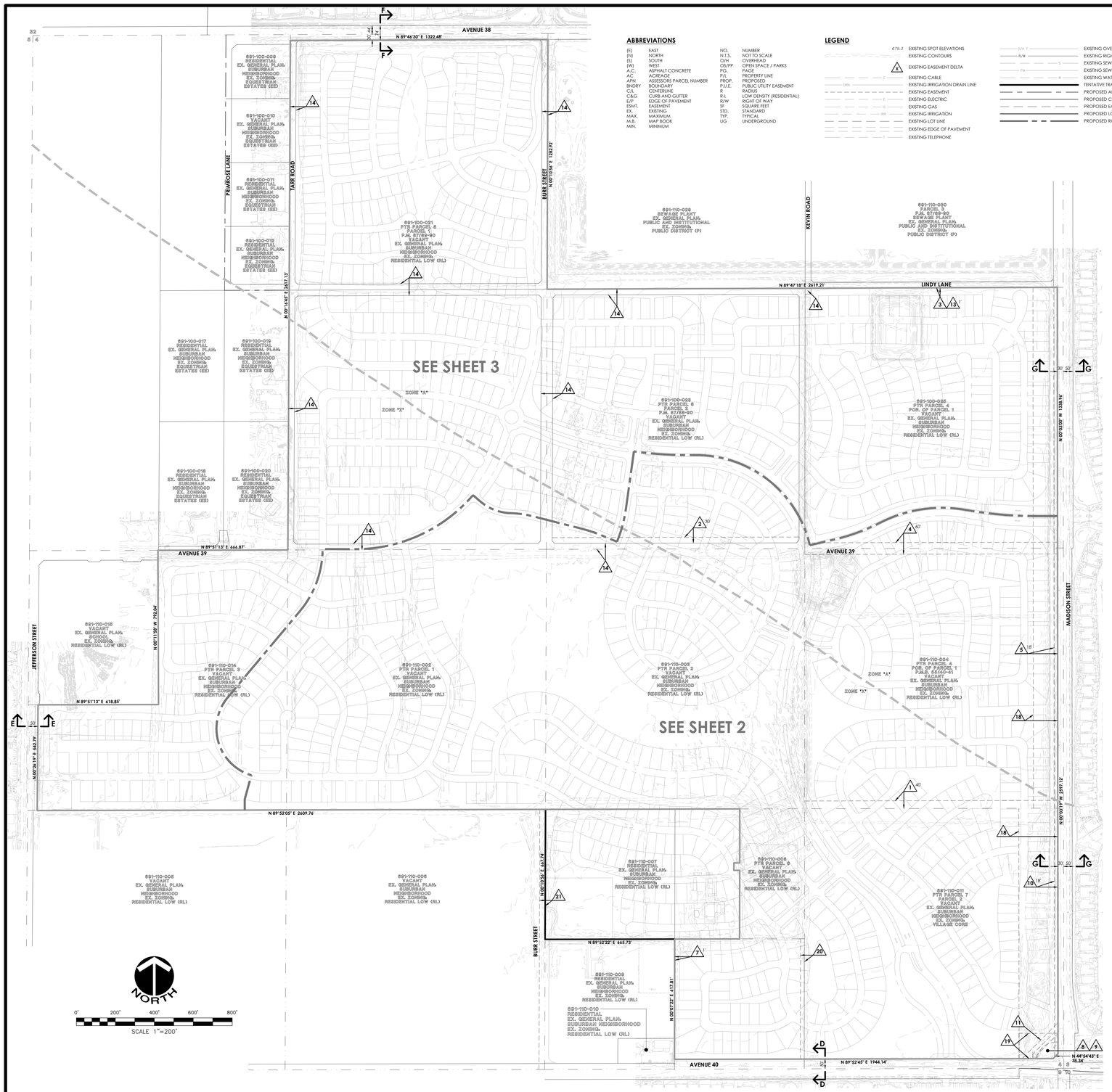


ABBREVIATIONS

(E)	EAST	NO.	NUMBER
(N)	NORTH	N.T.S.	NOT TO SCALE
(S)	SOUTH	OVH	OVERHEAD
(W)	WEST	OS/PP	OPEN SPACE / PARKS
A.C.	ASPHALT CONCRETE	PG.	PAGE
AC.	ACREAGE	P/L	PROPERTY LINE
APN	ASSESSORS PARCEL NUMBER	PROP.	PROPOSED
BNDRY	BOUNDARY	P.U.E.	PUBLIC UTILITY EASEMENT
C/L	CENTERLINE	R	RADIUS
C&G	CURB AND GUTTER	R-L	LOW DENSITY (RESIDENTIAL)
E/P	EDGE OF PAVEMENT	R/W	RIGHT OF WAY
ESMT.	EASEMENT	SF	SQUARE FEET
EX.	EXISTING	STD.	STANDARD
MAX.	MAXIMUM	TYP.	TYPICAL
M.B.	MAP BOOK	UG	UNDERGROUND
MIN.	MINIMUM		

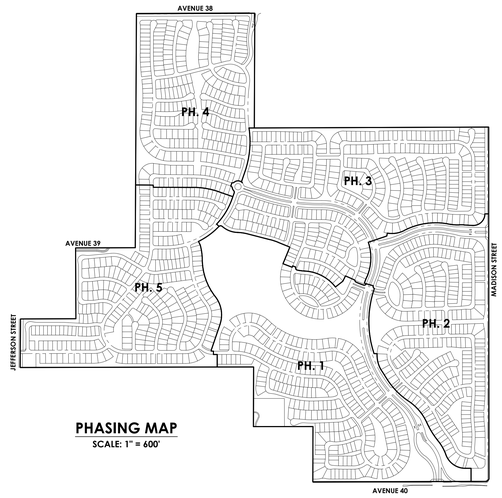
LEGEND

- 679.3 EXISTING SPOT ELEVATIONS
- EXISTING CONTOURS
- EXISTING EASEMENT DELTA
- EXISTING CABLE
- EXISTING IRRIGATION DRAIN LINE
- EXISTING EASEMENT
- EXISTING ELECTRIC
- EXISTING GAS
- EXISTING IRRIGATION
- EXISTING LOT LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING TELEPHONE
- EXISTING OVERHEAD TELEPHONE
- EXISTING RIGHT OF WAY
- EXISTING SEWER
- EXISTING SEWER FORCE MAIN
- EXISTING WATER
- TENTATIVE TRACT MAP BOUNDARY
- PROPOSED AND EXISTING CENTER LINE
- PROPOSED CURB
- PROPOSED EASEMENT
- PROPOSED LOT LINE
- PROPOSED RIGHT OF WAY

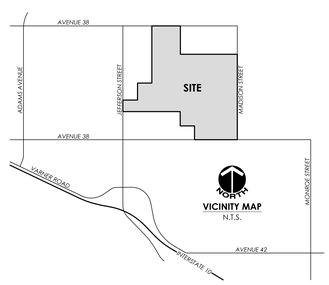
DATA TABLE CONTINUED

EXISTING EASEMENT NOTES:

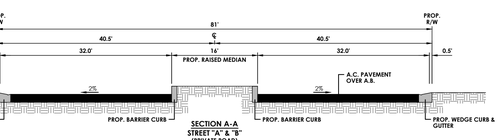
1	40' EASEMENT FOR INGRESS AND EGRESS AND INCIDENTAL PURPOSES RECORDED DECEMBER 4, 1931 AS BOOK 57, PAGE 364 OF OFFICIAL RECORDS. (PLOTTED HEREON)
2	30' EASEMENT IN FAVOR OF COACHELLA VALLEY COUNTY WATER DISTRICT FOR IRRIGATION, DRAINAGE AND STORM WATER PROTECTION AND INCIDENTAL PURPOSES, RECORDED APRIL 3, 1946 AS BOOK 736, PAGE 313 OF OFFICIAL RECORDS, A RESOLUTION DATED DECEMBER 29, 1949 A CERTIFIED COPY OF WHICH WAS RECORDED DECEMBER 30, 1949 AS INSTRUMENT NO. 3473, OFFICIAL RECORDS, ACCEPTED SUCH EASEMENT ON BEHALF OF SAID DISTRICT. (PLOTTED HEREON)
3	1' EASEMENT IN FAVOR OF IMPERIAL IRRIGATION DISTRICT FOR OVERHEAD AND/OR UNDERGROUND POWER LINE OR LINES AND INCIDENTAL PURPOSES, RECORDED JANUARY 12, 1973 AS INSTRUMENT NO. 5308 OF OFFICIAL RECORDS. (PLOTTED HEREON)
4	60' EASEMENT IN FAVOR OF FARFURA RANCH, A CALIFORNIA GENERAL PARTNERSHIP FOR INGRESS AND EGRESS AND INCIDENTAL PURPOSES, RECORDED JUNE 5, 1991 AS INSTRUMENT NO. 91-186972 OF OFFICIAL RECORDS. (PLOTTED HEREON)
5	18' EASEMENT IN FAVOR OF COACHELLA VALLEY WATER DISTRICT FOR PIPELINE AND NECESSARY APPURTENANCES, MAINTENANCE THEREOF AND INCIDENTAL PURPOSES, RECORDED MARCH 4, 1993 AS INSTRUMENT NO. 93-81007 OF OFFICIAL RECORDS. (PLOTTED HEREON)
6	AN UNRECORDED LEASE AS DISCLOSED BY AN AMENDED FINANCIAL STATEMENT RECORDED MAY 8, 2001 AS INSTRUMENT NO. 2001-200119 OF OFFICIAL RECORDS. LESSOR: DESERT MIST FARMS / LESSEE: OCEAN MIST FARMS (RANCHO GLORIA)
7	1' EASEMENT IN FAVOR OF IMPERIAL IRRIGATION DISTRICT FOR POWER LINE AND INCIDENTAL PURPOSES, RECORDED JANUARY 28, 1952 AS INSTRUMENT NO. 2890 OF OFFICIAL RECORDS. AFFECTS PARCEL 7: (PLOTTED HEREON)
8	AN EASEMENT IN FAVOR OF THE UNITED STATES OF AMERICA FOR WATER PIPELINE AND INCIDENTAL PURPOSES, RECORDED SEPTEMBER 1, 1993 AS INSTRUMENT NO. 343763 OF OFFICIAL RECORDS, THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED ACKNOWLEDGEMENT AND AUTHORIZATION RECORDED JANUARY 26, 2009 AS INSTRUMENT NO. 2009-0036631 OF OFFICIAL RECORDS. AFFECTS PARCEL 7: (PLOTTED HEREON)
9	AN EASEMENT IN FAVOR OF THE UNITED STATES OF AMERICA FOR WATER PIPELINE AND INCIDENTAL PURPOSES, RECORDED OCTOBER 29, 1993 AS INSTRUMENT NO. 430297 OF OFFICIAL RECORDS. AFFECTS PARCEL 7: (PLOTTED HEREON)
10	18' EASEMENT IN FAVOR OF COACHELLA VALLEY WATER DISTRICT FOR UNDERGROUND PIPELINE AND INCIDENTAL PURPOSES, RECORDED NOVEMBER 18, 1993 AS INSTRUMENT NO. 461126 OF OFFICIAL RECORDS. AFFECTS PARCEL 7: (PLOTTED HEREON)
11	AN EASEMENT IN FAVOR OF COACHELLA VALLEY WATER DISTRICT FOR UNDERGROUND PIPELINES AND INCIDENTAL PURPOSES, RECORDED FEBRUARY 19, 2019 AS INSTRUMENT NO. 2019-0055361 OF OFFICIAL RECORDS. AFFECTS PARCEL 7: (PLOTTED HEREON)
12	AN EASEMENT IN FAVOR OF COACHELLA VALLEY COUNTY WATER DISTRICT, FOR IRRIGATION, DRAINAGE AND STORM WATER PROTECTION FACILITIES AND INCIDENTAL PURPOSES, RECORDED APRIL 3, 1946 AS BOOK 736, PAGE 313 OF OFFICIAL RECORDS. AFFECTS PARCEL 8: (BLANKET EASEMENT)
13	1' EASEMENT IN FAVOR OF IMPERIAL IRRIGATION DISTRICT FOR POWER LINES AND INCIDENTAL PURPOSES, RECORDED JANUARY 12, 1973 AS INSTRUMENT NO. 5308 OF OFFICIAL RECORDS. AFFECTS PARCEL 8: (PLOTTED HEREON)
14	AN EASEMENT FOR STREET AND PUBLIC UTILITY AND INCIDENTAL PURPOSES, SHOWN AND DEDICATED TO PUBLIC USE ON PARCEL MAP NO. 14518, PM 87/89-90. AFFECTS PARCEL 8: (PLOTTED HEREON)
15	THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED RESOLUTION OF THE BOARD OF DIRECTORS OF COACHELLA VALLEY WATER DISTRICT RESOLUTION NO. 2003-49, RECORDED AUGUST 6, 2003 AS INSTRUMENT NO. 2003-597460 OF OFFICIAL RECORDS. AFFECTS ALL PARCELS
16	THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED STANDARD IRRIGATION SERVICE AGREEMENT RECORDED AUGUST 4, 2015 AS INSTRUMENT NO. 2015-0345582 OF OFFICIAL RECORDS. (AFFECTS PARCELS 1-4 AND 6-8)
18	155' WIDE BOR EASEMENT PER PARCEL C-311-D-R1, 230' WIDE BOR EASEMENT PER PARCEL C-311-C-R1 (PLOTTED HEREON)
19	180' X 230' WIDE BOR EASEMENT PER PARCEL C-311-C-R2. (PLOTTED HEREON)
20	20' INGRESS AND EGRESS EASEMENT INST NO. 37115 REC. 4/16/1969, O.R. AS SHOWN ON P.M. 11214 BK 55 PG 40-41 (PLOTTED HEREON)
21	29' IMPERIAL IRRIGATION DISTRICT EASEMENT FOR CONSTRUCTING, OPERATING AND MAINTAINING POWER LINES AND NECESSARY APPURTENANCES AT BOOK 1508, PAGE 289, RECORDED 9/16/1953. (PLOTTED HEREON)



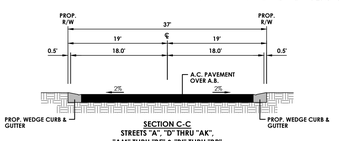
PHASING MAP
SCALE: 1" = 600'



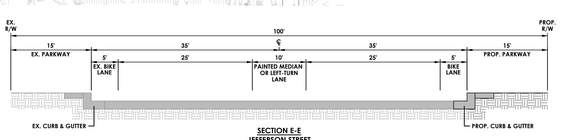
VICINITY MAP
N.T.S.



SECTION A-A
STREET "A" & "B"
(PRIVATE ROAD)
N.T.S.

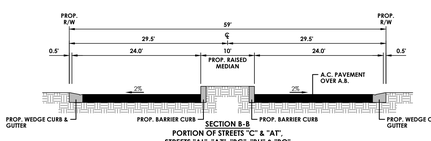


SECTION C-C
STREETS "A", "D" THRU "AK", "AM" THRU "BF" & "BI" THRU "BR"
(PRIVATE ROAD)
N.T.S.

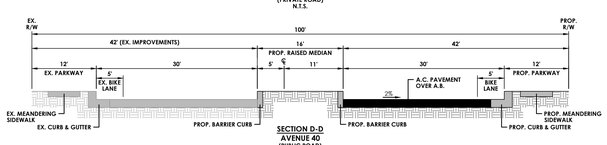


SECTION E-E
JEFFERSON STREET
(PUBLIC ROAD)
N.T.S.

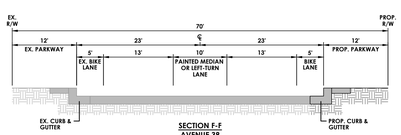
SECTION G-G
MADISON STREET
(PUBLIC ROAD)
N.T.S.



SECTION B-B
PORTION OF STREETS "C" & "AT", STREETS "AL", "AZ", "BG", "BH" & "BO"
(PRIVATE ROAD)
N.T.S.



SECTION D-D
AVENUE 40
(PUBLIC ROAD)
N.T.S.



SECTION F-F
AVENUE 38
(PUBLIC ROAD)
N.T.S.

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IN THE CITY OF INDIO, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

TENTATIVE TRACT MAP NO. 38470

EXHIBIT DATE: MAY 8, 2023

REVISIONS

NO.	DATE	DESCRIPTION

DATA TABLE

APPLICANT:	PULTE HOME COMPANY, LLC		
ADDRESS:	27401 LOS ALTOS, SUITE 400 MISSION VIEJO, CALIFORNIA 92691		
CONTACT:	DAVID DEWEGELI	**TELEPHONE:**	(760) 578-9334
LAND OWNER:	SALAMMBO, LLC		
ADDRESS:	73111 EL PASEO, SUITE 208 PALM DESERT, CALIFORNIA 92260		
CONTACT:	BERNARD J. DEBONNE	**TELEPHONE:**	(760) 774-0433
LAND OWNER:	MANUEL AND MARGARET PABLO		
ADDRESS:	80600 AVENUE 40 INDIO, CALIFORNIA 92203		
CONTACT:	MANUEL PABLO	**TELEPHONE:**	(760) 238-6944
EXHIBIT PREPARER:	MSA CONSULTING, INC.		
ADDRESS:	34200 BOB HOPE DRIVE RANCHO MIRAGE, CALIFORNIA 92270		
CONTACT:	PAUL DEPALATIS, AICP	**TELEPHONE:**	(760) 320-9811
SOURCE OF TOPOGRAPHY:	INLAND AERIAL SURVEYS, INC.		
ADDRESS:	7117 ARLINGTON AVENUE, SUITE "A" RIVERSIDE, CALIFORNIA 92503		
DATE OF TOPOGRAPHY:	SEPTEMBER 18, 2021	**TELEPHONE:**	(951) 687-4252
ASSESSOR'S PARCEL NUMBERS:	691-100-021, -023, -025 & 691-110-002, -003, -004, -008, -011 & -014		

LEGAL DESCRIPTION:

PARCEL 1: (APN: 691-110-002) THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 5 SOUTH, RANGE 7 EAST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL 2: (APN: 691-110-003) THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 4, TOWNSHIP 5 SOUTH, RANGE 7 EAST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL 3: (APN: 691-110-014) THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 5 SOUTH, RANGE 7 EAST, SAN BERNARDINO BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT.
EXCEPTING THEREFROM THAT PORTION CONDEMNED UNTO THE DESERT SANDS UNIFIED SCHOOL DISTRICT; A CALIFORNIA UNIFIED SCHOOL DISTRICT BY JUDGMENT IN CONDEMNATION RECORDED JUNE 13, 2007, AS INSTRUMENT NO. 2007-385824, OFFICIAL RECORDS OF RIVERSIDE COUNTY.
ALSO EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE CITY OF INDIO BY GRANT DEED RECORDED APRIL 10, 2008, AS INSTRUMENT NO. 2008-177750, OFFICIAL RECORDS OF SAID COUNTY.

PARCEL 4: (APN: 691-100-025 AND 691-110-004) PARCEL 1 OF PARCEL MAP NO. 11214, A SHOWN BY MAP ON FILE IN BOOK 55, PAGES 40 AND 41 OF PARCEL MAPS, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA;
EXCEPT ONE-HALF OF ALL OIL, GAS AND MINERAL RIGHTS AS RESERVED IN DEEDS FROM BARBARA RAE DIRNBERGER, AS GUARDIAN OF THE PERSON AND ESTATE OF MICHAEL EUGENE CARR, A MINOR, TO LEONARD K. FIRESTONE AND POLLY C. FIRESTONE, HUSBAND AND WIFE, DATED SEPTEMBER 9, 1959, RECORDED SEPTEMBER 18, 1959 AND FROM RICHARD W. LAWRENCE, ET AL. TO LEONARD K. FIRESTONE AND POLLY C., FIRESTONE, HUSBAND AND WIFE, DATED AUGUST 11, 1959, RECORDED SEPTEMBER 16, 1959,

PARCEL 6: (APN: 691-110-008) THE EAST 1/2 OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 4, TOWNSHIP 5 SOUTH, RANGE 7 EAST, SAN BERNARDINO BASE AND MERIDIAN.
ALSO THAT PORTION OF THE WEST 1/2 OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 4, TOWNSHIP 5 SOUTH, RANGE 7 EAST, SAN BERNARDINO, BASE AND MERIDIAN, DESCRIBED AS FOLLOWS:
COMMENCING AT THE SOUTHEAST CORNER OF SAID SECTION 4:
THENCE SOUTH 89 DEGREES 54'30" WEST, ON THE SOUTHERLY LINE OF SAID SECTION, 1,332.72 FEET TO THE SOUTHEAST CORNER OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 4;
THENCE NORTH 00 DEGREES 06'05" EAST, ON THE EASTERLY LINE OF SAID SOUTHWEST 1/4, 667.71 FEET TO THE SOUTHEAST CORNER OF THE NORTHEAST 1/4 OF SAID SOUTHWEST 1/4;
THENCE SOUTH 89 DEGREES 53'56" WEST, ON THE SOUTHERLY LINE OF SAID NORTHEAST 1/4, 332.82 FEET TO THE SOUTHEAST CORNER OF THE WEST 1/2 OF SAID NORTHEAST 1/4;
THENCE NORTH 00 DEGREES 07'56" EAST, ON THE EASTERLY LINE OF SAID WEST 1/2, 390.34 FEET TO THE TRUE POINT OF BEGINNING;
THENCE NORTH 89 DEGREES 92'04" WEST 30.00 FEET; THENCE SOUTH OO DEGREES 07'56" WEST, 38.00 FEET; THENCE SOUTH 89 DEGREES 52'04" EAST, 30.00 FEET TO THE TRUE POINT OF BEGINNING.

PARCEL 7: (APN: 691-110-011) PARCEL 2 OF PARCEL MAP NO. 11214, AS SHOWN ON A MAP ON FILE IN PARCEL MAP BOOK 55, PAGE(S) 40 AND 41, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.
EXCEPT ONE-HALF OF ALL OIL, GAS AND MINERAL RIGHTS AS RESERVED IN DEEDS FROM BARBARA RAE DIRNBERGER, AS GUARDIAN OF THE PERSON AND ESTATE OF MICHAEL EUGENE CARR, A MINOR, TO LEONARD K. FIRESTONE AND POLLY C. FIRESTONE, HUSBAND AND WIFE, DATED SEPTEMBER 9, 1959 AND FIELD FOR RECORD SEPTEMBER 16, 1959 AND FROM RICHARD W. LAWRENCE, ET. AL. TO LEONARD K. FIRESTONE AND POLLY C. FIRESTONE, HUSBAND AND WIFE, DATED AUGUST 11, 1959 AND FILED FOR RECORD SEPTEMBER 16, 1959, ALL OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

PARCEL 8: (APN: 691-100-021 AND 691-100-023)
PARCELS 1 AND 2, LETTERED LOTS E THROUGH L INCLUSIVE, AND K THROUGH N, INCLUSIVE, OF PARCEL MAP NO. 14518, AS SHOWN ON A MAP ON FILE IN PARCEL MAP BOOK 87, PAGE(S) 89 AND 90,
RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

LAND USE DESCRIPTION:	**ACREAGE:**
EXISTING GROSS ACREAGE	377.67 AC.
PROPOSED PUBLIC RIGHT OF WAY DEDICATION (AVENUE 38 / (AVENUE 38, AVENUE 39, AVENUE 40, BURR STREET & MADISON STREET)	2.15 AC.
PROPOSED I.I.D. WELL SITE (LOT "AP", LOT "AQ" & LOT "AR")	1.54 AC.
PROPOSED I.I.D. SUB-STATION (LOT "AS")	2.32 AC.
PROPOSED NET ACREAGE	371.66 AC.
PROPOSED PRIVATE RESIDENTIAL LOTS (LOTS 1 THRU 1,432)	206.16 AC.
PROPOSED RECREATION LOT (LOT 1,433)	26.13 AC.
PROPOSED PRIVATE OPEN SPACE LOTS (LOTS "A" THRU "AO")	72.66 AC.
PROPOSED PRIVATE STREETS (STREET "A" THRU "BO")	66.71 AC.

EXISTING ZONING:	RESIDENTIAL LOW DISTRICT (RL) / VILLAGE CORE
PROPOSED ZONING:	SPECIFIC PLAN
EXISTING GENERAL PLAN LAND USE:	SUBURBAN NEIGHBORHOOD
PROPOSED GENERAL PLAN LAND USE:	SPECIFIC PLAN

PUBLIC UTILITY PURVEYORS:

ELECTRIC:	IMPERIAL IRRIGATION DISTRICT	(760) 335-3640
GAS:	SOUTHERN CALIFORNIA GAS COMPANY	(800) 427-2200
TELEPHONE:	VERIZON COMPANY	(800) 483-5000
WATER:	COACHELLA VALLEY WATER DISTRICT	(760) 398-2651
CABLE:	TIME WARNER CABLE	(760) 340-1312
SEWER:	COACHELLA VALLEY WATER DISTRICT	(760) 398-2651
USA:	UNDERGROUND SERVICE ALERT	(800) 227-2600

FEMA FLOOD ZONE DESIGNATION:

ZONE "A" & "A" LOMR
ZONE "X": 0.2% ANNUAL CHANCE FLOOD & AREAS OF MINIMAL FLOOD HAZARD

AS SHOWN ON RIVERSIDE COUNTY, CALIFORNIA, FLOOD INSURANCE RATE MAP, COMMUNITY PANEL MAP NUMBER: 06065C1620G
EFFECTIVE DATE: AUGUST 28, 2008.

LIQUEFACTION: LOW LIQUEFACTION ZONE

NOTES:
1. THIS MAP INCLUDES THE ENTIRE CONTIGUOUS OWNERSHIP OF THE LAND DIVIDER.
2. THERE ARE NO EXISTING DWELLINGS, BUILDINGS, OR OTHER STRUCTURES KNOWN ON THIS PROPERTY.

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IN THE CITY OF INDIO, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

TENTATIVE TRACT MAP NO. 38470

EXHIBIT DATE: MAY 8, 2023

REVISIONS

NO.	DATE	DESCRIPTION

ABBREVIATIONS

(E)	EAST	NO.	NUMBER
(N)	NORTH	N.T.S.	NOT TO SCALE
(S)	SOUTH	O/H	OVERHEAD
(W)	WEST	OS/PP	OPEN SPACE / PARKS
A.C.	ASPHALT CONCRETE	PG.	PAGE
AC.	ACREAGE	P.L.	PROPERTY LINE
APN	ASSESSORS PARCEL NUMBER	PROP.	PROPOSED
BNDRY	BOUNDARY	P.U.E.	PUBLIC UTILITY EASEMENT
C/L	CENTERLINE	R	RADIUS
C&G	CURB AND GUTTER	R-L	LOW DENSITY (RESIDENTIAL)
E/P	EDGE OF PAVEMENT	R/W	RIGHT OF WAY
ESMT.	EASEMENT	SF	SQUARE FEET
EX.	EXISTING	STD.	STANDARD
MAX.	MAXIMUM	TYP.	TYPICAL
M.B.	MAP BOOK	UG	UNDERGROUND
MIN.	MINIMUM		

LEGEND

- 679.3 EXISTING SPOT ELEVATIONS
- EXISTING CONTOURS
- EXISTING EASEMENT DELTA
- EXISTING CABLE
- EXISTING IRRIGATION DRAIN LINE
- EXISTING EASEMENT
- EXISTING ELECTRIC
- EXISTING GAS
- EXISTING IRRIGATION
- EXISTING LOT LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING TELEPHONE
- EXISTING OVERHEAD TELEPHONE
- EXISTING RIGHT OF WAY
- EXISTING SEWER
- EXISTING SEWER FORCE MAIN
- EXISTING WATER
- TENTATIVE TRACT MAP BOUNDARY
- PROPOSED AND EXISTING CENTER LINE
- PROPOSED CURB
- PROPOSED EASEMENT
- PROPOSED LOT LINE
- PROPOSED RIGHT OF WAY

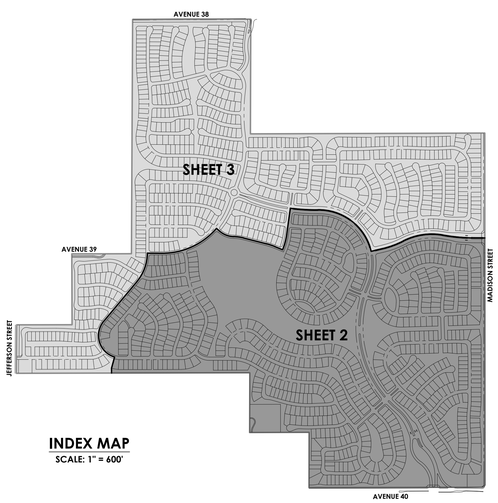
NORTH

0' 100' 200' 300' 400'

SCALE 1"=100'

INDEX MAP

SCALE: 1" = 600'



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IN THE CITY OF INDIO, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

TENTATIVE TRACT MAP NO. 38470

EXHIBIT DATE: MAY 8, 2023

REVISIONS

NO.	DATE	DESCRIPTION

INDEX MAP

SCALE: 1" = 600'

ABBREVIATIONS

(E)	EAST	NO.	NUMBER
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A.C.	ASPHALT CONCRETE	PG.	PAGE
AC	ACREAGE	P/L	PROPERTY LINE
APN	ASSESSORS PARCEL NUMBER	PROP.	PROPOSED
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C/L	CENTERLINE	R	RADIUS
C&G	CURB AND GUTTER	R-L	LOW DENSITY (RESIDENTIAL)
E/P	EDGE OF PAVEMENT	R/W	RIGHT OF WAY
ESMT.	EASEMENT	SF	SQUARE FEET
EX.	EXISTING	STD.	STANDARD
MAX.	MAXIMUM	TYP.	TYPICAL
M.B.	MAP BOOK	UG	UNDERGROUND
MIN.	MINIMUM		

LEGEND

679.3	EXISTING SPOT ELEVATIONS
	EXISTING CONTOURS
X	EXISTING EASEMENT DELTA
C	EXISTING CABLE
DRN	EXISTING IRRIGATION DRAIN LINE
	EXISTING EASEMENT
E	EXISTING ELECTRIC
G	EXISTING GAS
RR	EXISTING IRRIGATION
	EXISTING LOT LINE
	EXISTING EDGE OF PAVEMENT
T	EXISTING TELEPHONE
O/H T	EXISTING OVERHEAD TELEPHONE
R/W	EXISTING RIGHT OF WAY
S	EXISTING SEWER
FM	EXISTING SEWER FORCE MAIN
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	PROPOSED RIGHT OF WAY

NORTH

0' 100' 200' 300' 400'

SCALE 1"=100'

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DESERT RETREAT SPECIFIC PLAN

May 2023

Prepared For:
City of Indio

Applicant:
Pulte Home Company, LLC

Prepared By:
MSA Consulting, Inc.

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION & SETTING

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CHAPTER I: INTRODUCTION & SETTING

1.1 Executive Summary

The Desert Retreat Specific Plan (Specific Plan or SP) is a proposed 378 acre active-adult community located on the northwest corner of Madison Street and 40th Avenue within the corporate limits of the City of Indio, California. The SP sets forth a comprehensive vision for the project and will establish site-specific development standards, land use regulations, and programs to guide the development of the property in a manner that is consistent with the City of Indio General Plan while also maintaining flexibility to respond to changing conditions that factor in any long-term development. This SP implements all applicable elements of the General Plan and includes detailed information about the site's master plan and infrastructure improvements such as circulation, water, sewer, grading and drainage design. The Specific Plan is organized in five chapters, as described below:

Chapter 1, Introduction & Setting: This section provides an overview of the document, the project setting and history, legislative authority for the Specific Plan, entitlement process and other contextual information.

Chapter 2, Master Plan and Infrastructure: This section describes the primary master plan components required for further development of the property. These include land use, circulation, open space and recreation, water and sewer, and grading and drainage.

Chapter 3, Development Standards: This section establishes the allowable uses and development standards applicable within the Specific Plan area.

Chapter 4, Design Guidelines: This section establishes the design guidelines applicable within the Specific Plan area.

Chapter 5, Plan Administration: This section describes the various processes and procedures used to administer and implement the adopted Specific Plan.

1.2 Purpose and Intent

This SP is intended to guide future development and use of land within the Desert Retreat Specific Plan boundary, including the establishment of site-specific development standards and regulations. The Specific Plan is intended to ensure quality development consistent with the goals, objectives, and policies of the City of Indio General Plan.

This Specific Plan defines the location, type and amount of development allowed within the Specific Plan area consistent with the requirements for Specific Plans identified in State Planning and Land Use Law and City of Indio Municipal Code (IMC). It will also establish standards intended to allow the project to respond to market conditions.

This document has been prepared pursuant to California Government Code Section 65450, which grants local governments the authority to prepare specific plans as a systematic means of implementing their General Plan. California Government Code Sections 65450 through 65454 establishes the authority to adopt a Specific Plan, identifies the required contents of a Specific Plan, and mandates consistency with the General Plan.

1.3 Project Location & Site Characteristics

As shown on Figure 1.1, *Regional Location Map*, the Desert Retreat Specific Plan (Specific Plan) is situated in the eastern portion of the Coachella Valley within the City of Indio at the northwest corner of Madison St and 40th Ave. The Specific Plan area totals approximately 378 acres and includes APNs 691-110-002, 003, 004, 008, 011, 014, 021, 023, 025. Figure 1.2, *Local Vicinity Map*, depicts the physical setting of the property. Surrounding land uses are listed below in Table 1.1.

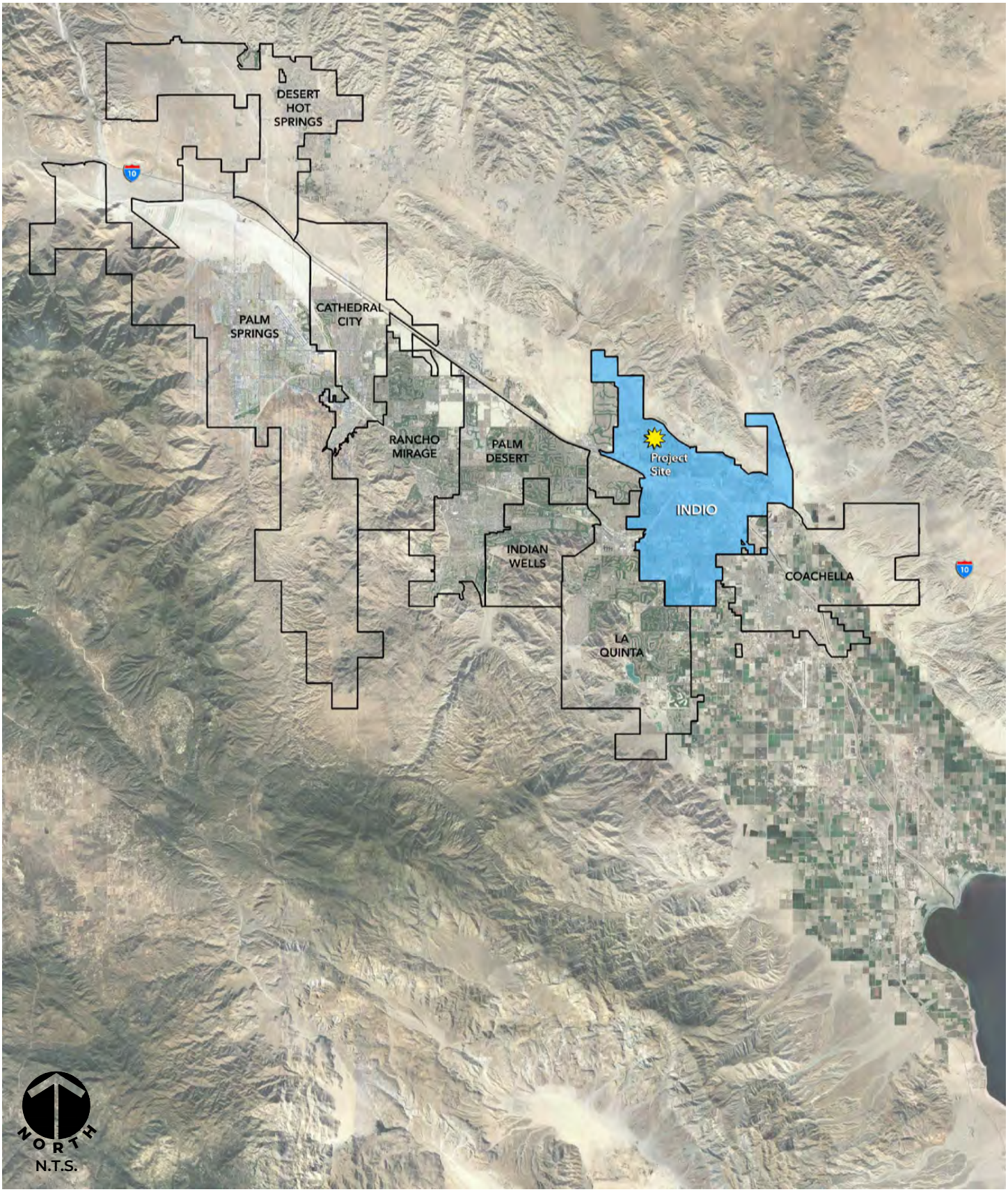
In its current condition the site consists entirely of undeveloped and relatively flat land as shown on Figure 1.3, *Existing Site Conditions.* Site topography slopes from northwest to southeast with higher elevations ranging from 52.2 feet above sea level at the Northwest corner of the property to a low elevation of 32.3 feet above sea level in the southeast corner.

TABLE 1.1

EXISTING AND SURROUNDING USES

	Jurisdiction	General Plan	Zoning	Existing Use
Site	Indio	Village Core/RL	Village Core/RL	Vacant Infill Land
North	Indio	Residential Low/Public/Equestrian Estates	PMP/Public District/EE	Residential / CVWD Treatment Planter
South	Indio	Residential Low	PMP	Sun City Shadow Hills Homes/Golf
East	Indio	Village Core/RL	SP	Sun City Shadow Hills
West	Indio	Country Estates/Public	CEIR-1/2/P	High School/Residential

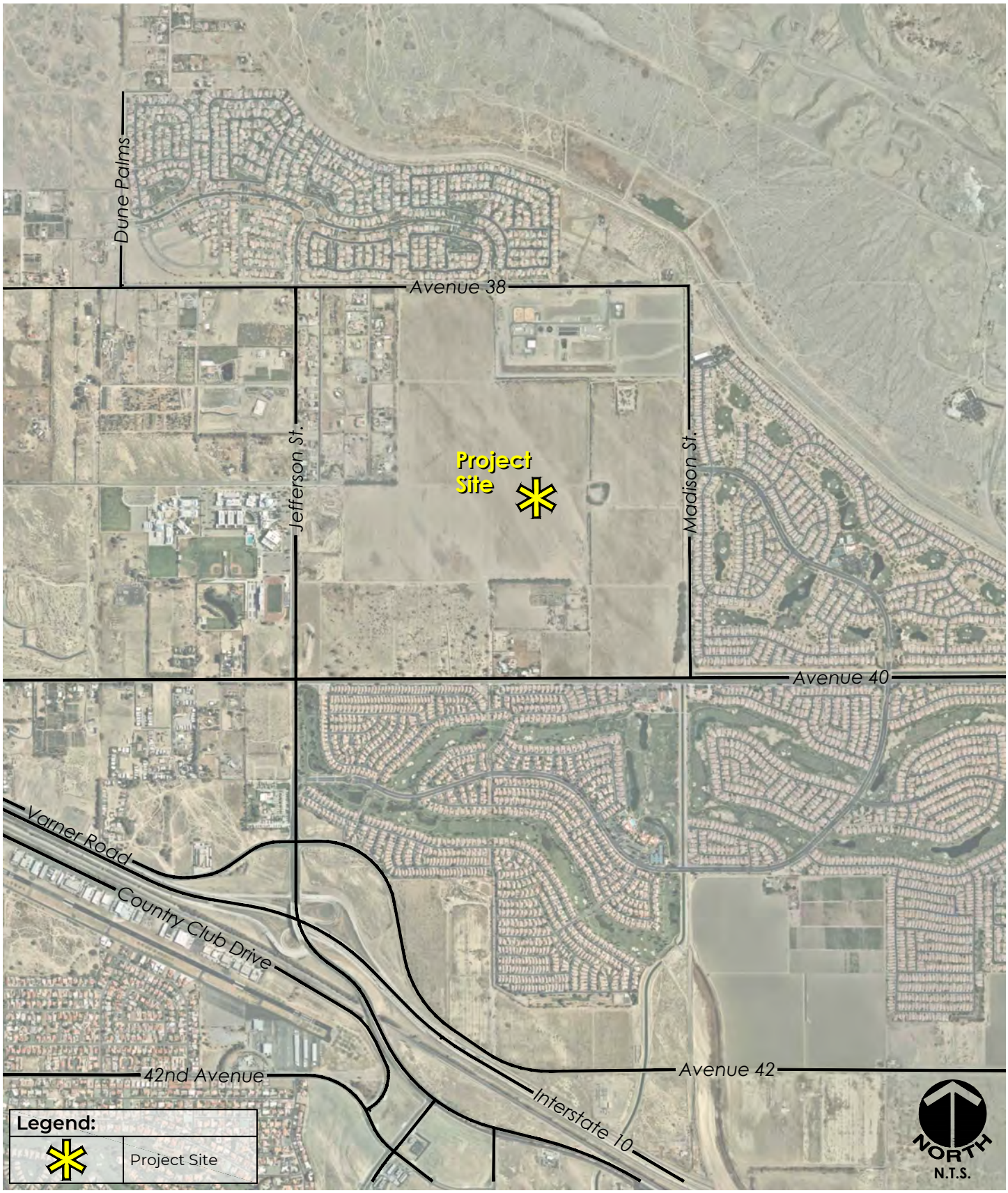
RL (Residential Low =4 DU/AC)



Source: MSA Consulting, Inc.

Exhibit Date: May 8, 2023

REGIONAL LOCATION MAP



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VICINITY MAP

FIGURE 1.2

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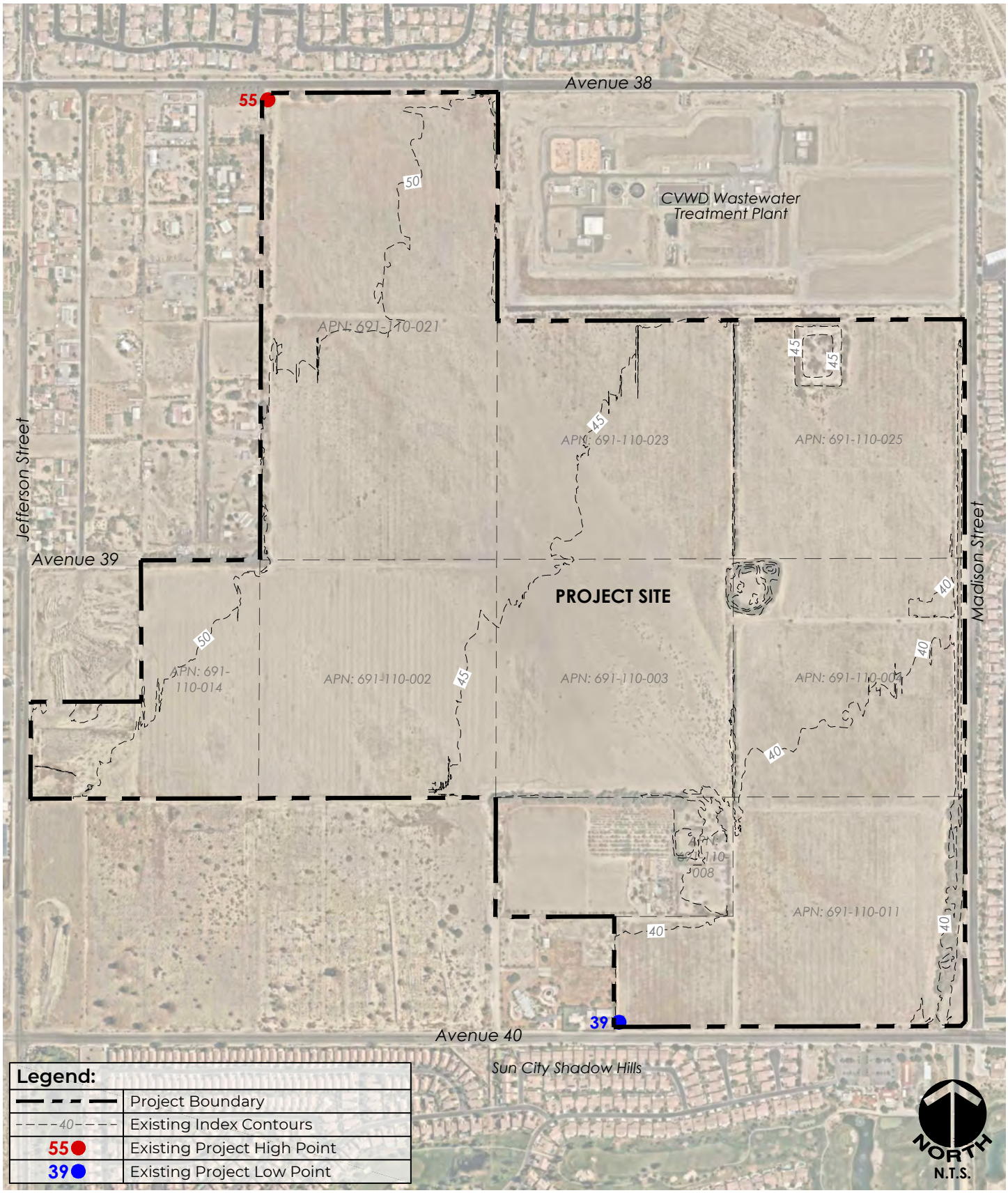

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EXISTING CONDITIONS

FIGURE 1.3

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1.4 Development Concept

The Specific Plan proposes to develop a residential community on approximately 378 acres that would allow the construction of up to 1,500 single-family homes at an average density of 4.1 du/ac The project would include a community clubhouse in the center of the project with outdoor resident amenities such pickle ball courts, bocce ball courts, tennis courts, and water features.

A network of connective open space corridors are integrated throughout the project as a unifying design feature. Chapter 4 of this Specific Plan provides design guidelines and development standards to ensure quality project design that is compatible with the existing built environment and with the Goals and Policies of the City of Indio General Plan.

This Specific Plan intends to provide a degree of flexibility to respond to market demand. The Desert Retreat Specific Plan will supersede the development guidelines and regulations of the Indio Zoning code to allow for a fresh, contemporary development strategy for the site.

1.5 Project Objectives

Various issues were considered and evaluated during the preparation of this Specific Plan. Engineering feasibility, water efficiency, General Plan goals, and compatibility with surrounding land uses were considered during the planning process. In order to ensure the functional integrity, economic viability, environmental sensitivity, and positive aesthetic contribution of this development, unique project objectives were established as follows:

- Develop a thoughtfully planned and integrated project to allow for a quality residential construction project.
- Provide a comprehensive land use plan that establishes development standards, land use regulations, and programs to guide the orderly transition/development of the property.
- Accommodate phasing that provides for a multi-year project buildout in an orderly and efficient manner.
- Establish design guidelines, development regulations, use standards and procedures that facilitate cohesive and attractive landscape and architectural treatments.
- Provide a safe and efficient circulation system;
- Provide water, sewer, and drainage systems to adequately service the project;
- Promote quality development consistent with the goals and policies of the Indio General Plan.
- Create a walkable community by incorporating pedestrian paths within the project and allowing for connections to public sidewalks/trails at each perimeter street.

1.6 General Plan and Zoning

The Indio General Plan 2040, adopted in September 2019, established the City's policy relative to the planned future pattern, intensity, density, and relationships of land uses in the City and the various infrastructure systems needed to effectively support those land uses. This Specific Plan implements the Indio General Plan by bringing detailed policies and regulations together into a focused development plan for the proposed project. It serves as a link between the Indio General Plan and subsequent development proposed within the Specific Plan area. The Specific Plan is a regulatory document which, when adopted by the Indio City Council, will govern all facets of project development including the distribution of land uses, location and sizing of supportive infrastructure, as well as development standards and regulations.

The project site lies within the "Northwest Indio Subarea" of the General Plan. Figure 1.4, *General Plan/Zoning*, displays the existing General Plan Land Uses within and around the project site, consisting of "Suburban Neighborhood". Since this Specific Plan is consistent with the General Plan, no changes are proposed the General Plan or the land use designation.

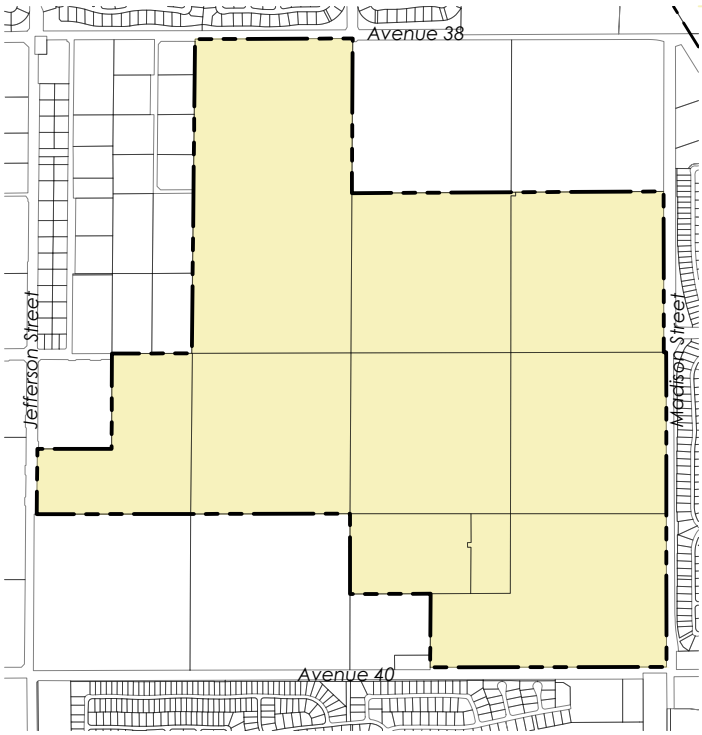
As also shown in Figure 1.4, General Plan/*Zoning*, the Specific Plan area is currently zoned "Residential Low" and "Village Core." The adoption of this Specific Plan will supersede the existing zoning for the site, this Specific Plan would become the new effective zoning of the site.

1.7 Utility & Service Providers

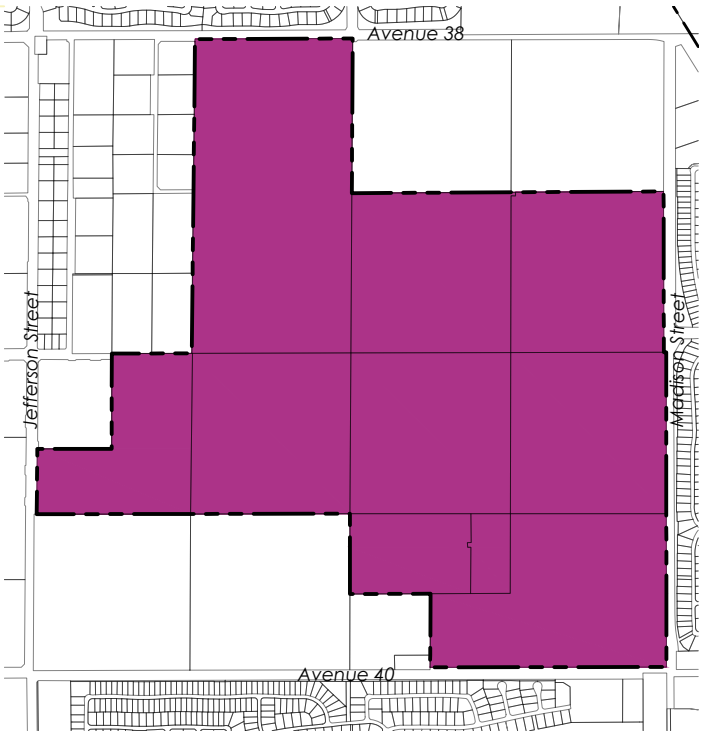
The Specific Plan is within the service area of the utility and service providers as listed in Table 1.2.

TABLE 1.2
UTILITY & SERVICE PROVIDERS

UTILITY/SERVICE	AGENCY	ADDRESS	PHONE
Sewer & Water	CVWD	75-525 Hovley Lane Palm Desert, CA. 92211	760.398.2651
Natural Gas	SCG	P.O. Box 3150 San Dimas, CA. 91773	800.427.2200
Electric	IID	333 E. Barioni Blvd Imperial, CA 92251	760.335.3640
Cable TV	Spectrum	79-785 Hwy 111 Suite E103 La Quinta, CA 92253	855.366.7132
Telephone	Frontier	78150 Avenida La Fonda La Quinta, CA 92253	877.295.4751
Police	Indio PD	46800 Jackson St., Indio, California 92201	760.391.4057
Fire	Cal Fire	46-990 Jackson St. Indio, CA 92201	760.347.0756
Solid Waste	Burrtec	53600 Polk Street Coachella, CA 92236	760.340.2113
Schools	DSUSD	47-950 Dune Palms Road, La Quinta, CA 92253	760.777.4200



Existing General Plan & Zoning



Proposed Zoning

Legend	
	Specific Plan Boundary
	City Limits
Existing	
	Suburban Neighborhood
Proposed	
	Specific Plan

NORTH
N.T.S.

Source: City of Indio

Exhibit Date: May 8, 2023

GENERAL PLAN / ZONING

FIGURE 1.4

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1.8 CEQA

The project is subject to the requirements of the California Environmental Quality Act (CEQA). Pursuant to the CEQA Guidelines, an Initial Study has been prepared for the Specific Plan to identify the potential environmental effects of the project. To provide CEQA clearances, the City has determined that an Environmental Impact Report (EIR) will accompany the Specific Plan.

The EIR will evaluate any potential environmental impacts associated with the development as described in this Specific Plan and appropriate measures to mitigate these impacts. All mitigation measures identified in the EIR and adopted by the City will be identified in a Mitigation Monitoring Program to define the timing and other requirements for implementing these mitigation measures as the Community is developed over time. All individual development projects within the Specific Plan will be reviewed for consistency with the Specific Plan to determine if supplemental environmental review documentation is needed pursuant to CEQA Guidelines.

1.9 Entitlement Process

Approval of the following entitlements will implement this project:

Specific Plan – The SP will provide comprehensive development guidelines, allowable uses, and development standards for the project as a whole.

Tentative Tract Map (TTM) – TTMs are intended to implement the project and subdivide the property into smaller parcels/lots for development or sale and create common area lots for private streets, the community clubhouse, open space paseos and other facilities.

Design Review (DR) – A Design Review application allows the City to review architectural and landscape plans in greater detail for buildings such as for the community clubhouse and residential homes.

Development Agreement (DA) – A Development Agreement establishes special terms beneficial and mutually agreeable to both the City and the Developer to facilitate development of the community and to vest the community's approvals.

See Section 5 of this Specific Plan for more detailed information on the administrative and public hearing processes related to these implementing approvals.

CHAPTER 2: MASTER PLAN

2.1 Land Use Plan

As noted in Table 2.1, the Specific Plan would facilitate construction of an active adult community with up to 1,500 residential units (gross density of approximately 4 du/ac) and a Community Clubhouse on approximately 378 acres of land. This project would serve as an extension of the existing Sun City Shadow Hills community to the south and east. Figure 2.1 *Land Use Map* shows the project boundary, as well as the layout of the residences and central clubhouse amenity.

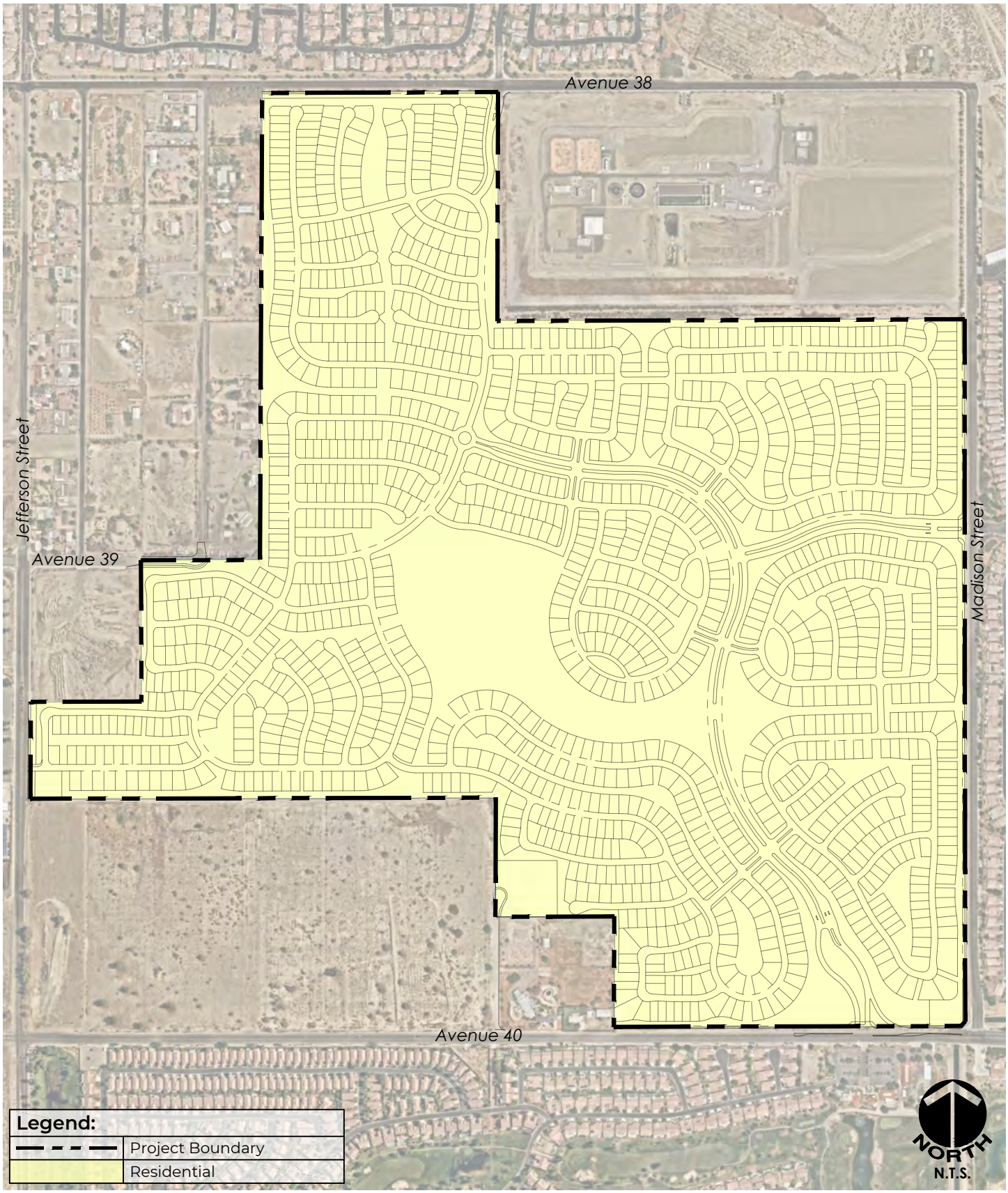
Table 2.1 Land Use Summary

Land Use	Acres	Max Units	Max Building SF
Residential	351.6	1,500	-
Perimeter R.O.W.	2.0	-	-
Clubhouse/Rec	26.1	-	26,100
Totals	377.7	1,500	26,100

2.2 Circulation

Vehicular and pedestrian circulation systems are an important component of this project. The SP has direct and convenient vehicular access to 40th Ave, Madison Steet, 38th Ave, and Jefferson Street. Vehicles will circulate through standard residential streets and project entrances in compliance with City engineering and Fire Department design standards. The circulation system is illustrated in Figure 2.2 *Vehicle Circulation and* Figure 2.3a & 2.3b *Typical Street Sections Private & Public,* Key aspects of the circulation system include:

Off-Site Street Improvements – 40th Ave exists along the project's southernly frontage and will reach a width of 100 feet from each end of the right of way (R.O.W). Jefferson Street will also reach 100 feet from the end of each R.O.W. and exists along the western end of the property. Madison Street to the east will reach a width of 88 feet from each R.O.W, and Avenue 38 to the north will reach a width of 70 feet from each R.O.W. per the Public Typical Street Sections as shown in Figure 2.3.b



Source: MSA Consulting, Inc.

Exhibit Date: May 8, 2023

LAND USE MAP

FIGURE 2.1

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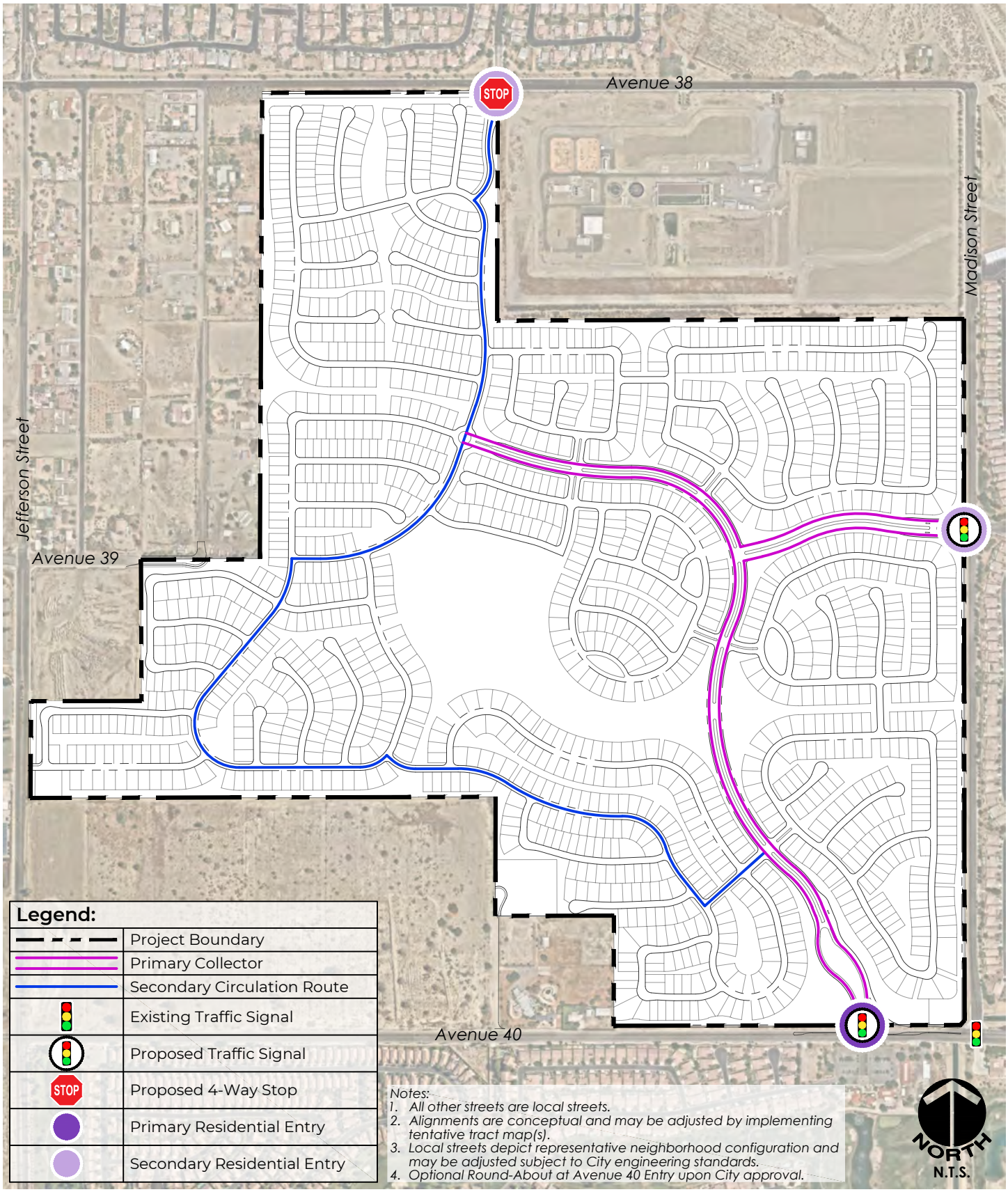
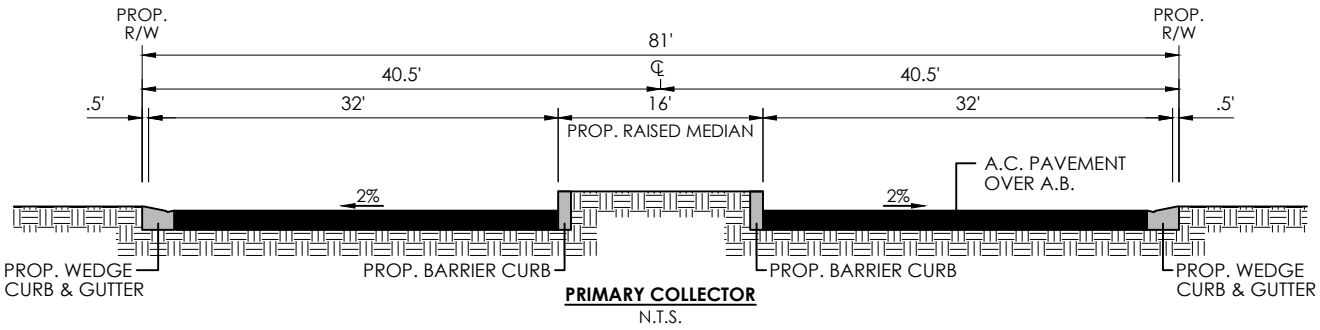


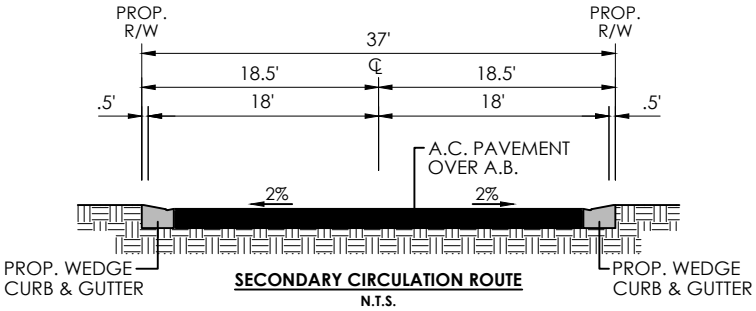
Source: MSA Consulting, Inc.

Exhibit Date: May 8, 2023

VEHICLE CIRCULATION



PRIMARY COLLECTOR
N.T.S.



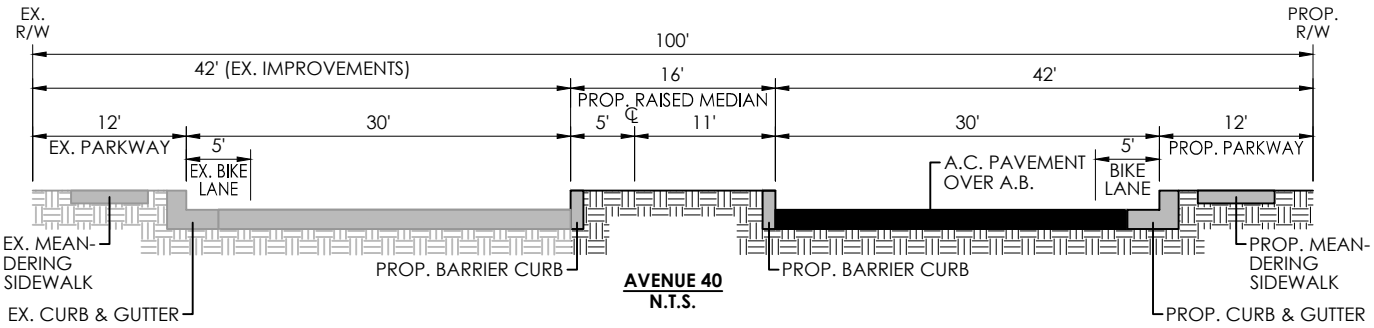
SECONDARY CIRCULATION ROUTE
N.T.S.

NORTH
N.T.S.

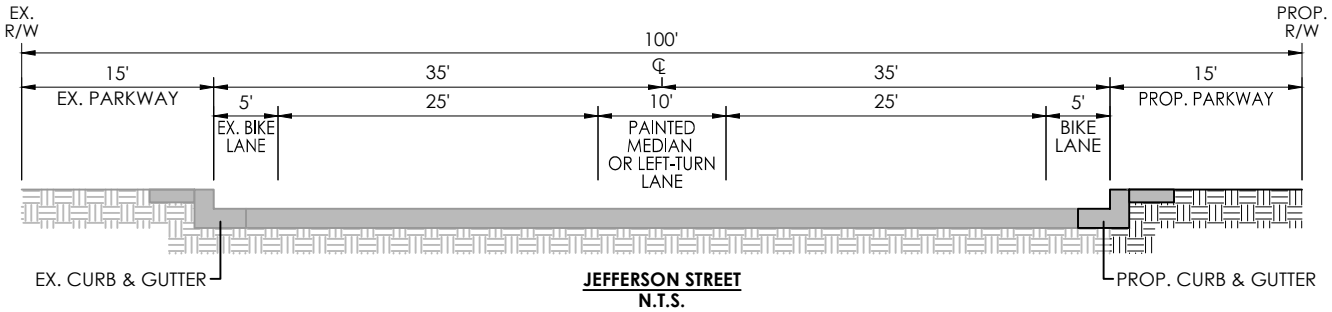
Source: MSA Consulting, Inc.

Exhibit Date: May 8, 2023

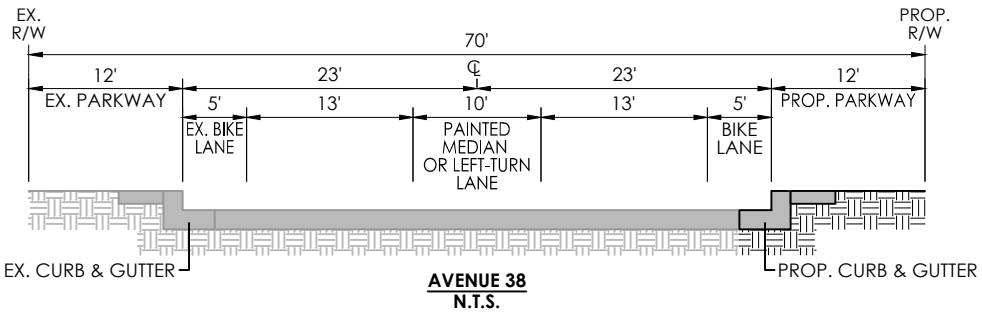
TYPICAL STREET SECTIONS: PRIVATE



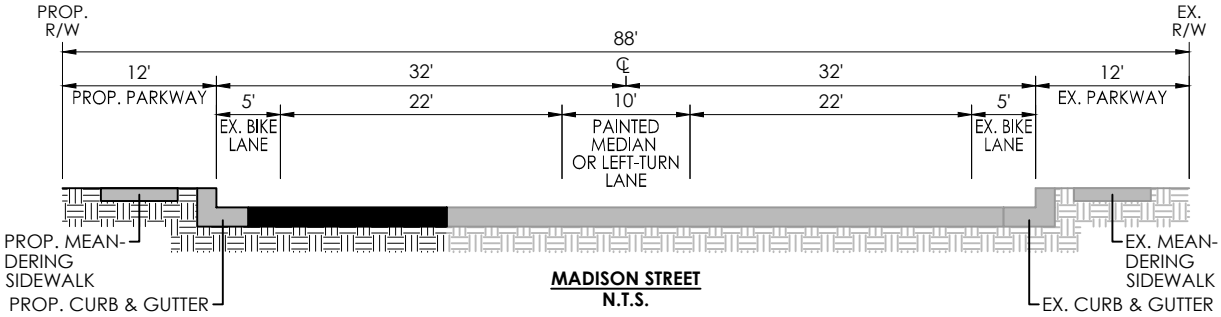
AVENUE 40
N.T.S.



JEFFERSON STREET
N.T.S.



AVENUE 38
N.T.S.



MADISON STREET
N.T.S.

Source: MSA Consulting, Inc.

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TYPICAL STREET SECTIONS: PUBLIC

Entries – Vehicular access to the site is proposed from gated entries on 40th Avenue, Madison Street, and 38th Avenue. The primary entry would occur on 40th Avenue near the corner with Madison St. Entries would include landscaping, entry signage and pedestrian walkway connections.

Vehicular Circulation – The vehicular circulation system will consist of a central collector road with local residential streets serving individual neighborhoods.

Pedestrian Circulation – The project will feature pedestrian access throughout the project via an integrated system of pedestrian trails/paseos and connecting on-street sidewalks. The project provides multiple pedestrian access points to connect the interior walkway system that allow residents free access to public sidewalks/trails on 40th Avenue, Madison Street, Jefferson Street, 38th and 39TH Avenue. The pedestrian circulation system is shown in greater detail on Figure 2.4 *Pedestrian Circulation*.

2.3 Open Space

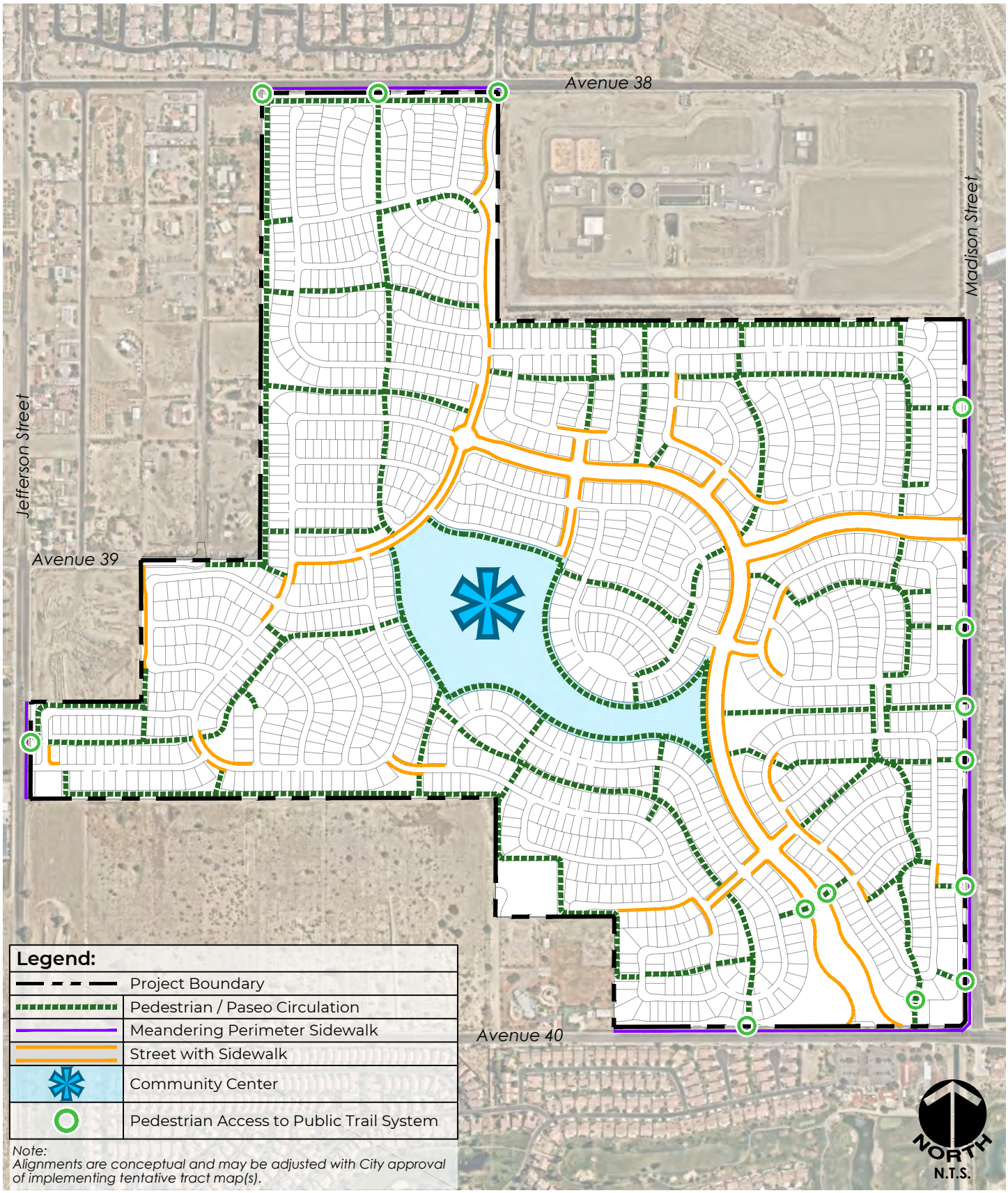
Open Space is an important aspect of a livable development. It provides areas where desert appropriate plant materials can be introduced to soften, accentuate, and shade urban hardscapes. They also provide prime opportunities. Key open space elements include:

Central Recreation Amenity – The project is designed around a central 26.1- acre recreational center that may contain amenities such as a fitness center, a movement studio, locker rooms, a covered outdoor pool, billiards tables, a golf simulator, arts and crafts room, game room, multi-purpose event lawn, sports courts, water features, outdoor kitchen, firepit seating ball room, catering kitchen, terrace, and indoor coffee bar with an outdoor social bar.

Paseos - Paseos provide an interconnected system of open spaces that link individual residences throughout the community with one another, the perimeter public sidewalk system and the central clubhouse amenity. These provide separated amenity corridors that encourage walking and biking throughout the community.

2.4 Water & Sewer

As shown in Figure 2.5 *Conceptual Water Plan and Figure* 2.6 *Conceptual Sewer Plan,* the Specific Plan area is provided with domestic water and sanitary sewer service by the Coachella Valley Water District (CVWD). Development within the project will be served by a private network of lines that will connect to existing public CVWD water and sewer lines located at 3 points of connection off Ave 38, Ave 40, and near the corner of Ave 39 and Jefferson.



Source: MSA Consulting, Inc.

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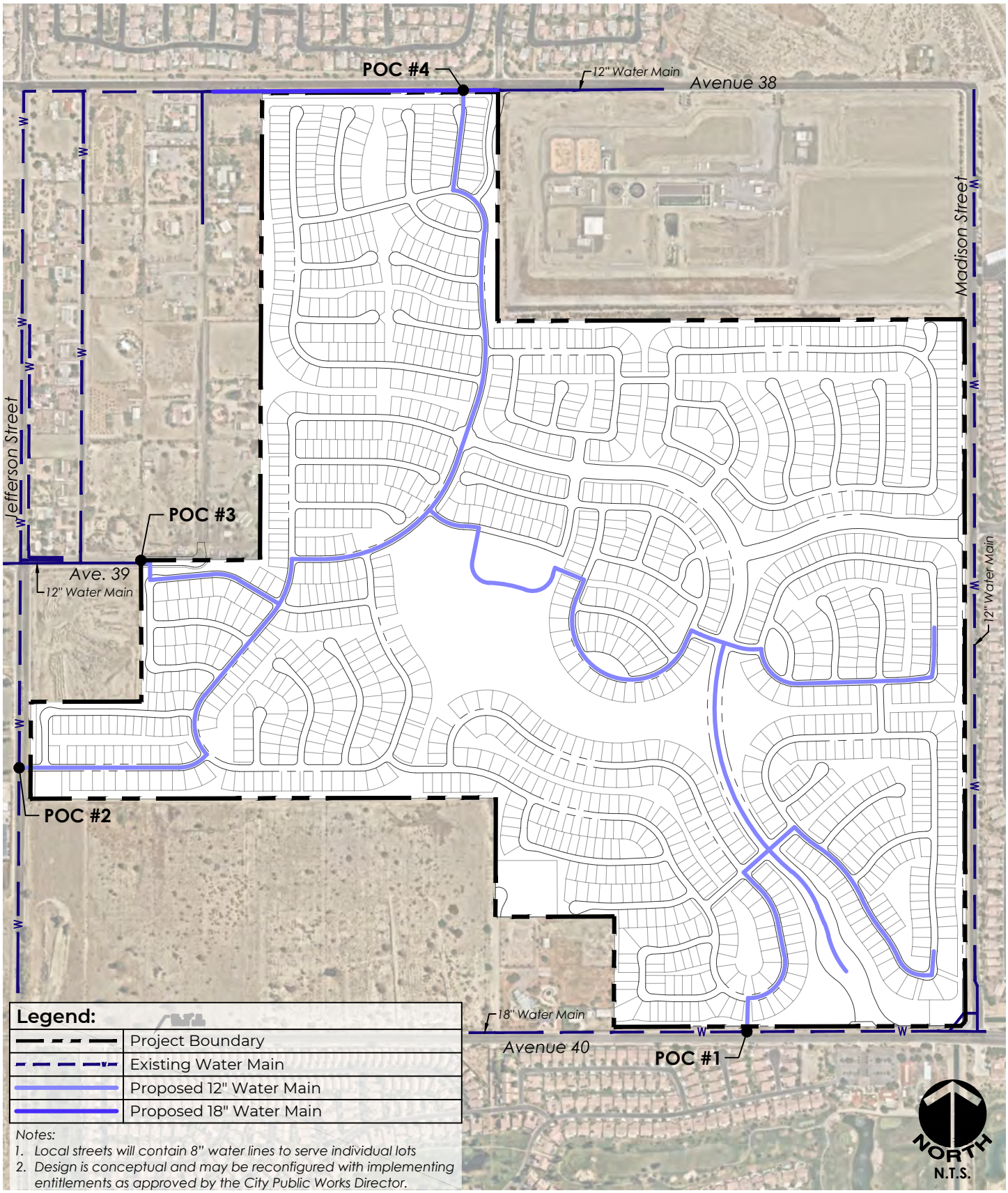
PEDESTRIAN CIRCULATION



Source: MSA Consulting, Inc.

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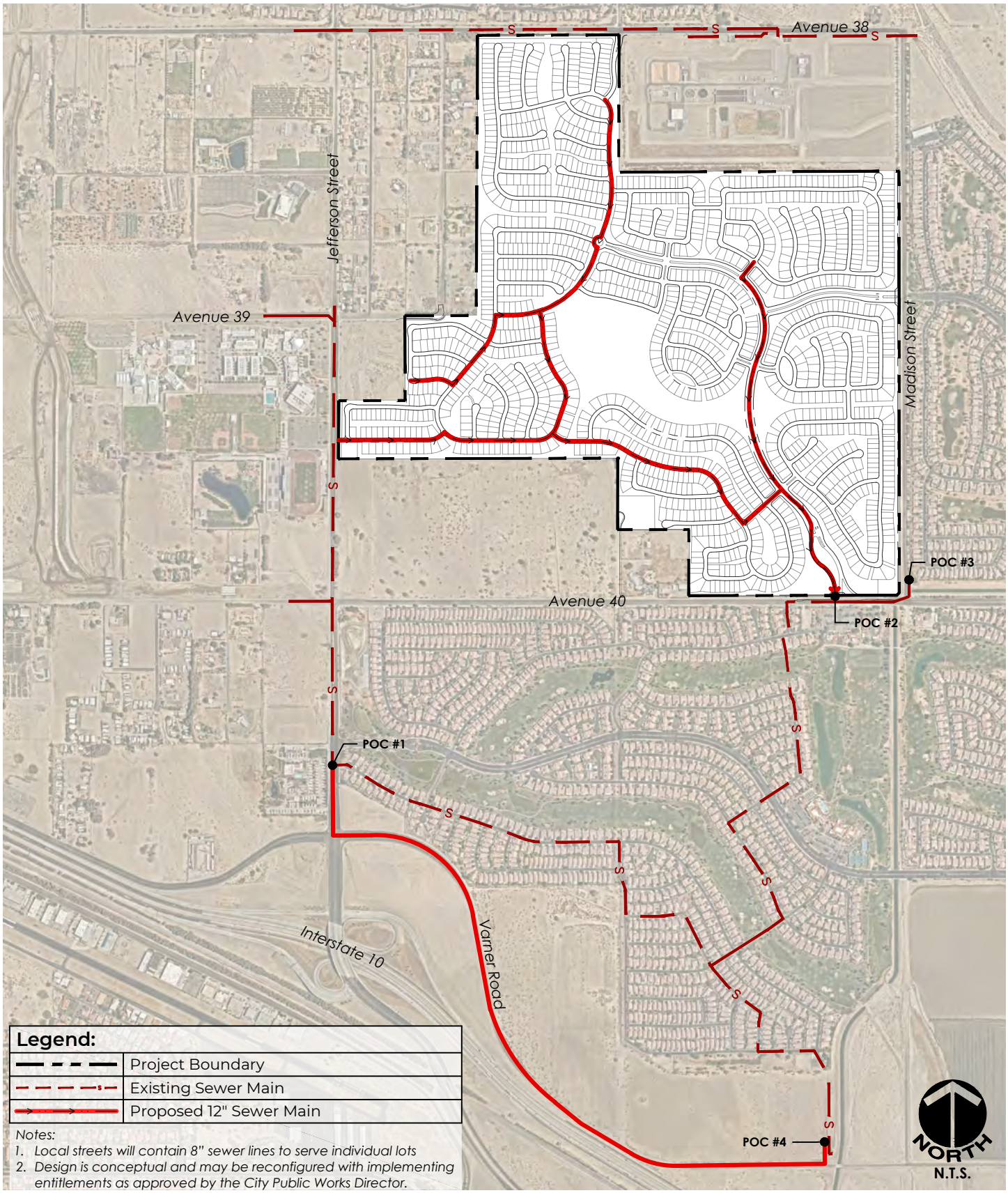
CONCEPTUAL WATER PLAN



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CONCEPTUAL SEWER PLAN

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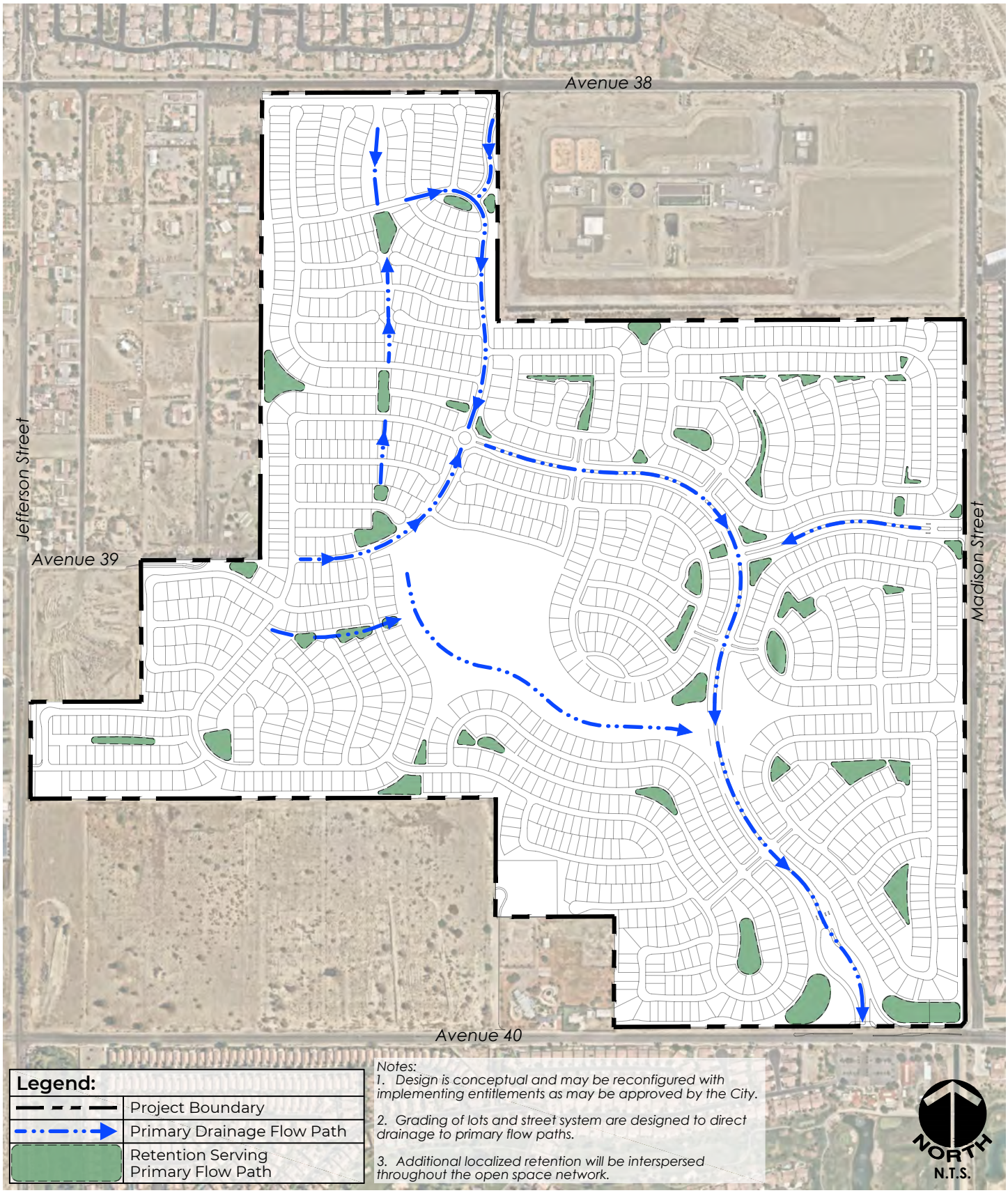
FIGURE 2.6

2.5 Grading & Drainage

Site topography slopes from northwest to southeast with higher elevations ranging from 52 feet above sea level to a low of 38 feet above sea level. Because grading and drainage are closely interrelated, they are addressed jointly in this section.

Site grading will create building pads while intending to keep the earthwork balanced on site. Because the site is relatively level, grading design will not deviate greatly from existing conditions and will be defined in greater detail as subsequent entitlement projects are proposed. Grading will achieve positive surface flows and protect all structures and physical improvements from the 100-year storm through surface runoff into retention basins either above or below the finished surfaces. Soil erosion and water quality will be protected both during and after construction is completed. The incremental increase in storm water runoff from an existing condition to the new developed condition created by impervious surfaces (roofs, pavement) will be retained on site.

As shown in Figure 2.7, Conceptual Grading and Drainage Plan, "developed condition" surface drainage will generally be split between the northern half and southern half of the property with water flowing north in the northern portion of the property, and south in the southern portion via project roadways and managed using retention facilities within open space paseos. The stormwater system depicts the drainage framework which will be adapted and detailed by implementing Tentative Tract Maps. Adjustments may include the number, location, configuration and depth of drainage pipes and basins as well as the specific flow path through the site. However, the retention basins and storm-drain pipes will be sized appropriately for each phase of the project using standard engineering modelling methods as approved by the Engineering Services Division.



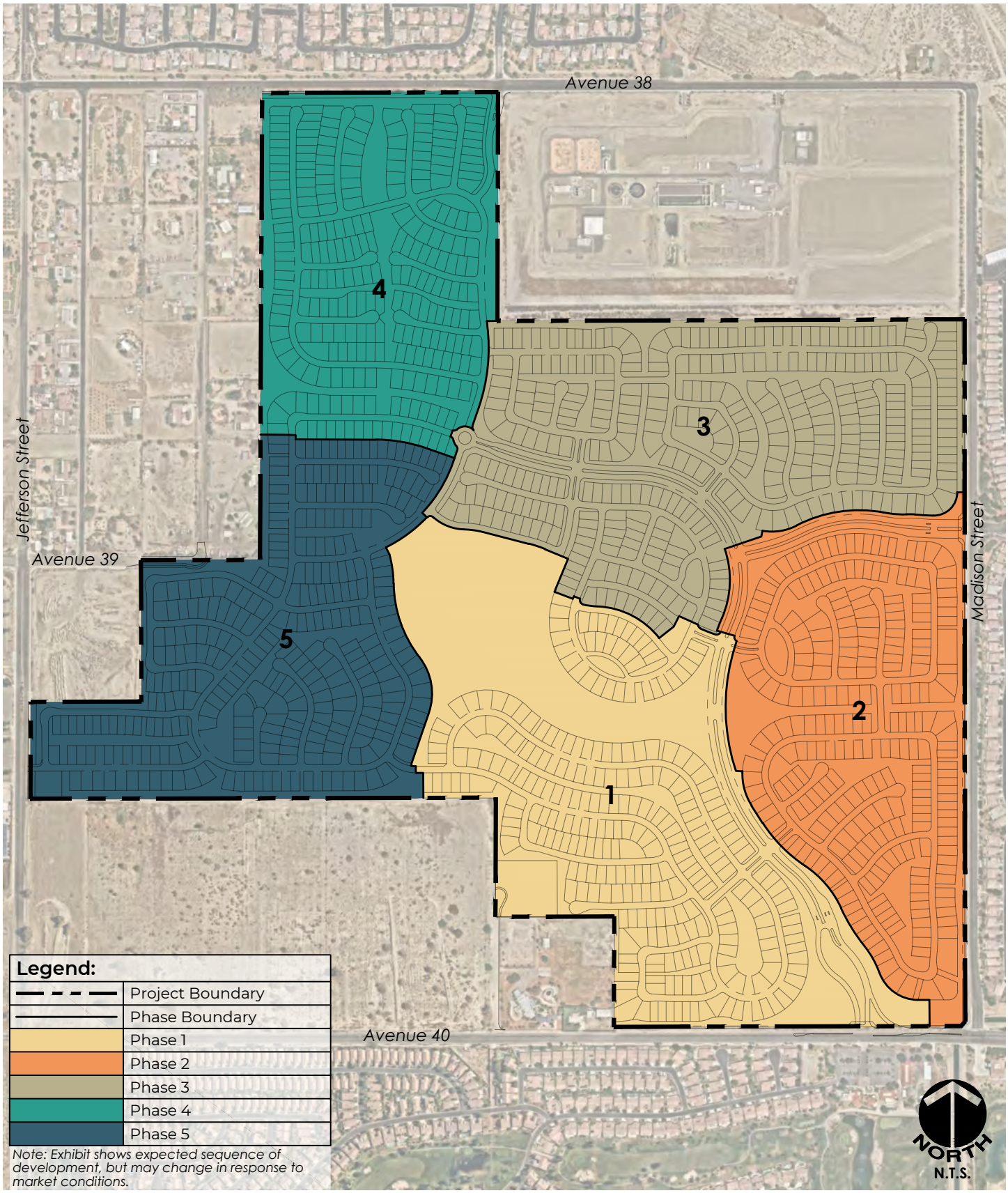
Source: MSA Consulting, Inc.

Exhibit Date: May 8, 2023

CONCEPTUAL GRADING & DRAINAGE

2.6 Phasing

Development of the Specific Plan is intended to be developed by a single developer. Phasing is allowed so long as each phase accommodates the orderly extension of circulation, utilities, and infrastructure in accordance with the final conditions of approval for each project and the City's Public Works Department. The project is expected to be built in 5 phases as shown in the Phasing Plan Exhibit 2.8



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PHASING PLAN

FIGURE 2.8

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CHAPTER 3: DEVELOPMENT STANDARDS

3.1 Overview

This chapter identifies the development standards applicable to the Desert Retreat Specific Plan area. The establishment of the site-specific development standards set forth in this chapter are intended to guide orderly development within the Specific Plan area, while also maintaining some flexibility to respond to changing conditions which may be a factor in any long-term development.

3.2 Allowable Uses

Development standards for the Desert Retreat Specific Plan area are shown in Table 3.1 *Allowable Uses*.

TABLE 3.1
ALLOWABLE USES

	P-Permitted Use
Residential	
Single-Family Homes (Detached)	P
Private Open Space and Recreational Facilities (tennis courts, pools, walk paths, etc.)	P
Clubhouses	P
Accessory Dwelling Units (eg. ADU, Granny Flat, Casita).	P
Sales Office, Model Home Complex.	P
Accessory Buildings Uses or Structures	P
Home occupations	P
The keeping of domestic animals	P
Public or quasi-public utility or public service facilities	P

3.3 Development Standards

Development standards for the Desert Retreat Specific Plan area are shown in Table 3.2 *Development Standards*.

TABLE 3.2
DEVELOPMENT STANDARDS

Lot Standards	
Minimum Lot Area	4,400 ft
Minimum Lot Width	40 ft
Minimum Corner Lot Width	50 ft
Minimum Lot Depth	100 ft
Maximum Lot Coverage	65%
Setbacks	
Front to living area or side loaded garage[1]	10 ft
Front to garage[1]	20 ft
Side	5 ft
Street Side	10 ft
Rear [2]	15 ft
Accessory Structures	See IMC Section 159.689
Parking	
Single Family Residence	4 spaces [3]

Notes:

1. *Measured from right of way*
2. *Accessory structures may encroach into the rear yard up to 5' from rear property line.*
3. *2 garage spaces plus 2 driveway spaces*

CHAPTER 4: DESIGN GUIDELINES

4.1 Overview

Quality development is achieved through attention to detail that is implemented from the initial inception of a project to the final construction of buildings, pathways, entry features, signage, and other design elements. This section outlines the design standards and guidelines for the Desert Retreat Specific Plan that will encourage the highest level of design quality and creativity in site planning and architectural design, while allowing for variation and flexibility.

All development within this Specific Plan needs to address the fundamental elements of design covered in this chapter. The following guidelines establish a design framework to help design professionals and developers understand and implement this project. The Specific Plan intends to allow a variety of design styles and a range of colors, materials, building detailing, and building orientations. However, these guidelines provide the necessary direction to ensure a coherent and complementary project.

Design guidelines that use the word "should" identify actions or outcomes that are encouraged but not mandatory. Only those using the word "shall," are considered mandatory.

4.2 Architectural Guidelines

The overall architectural theme governing the development of the community is founded upon a high level of architectural quality and attention to detail combined with materials appropriate for use in the local desert environment based on durability and building code industry standards. Architectural styles designed for this community should embrace the Indio environment by using materials that are long-lasting and a color palette that enhances the desert beauty. Homes and people-centric spaces should be designed at pedestrian scale and provide visual interest as residents move throughout Desert Retreat.

The common area buildings located at the recreation amenity will have massing reflective of well-grounded, strongly profiled building forms. The following are recommended for these structures:

- Deep recessed windows for passive protection against solar heat gain.
- Deep overhangs and trellis elements also for passive climate control and shade.
- Indoor and outdoor gathering areas.
- Spaces for active and passive recreation.
- Building materials may include stucco (primary material) with accents of stone, tile or siding depending on architecture style. Roof material and pitch shall match the architectural style.

Desert Retreat homes will be primarily one-story and encourage indoor/outdoor living. Homes will address the climatic conditions of Indio by using durable materials and desert appropriate design features.

- The garage should be de-emphasized by having living space closer to the street than garage doors.
- Windows and overhangs should be designed for passive cooling.
- Architectural styles should be identifiable, but may reflect a contemporary adaptation.
- Varied floorplans and elevation styles and or color/material palettes are encouraged for a more diverse street scene.

The following standards and guidelines shall be followed to achieve the overall architectural design theme. Photos to illustrate possible representative architectural character are shown in Figure 4.1 Residential Design Character.

Building Mass, Form and Scale

Residential buildings within the community shall be single story structures and include single story elements and, as a general rule, should be designed with massing consistent with historic desert residential precedents, including recessed and prominent projected elements. The apparent mass of buildings should be reduced through the application of one or more of the following techniques:

- Utilize projections and recesses to provide shadow and relief at exterior walls and roof areas.

- Use simple roof forms; provide interest by jogging the rooflines, varying plate lines and roof heights. Simple roof forms are strongly encouraged to address Title 24 Energy Code requirements more effectively.
- Encourage indoor/outdoor relationship with shaded areas such as California Rooms as well as thoughtfully designed windows and doors that can enhance the indoor/outdoor connection.
- Windows and doors may be recessed to provide depth. Accent trim and color, divided window lights, and raised panels are examples of detailing that provide individuality and interest. Awnings are permitted if they are consistent with the overall architectural style of the building. All window and door details shall be consistent with the architectural style of the home.

- Walls and fencing are discussed in Section 4.3; however, private walls and fencing should be consistent with community wall themes and compatible with the architectural style of the buildings. Foreground plantings, vines, and espaliers are strongly encouraged to soften long stretches of walls and fencing.

- Mechanical equipment such as air conditioning and pool equipment, soft water tanks, gas meters and electric meters shall be screened from public view but accessible for meter reading.

- Gutters and down spouts may be concealed or, if exposed, designed as a continuous architectural feature painted to match or contrast with the adjacent building surface. All flashing, sheet metal, vent stacks and pipes shall be painted to match the adjacent building surface. Skylights should be designed as an integral part of the roof. Their location and color should relate to the building. Patio trellises, pergolas and other exterior structures are encouraged to soften building masses, provide shade and define spaces. As with main buildings, clean forms are encouraged utilizing materials and colors complementary to building architecture and project design themes.

- Accessory structures shall be architecturally compatible with the primary structure.

Source: MSA Consulting, Inc.

Exhibit Date: May 8, 2023

RESIDENTIAL DESIGN CHARACTER IMAGERY

Building Materials and Colors

The primary goal of color and material palettes is to further enhance and define the architectural styles. Equally important is the composition of color and materials to achieve a harmonious and visually interesting community.

Selected colors and materials should be appropriate to the styles they represent and used to further differentiate from other styles.

- Use complementary building materials that promote a harmonious appearance and provide interest and variety consistent with the architectural styles.
- Where possible, use style-appropriate concrete roof tile blends; prohibit overly dramatic blends with extreme contrast.
- Material finishes should express permanence and quality.
- Avoid frequent changes in materials.
- Stucco is permitted as the primary material, but should lean toward a finer finish. Heavy lace stucco finishes are prohibited.
- Architectural screens and accessory structures should be compatible in material, color and texture to the primary buildings.

Use high-quality, durable, low-maintenance materials.

Roofs

Roofs should serve as major structural and architectural design elements, and a variety of roof types and colors are permitted. Roofs shall reflect the selected product type architectural concept and respond to the style, materials and scale of the building. Roof overhangs are encouraged; they provide essential shade and are also aesthetically pleasing. Skylights may be installed provided that they are designed as an integral part of the roof form.

- A variety of roof type is encouraged, including hip roofs, gable roofs and shed roofs. Roof pitches of 3:12 to 5:12 are permitted as well as flat roofs and parapets
- Roof heights and planes should vary to create interplay between the roof and the walls of the structure.
- Acceptable roofing materials include concrete s-tile and concrete slate tile. Standing seam metal roofs may be used for accents.
- Unacceptable roofing materials include wood shakes, clay, and asphalt shingles.

Chimneys

Chimneys may be used as an architectural element. Caps on chimneys shall have low profiles; they should not be visually distractive. The form and materials shall reflect the architectural theme of the structure.

Doors and Windows

By varying the spacing, sizes, shapes and locations of door and window openings in building facades, structures may be made more visually interesting and attractive. However, care must be taken to avoid excessive variety, or the end result will be a chaotic, cluttered building facade. It is especially important to vary the placement of doors and windows on buildings located in close

proximity to each other in the same development. In addition, windows and doors may be recessed into or projected out of structures to emphasize important areas of the building.

To further enhance the individual identity of each structure, pot shelves, window boxes, and built-in planters may be utilized if style appropriate. However, all such containers must be easily accessible for plant maintenance. Window frames, mullions, and doorframes shall be color coordinated with the rest of the building. Decorative wrought iron grills on windows may be used. Doors and windows shall complement the architectural style. .

Garages

Garage setbacks may be varied in order to enhance the streetscape scene. Garages shall be constructed of materials compatible with the architectural style of the structures.

Porches, Arcades and Entryways

Entrances to buildings shall be clear and easily recognizable. Covered entrances, porches, and arcades are desirable because they serve to identify entrances and provide shelter from the sun and inclement weather. A protected entrance is not only functional, but also produces a sense of privacy. Front entrances should be designed as significant architectural features. Porches and entryways may be used to visually break up large, monolithic buildings into smaller units more in keeping with the desired human scale of the community. Porch and railing materials shall be consistent with the architectural style.

Mailboxes

Where common mailbox services are provided for any residential area, they shall be located close to the neighborhood entry in clusters throughout the neighborhood. The architectural character shall be similar to the residential architecture.

4.3 Wall and Fence Guidelines

Walls and fences will be constructed in various settings throughout the community to provide privacy and security. Guidelines related to walls and fences are described below with representative character photos shown in Figure 4.2, *Wall Design Character*.

Community Walls

Walls are a major component in achieving an overall community theme within the Community. Wall and fence materials will be designed to be compatible with adjacent architectural and landscape elements. A strong cohesive appearance is achieved through the use of a community wall design that is compatible with the community buildings' architectural theme.

Perimeter and Community Walls

This project will be a gated community with a perimeter community wall that provides privacy. A solid decorative wall will be used at the perimeter of the project as well as inside the project adjacent to major streets and landscape areas. Tubular steel fencing may be constructed at the perimeter of the project in place of the solid decorative wall where such fences are adjacent to open space or where necessary for drainage purposes.

Source: MSA Consulting, Inc.

Exhibit Date: May 8, 2023

WALL DESIGN CHARACTER IMAGERY

Open Space Walls

Where view opportunities are adjacent to open space areas, a concrete curb will be used. Wrought iron or tubular steel fencing may be installed on top of this wall at the option of the individual owners, provided the overall height does not exceed 6 feet.

Interior Walls for Single Family Lots

Interior side and rear walls constructed around individual single-family lots will consist of masonry block, or low maintenance tubular steel fencing, with a minimum height of 5 feet above the finish floor elevation of the home. Interior rear walls located adjacent to an open space corridor will be a maximum of 3' high (6' high pool walls/ fences for safety), measured from the highest finish grade. Interior side walls shall be painted stucco or split fence, slump, sack finish or masonry block where they can be viewed from the open space areas.

Special Wall and Fence Requirements

- Walls may be used in association with common area buildings, such as maintenance facilities, for the purpose of sound abatement and visual screening of maintenance activities within the maintenance yard. Walls of up to 8 feet in height will be permitted for their value in isolating maintenance activities from the balance of the community. Additionally, walls of up to 8 feet in height are also permitted in order to screen food service areas and trash enclosures from the balance of the community and where appreciation of the common area amenities would suffer due to the lack of such walls.

- Fences and walls shall not exceed 8 feet in height above the highest adjacent grade, except when used on top of a berm where the maximum wall height will be 6'. The total height shall not exceed 8 feet above the lowest adjacent grade.

- Privacy walls surrounding residences should be a minimum of 5 feet in height and 6' maximum height. Privacy walls may be used in front yards, but it is encouraged to have landscape planting along the exterior side of the wall to soften appearance.

- Fences and screen walls (not including privacy walls, retaining walls or courtyard walls) shall not be located within the front yard area of a residential lot.

- All fences and walls connecting two separate residential dwelling units shall be constructed of the same material and color and shall be compatible with the color of the architecture.

- Barbed wire, electrically charged fences, plain exposed precision concrete block, plastic materials, corrugated metal, chain link, vinyl and grape stake fencing are prohibited.

- Retaining walls and courtyard walls located in the front yard setback area of single family lots shall be limited to 4 feet in height.

4.4 Landscape Guidelines

Landscaping is an integral part of community theming, and architectural enhancement. Landscape guidelines are described below with representative character photos shown in Figure 4.3 *Landscape Design Character*.

Theme

The landscape architectural theme for the Desert Retreat Community will play an important role in creating a community identity as well as continuity throughout the project as it develops. The landscape architectural design for this project will reflect a "desertscape" theme with supplemental ornamental accent landscaping, while providing a commitment to water conservation and low maintenance. This can be accomplished with the proper layout of "water efficient" plant materials and a state-of-the-art irrigation system.

It is the intent of these guidelines to provide flexibility and diversity in plant material selection, while maintaining a limited palette to give greater unity and thematic identity to the community. The landscape materials listed in the Community Plant Palette have been selected for their appropriateness to the project theme, climatic conditions, soil conditions and concern for maintenance. Plant material selection will include ground covers, accent shrubs, functional turf palm trees, and evergreen trees. Flowering vines and espaliers may also be used throughout the project.

Project Entries

The main entry gate will be provided at 40th Avenue, with the secondary entry at Madison Street. The gates themselves will be automatically activated by a security system. Decorative wrought iron gates will be provided at both entries. The gates will be hung on masonry pilasters in keeping with the overall architectural theme and materiality.

The main entry gate at 40th Avenue will establish the initial theme and identification of the overall community. This entry will include a guard house, signage monumentation, landscaping, and community entry water feature. The community water feature and wall signs, as well as selected accent trees will be lighted. The median will be planted with shrubs, ground cover and accent planting. Other features may include landscaped berms, enhanced paving, accent trees and shrubs.

The secondary entry gate at Madison Street will be provided with transponder-activated gates that will provide access for community residents only. Enhanced landscaping will be provided at this entry consistent with the overall community theme. Other features may include landscaped berms, paving, boulders, landscape sculpture elements and a signature monument signage.

Source: MSA Consulting, Inc.

Perimeter Streets

The expansive landscape setback along 38th Avenue, 40th Avenue, Madison Street and Jefferson Street will reflect a drought tolerant, natural dry concept that will fit into the low desert environment. Plant material selection will consist of primarily desert flowering trees with palm tree accents, desert accent shrubs and ground covers. Planting will be organic and free flowing.

Decorative crushed rock and gravel will be used as a continuous inert groundcover along with boulder rock used as accents.

Private Arterial and Collector Streets

Extensive landscaping will be provided for the private arterial streets within the project. Community private streets sections are illustrated in Figures 2.3a and 2.3b.

Single Family Residential Lots

It shall be the responsibility of the Developer to install front yard landscaping. It will be the responsibility of individual homeowners to install landscaping for the entire rear lot within a period of 90 days from the close of escrow. The lot owners will submit landscaping plans for review by the Master Homeowners Association within 30 days after the close of escrow. All individual lot landscaping will comply with the following minimum landscape guidelines, which at the discretion of the homeowner's association, can be increased or made more stringent:

- The use of native or compatible drought tolerant species is strongly encouraged for all yard landscaping. Plants that consume higher amounts of water should be used sparingly and should be grouped together for efficient and proper irrigation.

- All landscape plantings will be maintained by a fully automatic underground watering system. The watering system valves will be brass and not plastic. The irrigation system must be equipped with an upstream pressure regulator. The drip system should also have a filter.

- The following plants will not be allowed in the Community:

Common Name	Botanical Name
Mulberry	Morus alba
Olive/fruit	Olea europaea
Tamarisk	Tamarix
Italian Cyprus	Cupressus sempervirens
Fountain Grass	Pennisetum setaceum

- Front yards shall be provided with a minimum of one tree and a minimum of one shrub or plant for each 200 square feet, or fraction thereof, of the overall lot area. No less than one-half of the minimum amounts of required shrubs or plants are to be located in the front yard. No less than one-quarter of the minimum amounts of required shrubs or plants are

to be located by the homeowner in the rear yard. All shrubs or plants must be at least a five-gallon container size. Trees will be no smaller than 24" box size. Ground cover will be required in all yards. Corner lots will be provided with two trees in the front yard and two trees on the side yard facing the street.

- The ground surfaces of all yards will be covered with inert or living materials or any combination of both. For the purpose of these Design Guidelines, topsoil or decomposed granite (fines) will not be considered inert material. No artificially colored rock will be permitted as ground cover. Ground cover or inert material will not be used to spell out names, nicknames, names of states, city's athletic teams, slogan states, emblems or any other communication.

- If turf is used, common Bermuda grass will not be allowed. There are several hybrid Bermudas available from which to choose. No more than 20% of the total square footage of the lot as described in the recorded tract map may be planted in turf, and only in the rear yard. Narrow or irregular shaped areas should be avoided because they are difficult to irrigate without encountering over-spray problems. Warm season grass such as hybrid Bermuda that goes dormant in winter will be over seeded with Winter Rye at the beginning of the fall season in order to maintain a consistent appearance. Perennial Rye seed is recommended. Owners may install turf that abuts a patio edge provided that such turf is not within four (4) feet from dwelling unit, and two (2) feet from side and rear property lines or any wall. Where turf is adjacent to sidewalks, designs shall eliminate over-spray of the hardscape.

- The use of solid plastic sheeting or polyethylene over ground areas will not be permitted. If landscape fabric is used, it must allow the free flow of water, air, and gases to and from the soil.

- Fountains will be limited in height to 5 feet above the natural grade of the lot unless otherwise approved by the master homeowner's association. They will be of natural materials compatible with the overall architectural theme of the community. Fountains will be permitted in the front yards, street side yards, rear yards, and courtyards of all residential homes. Waterfall features, including waterfall spills for pools or spas, when constructed in the front, side or rear yards, are limited to a maximum of 36 inches in height above the finished floor elevation of the lot. Waterfalls constructed in rear yards enclosed by 5-foot walls or higher can exceed this maximum height as long as they cannot be seen from common areas or neighboring lots.

- Statues and artifacts will not be allowed in the front yard excepting temporary statues, artifacts and other holiday decorative landscaping items which may be allowed within a reasonable time period prior to and after the holiday season. In front enclosed courtyards, artifacts will be allowed with prior approval of the homeowner's association, so long as they are limited to 5-feet in height. Also, with prior approval of the homeowner's association for placement, statues and artifacts are allowed in the back yards of green belt lots so long as they do not exceed 36 inches in height measured from the finish floor elevation to the top of the statue or artifact.

CHAPTER 5: PLAN ADMINISTRATION

5.1 Overview

This chapter describes the procedures for administration and implementation of the Desert Retreat Specific Plan. The City of Indio Community Development Department shall have the responsibility for plan administration and implementation as established in this chapter.

5.2 Implementation

This Specific Plan establishes the general intent and comprehensive framework for the future development of the Desert Retreat project. However, prior to construction, various implementing approvals are required, as noted below.

Specific Plan – The SP will provide comprehensive development guidelines, allowable uses, and development standards for the project as a whole.

Tentative Tract Map (TTM) – TTMs are intended to implement the project and subdivide the property into smaller parcels/lots for development or sale and create common area lots for private streets, the community clubhouse, open space paseos and other facilities.

Design Review (DR) – A Design Review application allows the City to review the architectural and landscape plans in greater detail for buildings such as for the community clubhouse and residential homes.

Development Agreement (DA) – A Development Agreement establishes special terms beneficial and mutually agreeable to both the City and the Developer to facilitate development of the community and to vest the community's approvals.

5.3 Administration

Administrative Changes - Minor modifications that are consistent with the purpose and intent of this Specific Plan are allowed at the discretion of the Community Development Director or designee. Therefore, it is intended that this Specific Plan provide City Staff with the flexibility to interpret the details of project development as well as those items described in general terms in the Specific Plan without requiring a Specific Plan.

Requests for administrative changes shall be made in writing. If/when it is determined that changes or adjustments are necessary or appropriate, these shall be approved administratively by the Community Development Director or designee. After approval, any such administrative change shall be attached to the Specific Plan as an addendum and may be further changed and amended from time to time as necessary.

Representative examples of such changes may include, but are not limited to:

- The addition of new information to the Specific Plan maps or text that do not substantially change the effect of any regulation. The new information may include more detailed, site-specific information.

- Changes to infrastructure such as drainage systems, roads, water and sewer systems, etc.

- Deviations not exceeding 10% of the development regulations set forth in Chapter 3 of this Specific Plan will be considered on a case-by-case basis, subject to the discretion and approval of the Community Development Director.

Formal Amendments - If it has been determined that the proposed change is not in conformance with the intent of the current Specific Plan approval, the Specific Plan may be amended in accordance with the procedures set forth in the City of Indio Municipal Code.

5.4 Interpretation

Uses Not Listed - All uses not listed as allowed in this Specific Plan are prohibited. However, the Community Development Director may determine that a use not listed is included within, similar to or comparable to a listed use and, once so determined; it shall be treated in the same manner as a listed use.

Application of Standards - Where there is ambiguity between the Specific Plan and the Zoning Code, the Community Development Director shall review pertinent information and make a determination as to which code or standard applies. All determinations shall be in writing and shall be attached to the Specific Plan as noted under *Administrative Changes*, earlier in this section.

5.5 Enforcement

The enforcement of the provisions of this Specific Plan shall be by the following:

- The City of Indio Community Development Department shall enforce the development standards and regulations set forth herein.

- Any administrative decision or interpretation of this Specific Plan may be appealed to the Planning Commission per the provisions of Section 150.022 of the City of Indio Municipal Code. Likewise, any decision by the Planning Commission may be appealed to the City Council.

- The City of Indio shall administer the provisions of this Specific Plan in accordance with the State of California Government Code, Subdivision Map Act, the City of Indio General Plan, and the City of Indio Municipal Code.

- The Specific Plan development procedures, regulations, standards, and specifications shall supersede the relevant provisions of the City's Municipal Code, as they currently exist or may be amended in the future.

- All regulations, conditions, and programs contained herein shall be deemed separate distinct and independent provisions of this Specific Plan. In the event that any such provision is held invalid or unconstitutional, the validity of all the remaining provisions of this Specific Plan shall not be affected.

- Any development regulation and building requirement not addressed in this Specific Plan shall be subject to all relevant City of Indio ordinances, codes, and regulations.

NOTICE OF PUBLIC HEARING

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

www.rcaluc.org

A PUBLIC HEARING has been scheduled before the Riverside County Airport Land Use Commission (ALUC) to consider the applications described below.

Any person may submit written comments to the ALUC before the hearing or may appear and be heard in support of or opposition to the project at the time of hearing. **Information on how to participate in the hearing will be available on the ALUC website at www.rcaluc.org.** The ALUC holds hearings for local discretionary permits within the Airport Influence Area, reviewing for aeronautical safety, noise and obstructions. ALUC reviews a proposed plan or project solely to determine whether it is consistent with the applicable Airport Land Use Compatibility Plan. For more information please contact **ALUC Planner Jackie Vega at (951) 955-0982.**

The City of Indio Planning Department should be contacted on non-ALUC issues. For more information please contact City of Indio Planner Kendra Reif at (760) 391-4086.

The proposed project application may be viewed by a prescheduled appointment and on the ALUC website www.rcaluc.org. Written comments may be submitted at the Riverside County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, California 92501, Monday through Friday from 8:00 a.m. to 3:30 p.m., or by e-mail to javega@rivco.org. Individuals with disabilities requiring reasonable modifications or accommodations, please contact Barbara Santos at (951) 955-5132.

PLACE OF HEARING: **Riverside County Administration Center**
4080 Lemon Street, 1st Floor Board Chambers
Riverside California

DATE OF HEARING: **July 13, 2023**

TIME OF HEARING: **9:30 A.M.**

CASE DESCRIPTION:

ZAP1092BD23 – Pulte Home Company, LLC (Representative: David Dewegeli) – City of Indio Case Nos. DR22-06-503 (Specific Plan), TTM38470 (Tentative Tract Map). A proposal to establish the Desert Retreat Specific Plan creating an age-restricted community containing 1,500 single-family homes on 378 acres, located northerly of 40th Avenue, easterly of Jefferson Street, westerly of Madison Street, and southerly of 38th avenue. The applicant also proposes dividing 378 acres into 1,500 single family lots. (Airport Compatibility Zone E of the Bermuda Dunes Airport Influence Area)

RIVERSIDE COUNTY
AIRPORT LAND USE COMMISSION

APPLICATION FOR MAJOR LAND USE ACTION REVIEW

ALUC STAFF ONLY

ALUC Case Number: ZAP1091BD23 Date Submitted: 4/18/23

AIA: Bermuda Dunes Zone: E Public Hearing ☐ Staff Review ☑

Applicant

Applicant Full Name: Omar Hussein

Applicant Address: 69-930 Hwy 111, Ste 203 Rancho Mirage, CA 92270

Phone: (214) 923-3246 **Email:** omar@beaconrealtyadvisors.com

Representative/ Property Owner Contact Information

Representative: Luis Gomez (goUrban Development) **Email:** lagomez@gourbandev.com

Phone: (562) 895-3392

Address: 1 World Trade Center, 8th Floor, Long Beach CA 90831

Property Owner: AABC Beacon Jefferson Square, LLC, a North Carolina limited liability company **Email:** omar@beaconrealtyadvisors.com

Phone: (214) 923-3246

Address: 69-930 Hwy 111, Ste 203 Rancho Mirage, CA 92270

Local Jurisdiction Agency

Agency Name: City of La Quinta Phone: (760) 341-4800

Staff Contact: Nicole Criste **Email:** consultingplanner@laquintaca.gov

Address: 78495 Calle Tampico, La Quinta, CA 92253

Local Agency Case No.: Master Project # 2023-0001, SP2022-0004,TTM2022-0003,SDP22022-0015

Project Location

Street Address: N/A Gross Parcel Size.: 5.1 Acres

Assessor's Parcel No.: 604-521-013, 604-521-014

Solar

Is the project proposing solar Panels? Yes ☑ No ☐ If yes, please provide solar glare study. (only if in Zone C or higher)

Data

Site Elevation:(above mean sea level): 59 ft

Height of Building or structures: 45' 4"

What type of drainage basins are being proposed and the square footage: 2 above-ground retention basins (8,100 SF + 14,400 SF) and 1 underground retention basin (4,800 SF)

Notice

A. NOTICE: Failure of an applicant to submit complete or adequate information pursuant to Sections 65940 to 65948 inclusive of the California Government Code, MAY constitute grounds for disapproval of actions, regulations, or permits.

B. REVIEW TIME: Estimated time for "staff level review" is approximately 30 days from date of submittal. Estimated time for "commission level review" is approximately 45 days from date of a complete application submittal to the next available commission hearing meeting.

C. SUBMISSION PACKAGE:

Please submit all application items DIGITALLY via USB or CD:

- Completed ALUC Application Form
- Plans Package: site plans, floor plans, building elevations, grading plans, subdivision maps
- Exhibits of change of zone, general plan amendment, specific plan amendment
- Project description of existing and proposed use

Additionally, please provide:

- ALUC fee payment (Checks made out to Riverside County ALUC)
- Gummed address labels of all surrounding property owners within a 300-foot radius of project site. (Only required if the project is scheduled for a public hearing).

Riverside County Airport Land Use Commission, County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, CA 92501, Phone: 951-955-5132 Fax: 951-955-5177 Website: www.rcaluc.org

RIVERSIDE COUNTY
AIRPORT LAND USE COMMISSION

STAFF REPORT

AGENDA ITEM:	3.3
HEARING DATE:	July 13, 2023
CASE NUMBER:	ZAP1076TH23 – City of Coachella (Representative: Gabriel Perez)
APPROVING JURISDICTION:	City of Coachella
JURISDICTION CASE NO:	GPA 23-02 (General Plan Amendment), ZOA 22-03 (Zoning Ordinance Amendment), CZ 23-01 (Change of Zone)
LAND USE PLAN:	2005 Jacqueline Cochran Regional Airport Land Use Compatibility Plan (last amended in 2006)
Airport Influence Area:	Jacqueline Cochran Regional Airport
Land Use Policy:	Airport Compatibility Zones C, D, E
Noise Levels:	55 CNEL to 60 CNEL from aircraft
MAJOR ISSUES:	None

RECOMMENDATIONS: Staff recommends that the proposed General Plan Amendment, Zoning Ordinance Amendment, and Change of Zone be found CONSISTENT with the 2005 Jacqueline Cochran Regional Airport Land Use Compatibility Plan, as amended in 2006.

PROJECT DESCRIPTION: A City-initiated proposal for a city-wide Zoning Consistency Update which will: 1) prepare new or revised zones to implement the 2035 General Plan; 2) consolidate and incorporate the zones in the Pueblo Viejo Strategy Implementation Plan into the Zoning Code; 3) update the Official Citywide Zoning Map; 4) provide environmental clearance for the above changes to the Zoning Code and General Plan; and 5) Update the General Plan Land Use Map for consistency with the Zoning Code and address “clean up”.

PROJECT LOCATION: All land subject to the land use jurisdiction of the City of Coachella within Compatibility Zones C, D and E of the Jacqueline Cochran Regional Airport Land Use Compatibility Plan (JCRA ALUCP).

BACKGROUND: The City Council adopted the Coachella General Plan 2035 on April 22, 2015 (which was found consistent by the ALUC on February 5, 2015 via ZAP1027TH24), which established the goals, policies, and implementation strategies which will implement the vision for the City of Coachella. The General Plan 2035 also included a new adopted General Plan Land Use Map and a Zoning Consistency Analysis that called for the establishment of new zoning districts that currently do not exist in the City’s Official Zoning Map. The conforming zoning changes with the General Plan are now overdue and in 2022 the City initiated work to prepare the Zoning

Consistency Update which includes:

- prepare new or revised citywide zones to implement the 2035 General Plan,
- consolidate and incorporate the zones in the Pueblo Viejo Strategy Implementation Plan into the Zoning Code,
- update the Official Citywide Zoning Map, and
- provide environmental clearance for the above changes to the Zoning Code and General Plan Update the General Plan Land Use Map for consistency with the Zoning Code and address “clean up.”

AIRPORT LAND USE COMPATIBILITY REFERENCES IN THE GENERAL PLAN UPDATE:

The project includes the addition of text in the City of Coachella 2035 General Plan Chapter 4 Land Use and Community Character to establish the Downtown Transition land use. The General Plan Designation Compatible Uses Table 4-1 is proposed to be deleted and will instead be applied within text of permitted uses of zoning districts within the Zoning Code. The General Plan map is updated to include the Vista Del Agua Specific Plan, designate the Downtown Transition land use area, and identify land uses for parcels that were erroneously omitted in the 2035 General Plan Update.

The project will change the general plan land use designation of two areas identified as Fountainhead Plaza (from Downtown Center to Urban Employment) and APN 612-250-007 (to split General Neighborhood and Neighborhood Center). Both areas are located outside the JCRA airport influence area and will not have any impact to the ALUCP criteria.

Lastly, the proposed update to the general plan land use exhibit contains regulatory language requiring that projects shall be consistent with the JCRA ALUCP criteria.

AIRPORT LAND USE COMPATIBILITY REFERENCES IN THE ZONING CODE UPDATE:

The City’s Zoning Code is adopted as a means to implement the General Plan and currently includes 13 zoning districts. The Zoning Consistency Analysis developed with the 2035 General Plan Update effort identified Zoning Code changes necessary to implement the General Plan as follows:

- Reclassify five (5) zones (Agricultural Transition to Rural Rancho, Residential Single Family and 6000 Overlay to Suburban Neighborhood, Residential Multiple Family to General Neighborhood, Tourist Commercial to Regional Commercial Zones),
- Revise eight (8) zones (Agricultural Reserve, Residential Estate, Mobilehome Park, Neighborhood Commercial, General Commercial, Manufacturing Service, Heavy Industrial, and Wrecking Yard Zones),
- Create four (4) new zoning districts (Urban Neighborhood, Urban Employment, Resort District, Open Space Zones),
- Delete the Tourist Commercial District and incorporate it into the Regional Commercial and Resort Districts.

Additionally, the Pueblo Viejo Implementation Strategy Plan identified the need to create four (4) new Downtown zones rather than a single district identified in the General Plan. Staff observed that many of the permitted uses and development standards identified for the 4 recommended

Downtown zones were similar and propose to simplify the recommendations by consolidating them into two new zoning districts as follows:

- Downtown Pueblo Viejo, DT-PV: Achieves more intensified urban development standards in key destination areas of Pueblo Viejo.
- Downtown Transition, DT-PV: Allows for less intensified development standards as a transition between residential zoning and more intense Downtown zoning.

Several notable proposed Zoning Code modifications depart from the City's existing development standards and permitted uses as follows:

- Affordable Housing Requirement – Pueblo Viejo. For the Downtown Pueblo Viejo, DT-PV, and Downtown Transition, TR-PV, Zones, a minimum of 10% of all residential units for projects of more than 10 units must be priced for low and/or moderate-income residents consistent with the adopted Pueblo Viejo Revitalization Implementation Plan.
- Recreational Vehicle (RV) Storage limitation in the M-S, Manufacturing Service, M-H, Heavy Industrial Zones, and M-W, Wrecking Yard Zones. Established a cap of 15% for the area RV storage uses can occupy within the M-S, M-H, and M-W Zones. Currently, the Municipal Code does not expressly permit RV Storage and the use has been interpreted to be similar to a mini-storage warehouse. The Zoning Code modification is proposed to ensure that a sufficient balance of revenue and employment generating uses compatible with the intent of the M-S, M-H, and M-W Zones.
- Suburban Neighborhood Zone includes a proposed minimum lot size reduction from 7,200 sq. ft. to 5,400 sq. ft. Currently, 5,000 sq. ft. lot sizes are only permitted in the R-S, Residential Single Family Zone with custom development standards approved through a planned unit development (PUD) overlay.
- Objective Design Standards for single-family residential units. State law under Senate Bill (SB) 330 requires new housing development to be reviewed against objective design standards. Currently, the City does not have any adopted objective design standards and cannot apply subjective design criteria such as compatibility with the surrounding built environment for new residential development. The proposed supplemental standards for single-family residential units address site planning and building façade standards to ensure adequate building modulation and variation of building materials. Objective design standards for multi-family residential units are under development and will be considered separately by the City Council in June 2023.

The project proposes making the following changes to the draft Zoning Code in the following areas:

- 51-996 Tyler Street. Amend the code to allow commercial daycare facilities in Urban Neighborhood and Urban Employment zones. This physical location is located in Zone E which does not restrict density or intensity and is therefore consistent with the JCRA ALUCP.
- 85-220 Avenue 50. Add language to Conditional Uses for Urban Employment zone for light industrial uses permittance. This physical location is located outside the JCRA airport influence area and will not have any impact to the ALUCP criteria.
- Manufacturing Service Zone. Amend the code to not limit RV storage uses to 15%, but instead to allow staff to decide the appropriate locations. There are Manufacturing Service zones located within Airport Compatibility Zones C, D and E, where Zone C restricts non-residential intensity to 75 people per average acre and 150 people per single acre, and

Zone D restricts intensity to 100 people per average acre and 300 people per single. Zone E does not restrict intensity. The proposed update to the zoning map contains regulatory language requiring that projects shall be consistent with the JCRA ALUCP criteria.

As mentioned previously, the project will also change the zoning of two areas identified as Fountainhead Plaza (from Downtown Center to Urban Employment) and APN 612-250-007 (to split General Neighborhood and Neighborhood Center). Both areas are located outside the JCRA airport influence area and will not have any impact to the ALUCP criteria.

Lastly, the proposed update to the zoning map contains regulatory language requiring that projects shall be consistent with the JCRA ALUCP criteria.

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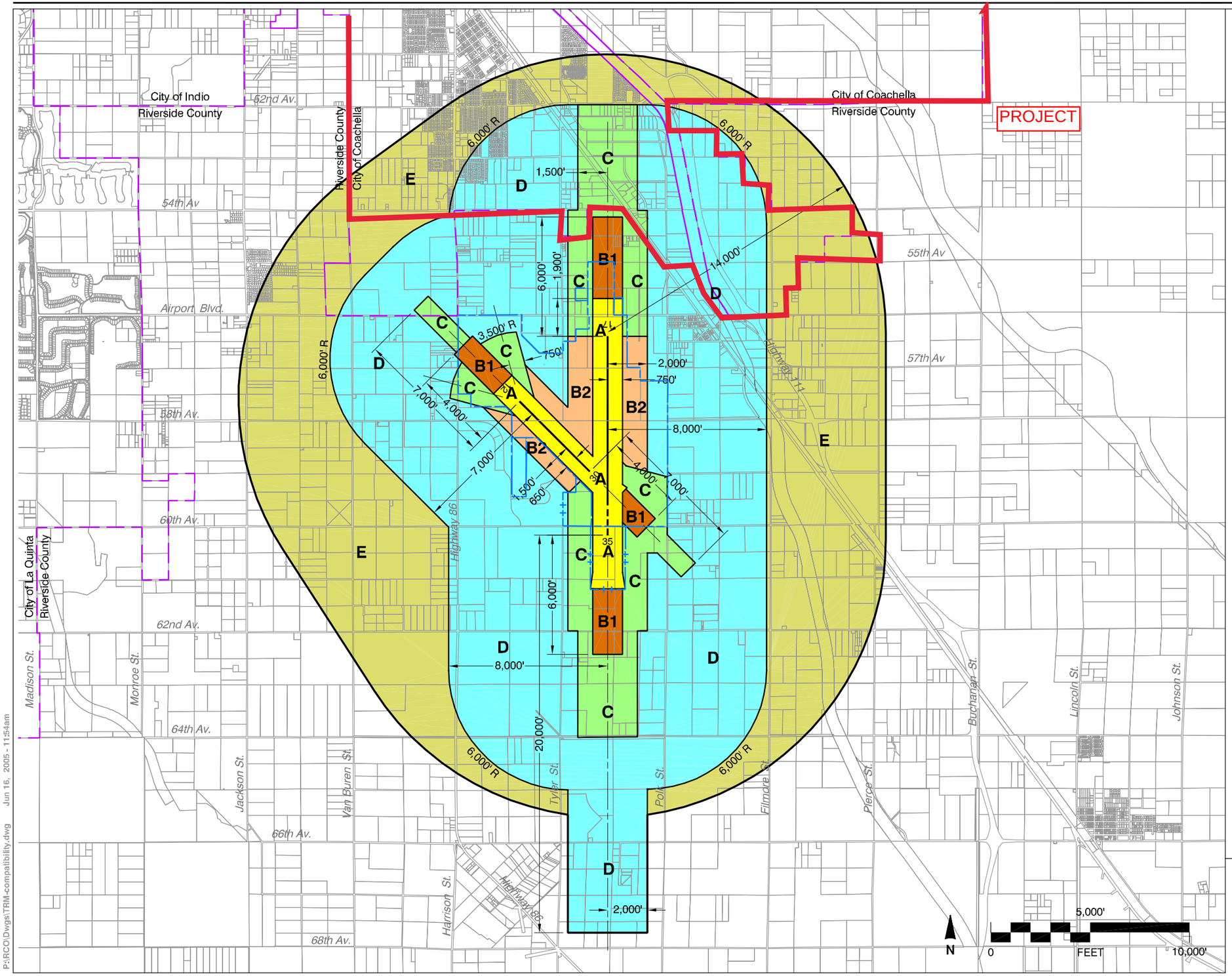


Legend

Compatibility Zones

- Airport Influence Area Boundary
- Zone A
- Zone B1
- Zone B2
- Zone C
- Zone D
- Zone E

Boundary Lines

- Airport Property Line - Existing
- Airport Property Line - Planned
- City Limits

Note

Except for southern extension, Airport Influence Area boundary measured from a point 200 feet beyond runway ends in accordance with FAA airspace protection criteria (FAR Part 77). All other dimensions measured from runway ends and centerlines.

See Chapter 2, Table 2A for compatibility criteria associated with this map.

Riverside County
Airport Land Use Commission

Riverside County
Airport Land Use Compatibility Plan
Policy Document

(Adopted June 2005)

Map JC-1

Compatibility Map

Jacquelline Cochran Regional Airport

P:\RCO\Dwgs\TRM-compatibility.dwg Jun 16, 2005 - 11:54am

raimi+ associates

Memo

May 18, 2023
To: Gabriel Perez, City of Coachella
From: Simran Malhotra and Melissa Stark, Raimi Associates

Subject: **Summary of Recommended Changes to the Zoning Code and General Plan based on Public Input**

The following memo summarizes recommended changes to the Coachella Public Draft Zoning Code and recommended amendments to the General Plan based on recent public feedback:

51-996 Tyler Street

- **Request:** Allow day care uses, corporate office and regional cooking service in Urban Neighborhood (U-N) to allow for existing uses
- **Staff Recommendation:** Amend the code to allow commercial daycare facilities in Urban Neighborhood (U-N) and Urban Employment (U-E) zones

85-220 Avenue 50

- **Request:** Allow legacy multi-tenant uses on the property as a right of use instead of making these uses non-conforming. Current uses on this property include a variety of manufacturing service-related uses.
- Also, request that the M-S zone allow towing/impound as a permitted use.
- **Staff Recommendation:** Add following language to **17.16.020.C. Conditional Uses for Urban Employment zone:**
- 5. Light Industrial uses as permitted in the M-S (Manufacturing Service) Zone, and as stand-alone uses operating indoors. *Such uses in existence and permitted at the time of adoption of this code amendment shall be permitted to continue as a permitted use without obtaining a conditional use permit.*
- No recommendation re. towing/impound

Manufacturing Service Zone

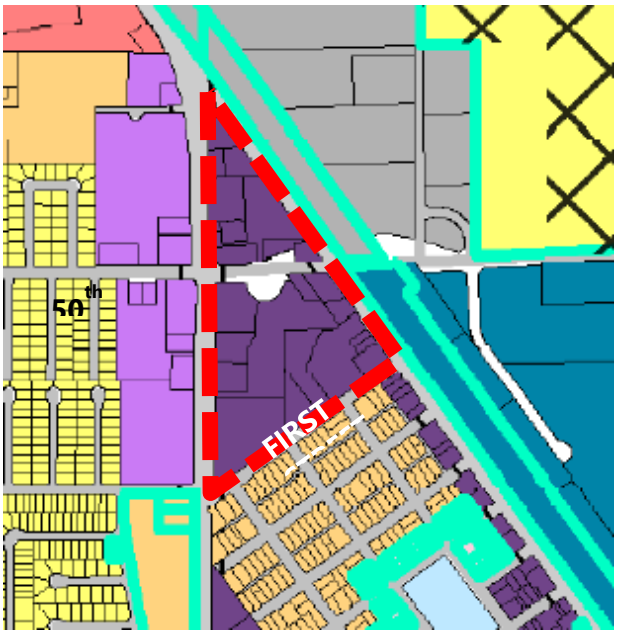
- **Request:** Do not limit RV Storage Uses to 15% of the zone. Instead allow staff to decide appropriate locations where these should be allowed.
- **Options for Planning Commission to consider:**
    - Maintain current requirement.
    - Make it more restrictive – reduce to 10%. *(Economic Development Subcommittee is considering making this requirement more restrictive for RV storage and mini-storage.)*

- Another option is to limit these uses on parcels that do not front on the major arterials.

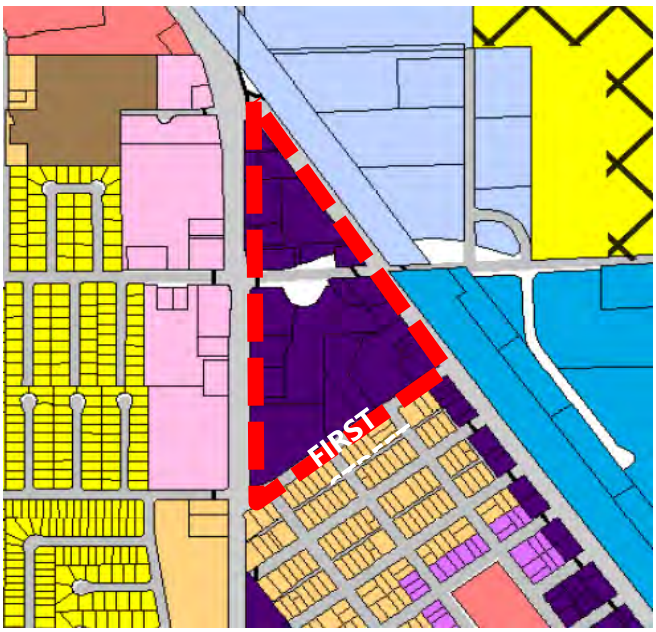
Fountainhead Plaza

- **Request:** Allow auto-oriented uses in this part of the Downtown center (GPLU) and DT-PV zone.
- **Staff Recommendations:** Change the GPLU and Zoning to Urban Employment to better reflect current and proposed uses in this area.
  - Current GPLU – Downtown Center
  - Recommended GPLU – Urban Employment
  - Draft Zone – Downtown (DT-PV)
  - Recommended Zone – Urban Employment (U-E)

General Plan Land Use



Draft Zoning



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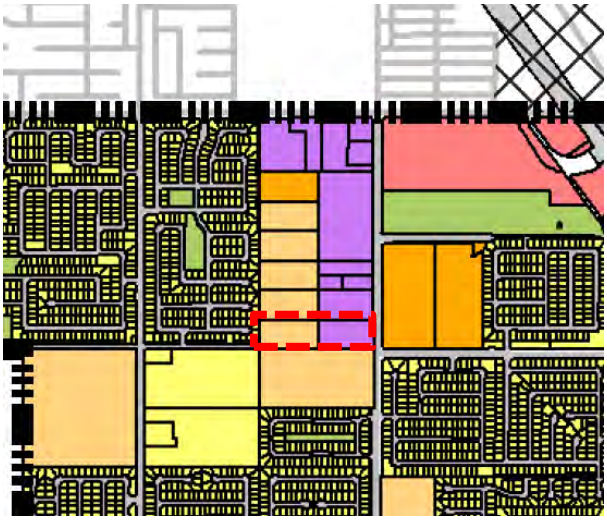
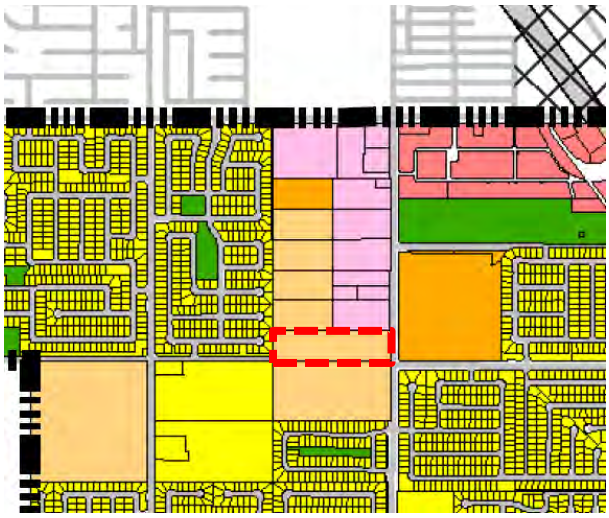
Zoning Clean Up

- **Staff Recommendations:** Recommend clean up change related to General Plan consistency.
    - Draft Zone – General Neighborhood
    - General Plan – split General Neighborhood and Neighborhood Center
    - Recommendation - split General Neighborhood and Neighborhood Center

General Plan Land Use



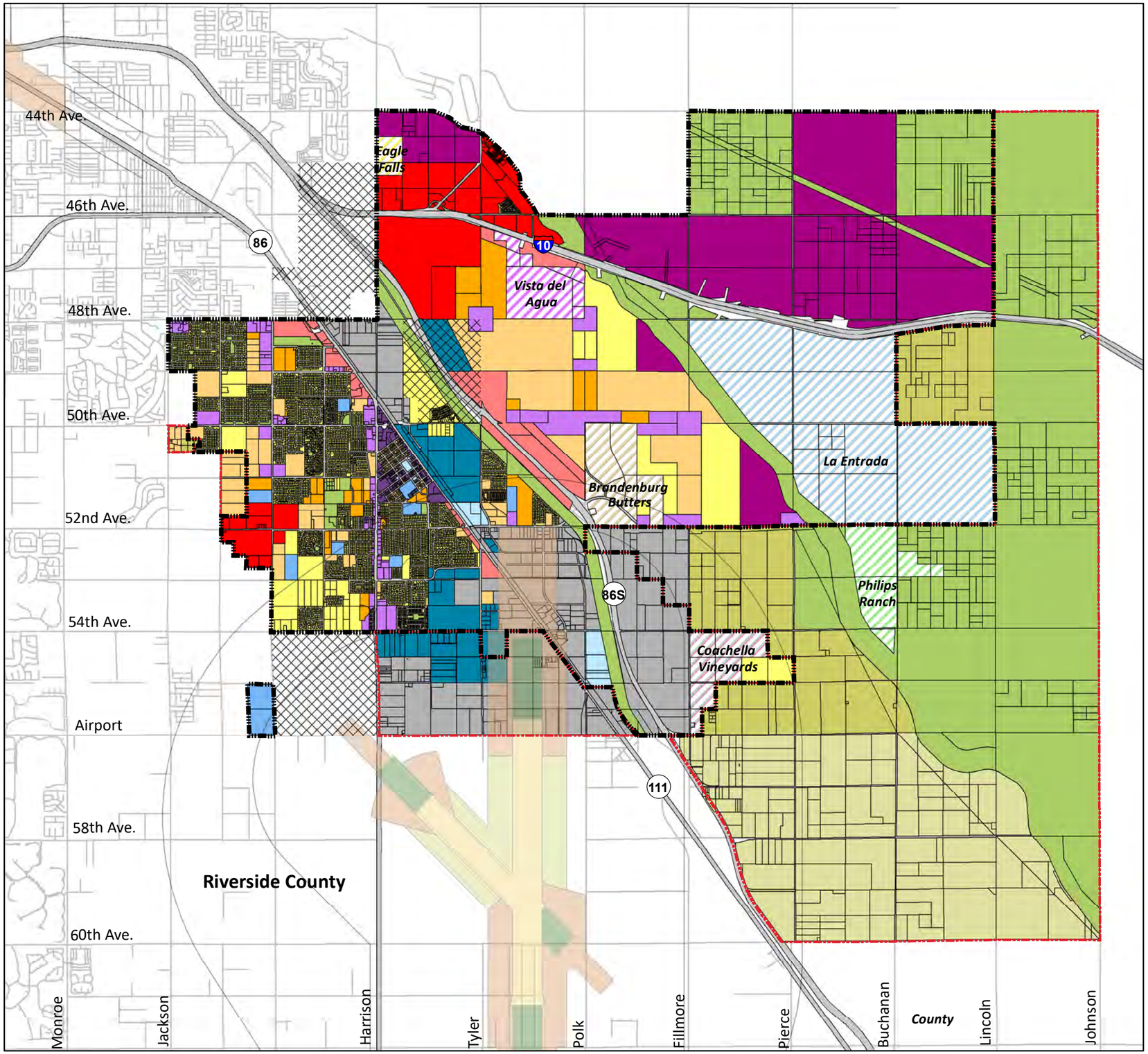
Draft Zoning



Attachments:

- General Plan Land Use Map
- Draft Zoning Map

City of Coachella
General Plan Update 2035



General Plan Land Use

City Boundary

Sphere of Influence

Tribal Land

Airport Compatibility

- Zone A
- Zone B1
- Zone B2
- Zone C
- Zone D
- Zone E

Land Use Designation

- Agricultural Rancho
- Rural Rancho
- Suburban Neighborhood
- General Neighborhood
- Urban Neighborhood
- Downtown Transition
- Downtown Center
- Neighborhood Center
- Suburban Retail District
- Regional Retail District
- Resort District
- Open Space
- Public Facilities
- School
- Urban Employment
- Industrial District
- Brandenburg Butters Specific Plan
- Coachella Vineyards Specific Plan
- Eagle Falls Specific Plan
- La Entrada Specific Plan
- Philips Ranch Specific Plan
- Vista del Agua Specific Plan

**Densities, intensities, and prohibited uses shall be consistent with criteria in the airport land use compatibility plan for the Jacqueline Cochran Regional Airport, including applicable Countywide criteria that may exist at the time of project review. If the project is located in the Riverside County Airport Land Use Compatibility Plan zones, please see ALUCP and Coachella City Planning Staff for the most up-to-date regulations.*

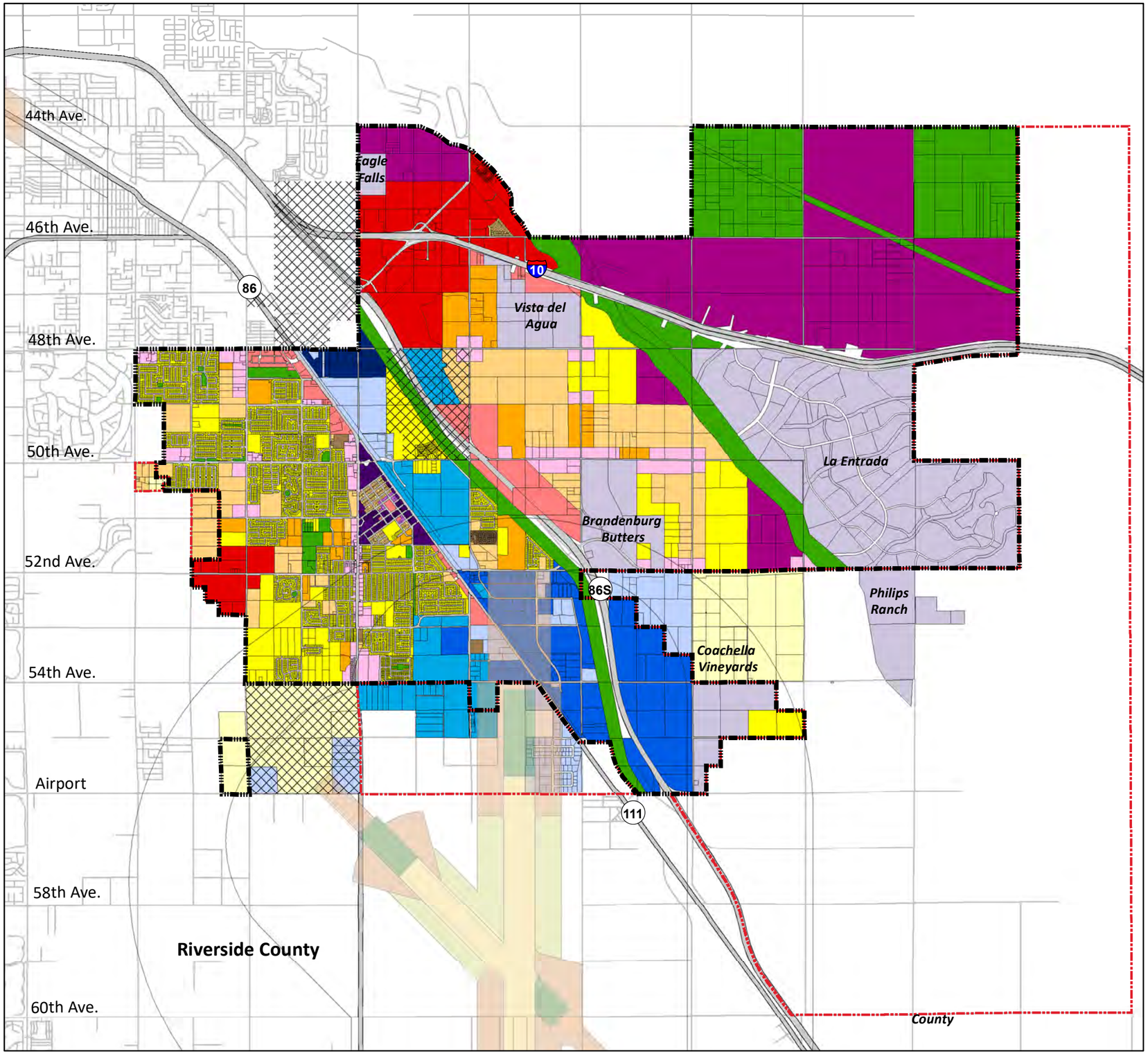
0 1 2 3 Miles

N

raimi+ associates

Source: City of Coachella and Riverside County
Date: April 2023

City of Coachella
Official Zoning Map



Draft Zoning Districts

- City Boundary
- Sphere of Influence
- Tribal Land

Airport Compatibility

- Zone A
- Zone B1
- Zone B2
- Zone C
- Zone D
- Zone E

- Rural Rancho (R-R)
- Suburban Neighborhood (S-N)
- Mobile Home (R-MH)
- General Neighborhood (G-N)
- Urban Neighborhood (U-N)
- Neighborhood Commercial (C-N)
- General Commercial (C-G)
- Regional Commercial (R-C)
- Downtown Transition (TR-PV)
- Downtown (DT-PV)
- Resort District (R-D)
- Urban Employment (U-E)
- Manufacturing Service (M-S)
- Heavy Industrial (M-H)
- Wrecking Yard (M-W)
- Open Space (O-S)
- Specific Plan

**Densities, intensities, and prohibited uses shall be consistent with criteria in the airport land use compatibility plan for the Jacqueline Cochran Regional Airport, including applicable Countywide criteria that may exist at the time of project review. If the project is located in the Riverside County Airport Land Use Compatibility Plan zones, please see ALUCP and Coachella City Planning Staff for the most up-to-date regulations.*

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N

raimi+ associates

Source: City of Coachella and Riverside County
Date: April 2023

5/19/2023

TO: Riverside County Airport Land Use Commission

FROM: Gabriel Perez, Development Services Director

SUBJECT: City of Coachella Zoning Consistency Update.

PROPOSED ACTIONS:

Staff recommends that the Planning Commission:

1. Find and determine that additional environmental review is not required pursuant to CEQA Guidelines Section 15183 (Projects Consistent with a Community Plan or Zoning); and

2. Approve a City Resolution approving General Plan Amendment No. 23-02 amending the City of Coachella 2035 General Plan and the Official General Plan Map.

3. Approve a City Resolution approving Zoning Ordinance Amendment No. 22-03 of the City of Coachella Municipal amending the Official Zoning Map and Amending Municipal Code Title 17 (Zoning) for consistency with the City of Coachella 2035 General Plan.

BACKGROUND:

The City Council adopted the Coachella General Plan 2035 on April 22, 2015, that established the goals, policies, and implementation strategies that will implement the vision for the City of Coachella. The General Plan 2035 also included a new adopted General Plan Land Use Map and a Zoning Consistency Analysis that called for the establishment of new zoning districts that currently do not exist in the City's Official Zoning Map. The General Plan 2035 was reviewed and approved by ALUC.

The conforming zoning changes with the General Plan are overdue and in 2022 Planning staff engaged the professional services of Raimi + Associates to assist in preparation of the Zoning Consistency Update that would include the following:

- Prepare new or revised citywide zones to implement the 2035 General Plan
- Consolidate and incorporate the zones in the Pueblo Viejo Strategy Implementation Plan into the Zoning Code
- Update the Official Citywide Zoning Map

- Provide environmental clearance for the above changes to the Zoning Code and General Plan
- Update the General Plan Land Use Map for consistency with the Zoning Code and address "clean up."

DISCUSSION/ANALYSIS:

Zoning Code Updates

The City of Coachella Municipal Code (C.M.C.), Title 17, Zoning, is known as "The Comprehensive Zoning Ordinance of the City of Coachella" and is referenced herein as the "Zoning Code." The City's Zoning Code is adopted as a means to implement the General Plan and currently includes 13 zoning districts. The Zoning Consistency Analysis developed with the 2035 General Plan Update effort identified Zoning Code changes necessary to implement the General Plan as follows:

- Reclassify five (5) zones (Agricultural Transition to Rural Rancho, Residential Single Family and 6000 Overlay to Suburban Neighborhood, Residential Multiple Family to General Neighborhood, Tourist Commercial to Regional Commercial Zones)
- Revise eight (8) zones (Agricultural Reserve, Residential Estate, Mobilehome Park, Neighborhood Commercial, General Commercial, Manufacturing Service, Heavy Industrial, and Wrecking Yard Zones)
- Create four (4) new zoning districts (Urban Neighborhood, Urban Employment, Resort District, , Open Space Zones)
- Delete the Tourist Commercial District and incorporate it into the Regional Commercial and Resort Districts.

Additionally, the Pueblo Viejo Implementation Strategy Plan identified the need to create four (4) new Downtown zones rather than a single district identified in the General Plan. Staff observed that many of the permitted uses and development standards identified for the 4 recommended Downtown zones were similar and propose to simplify the recommendations by consolidating them into two new zoning districts as follows:

- Downtown Pueblo Viejo, DT-PV: Achieves more intensified urban development standards in key destination areas of Pueblo Viejo.
- Downtown Transition, DT-PV: Allows for less intensified development standards as a transition between residential zoning and more intense Downtown zoning.
-

Table 1: Summary of Existing, Revised and New Zones for Zoning Consistency Update

Current Chapter #	Current Zoning District	New Chapter #	New/Revised Zoning District	New Density Range (du/ac)	New FAR	Corresponding GPLU
Residential Zones						
17.10	Agricultural Reserve (A-R)	17.10	Agricultural Reserve (A-R)	Up to 0.025	-	Agricultural Rancho
17.12	Agricultural Transition (A-T)	17.11	Rural Rancho (R-R)	0.4 to 1	-	Rural Rancho
17.14	Residential Estate (R-E)	17.12	Residential Estate (R-E)	1 to 2.2	-	Estate Rancho
17.16	Residential Single Family (R-S)	17.13	Suburban Neighborhood (S-N)	2 to 8	-	Suburban Neighborhood
17.18	6000 Overlay (R-O-6000)					
17.20	Residential Multiple Family (R-M)	17.14	General Neighborhood (G-N)	8 to 25	-	General Neighborhood
		17.15	Urban Neighborhood (U-N)	20 to 38	0.5	Urban Neighborhood
17.22	Mobilehome Park (R-MH)	17.22	Mobile Home Park (R-MH)	(1 mobile home/ 4,500 sf)	-	Varies
cial and Mixed Use Zones						
		17.16	Urban Employment (U-E)	30 to 65	2	Urban Employment
		17.17	Resort District (R-D)	Up to 8	0.1	Resort District
Pueblo Viejo Plan	Transition Area Pueblo Viejo Zone (TR-PV)	17.18	Downtown Transition (TR-PV)	Up to 25	1.5	Downtown Transition
	Sixth Street Pueblo Viejo Zone (SS-PV)		Downtown Zone (DT-PV) – collapses several Pueblo Viejo zones	20 to 65	3	Downtown Center
	Grapefruit Boulevard Pueblo Viejo Zone (GB-PV)					
	Cesar Chavez Street Pueblo Viejo Zone (CC-PV)					
17.24	Neighborhood Commercial (C-N)	17.24	Neighborhood Commercial (C-N)	15 to 40	1.5	Neighborhood Center
17.26	General Commercial (C-G)	17.26	General Commercial (C-G)	-	1	Suburban Retail
17.28	Tourist Commercial (C-T)	17.28	Regional Commercial (R-C)	10 to 15	2	Regional Retail
trial and Other Zones						
17.30	Manufacturing Service (M-S)	17.30	Manufacturing Service (M-S)	-	2	Industrial
17.32	Heavy Industrial (M-H)	17.32	Heavy Industrial (M-H)	-	2	Industrial
17.34	Wrecking Yard (M-W)	17.34	Wrecking Yard (M-W)	-	2	Industrial
		17.35	Open Space (OS)	-	-	Parks and Open Space

Several notable proposed Zoning Code modifications depart from the City's existing development standards and permitted uses as follows:

- Affordable Housing Requirement – Pueblo Viejo. For the Downtown Pueblo Viejo, DT-PV, and Downtown Transition, TR-PV, Zones, a minimum of 10% of all residential units for projects of more than 10 units must be priced for low and/or moderate-income residents consistent with the adopted Pueblo Viejo Revitalization Implementation Plan.
- Recreational Vehicle (RV) Storage limitation in the M-S, Manufacturing Service, M-H, Heavy Industrial Zones, and M-W, Wrecking Yard Zones. Established a cap of 15% for the area RV storage uses can occupy within the M-S, M-H, and M-W Zones. Currently, the Municipal Code does not expressly permit RV Storage and the use has been interpreted to be similar to a mini-storage warehouse. The Zoning Code modification is proposed to ensure that a sufficient balance of revenue and employment generating uses compatible with the intent of the M-S, M-H, and M-W Zones.
- Suburban Neighborhood Zone includes a proposed minimum lot size reduction from 7,200 sq. ft. to 5,400 sq. ft. Currently, 5,000 sq. ft. lot sizes are only permitted in the R-S,

Residential Single Family Zone with custom development standards approved through a planned unit development (PUD) overlay.

- Objective Design Standards for single-family residential units. State law under Senate Bill (SB) 330 requires new housing development to be reviewed against objective design standards. Currently, the City does not have any adopted objective design standards and cannot apply subjective design criteria such as compatibility with the surrounding built environment for new residential development. The proposed supplemental standards for single-family residential units address site planning and building façade standards to ensure adequate building modulation and variation of building materials. Objective design standards for multi-family residential units are under development and will be considered separately by the City Council in June 2023.

General Plan Modifications

The Zoning Consistency Update project includes addition of text in the City of Coachella 2035 General Plan Chapter 4 Land Use and Community Character to establish the Downtown Transition land use. The General Plan Designation Compatible Uses Table 4-1 is proposed to be deleted and will instead be applied within text of permitted uses of zoning districts within the Zoning Code. The General Plan map is updated to include the Vista Del Agua Specific Plan, designate the Downtown Transition land use area, and identify land uses for parcels that were erroneously omitted in the 2035 General Plan Update.

Public Review and Comments

The draft of the Zoning Consistency Update document and zoning map were published on the City website beginning May 2, 2023, and the City hosted two virtual questions and answer sessions for the public in English and Spanish on May 8 and May 11, 2023, that were advertised on the City's social media platforms. The comment letters received by Planning staff are listed in Attachment 6.

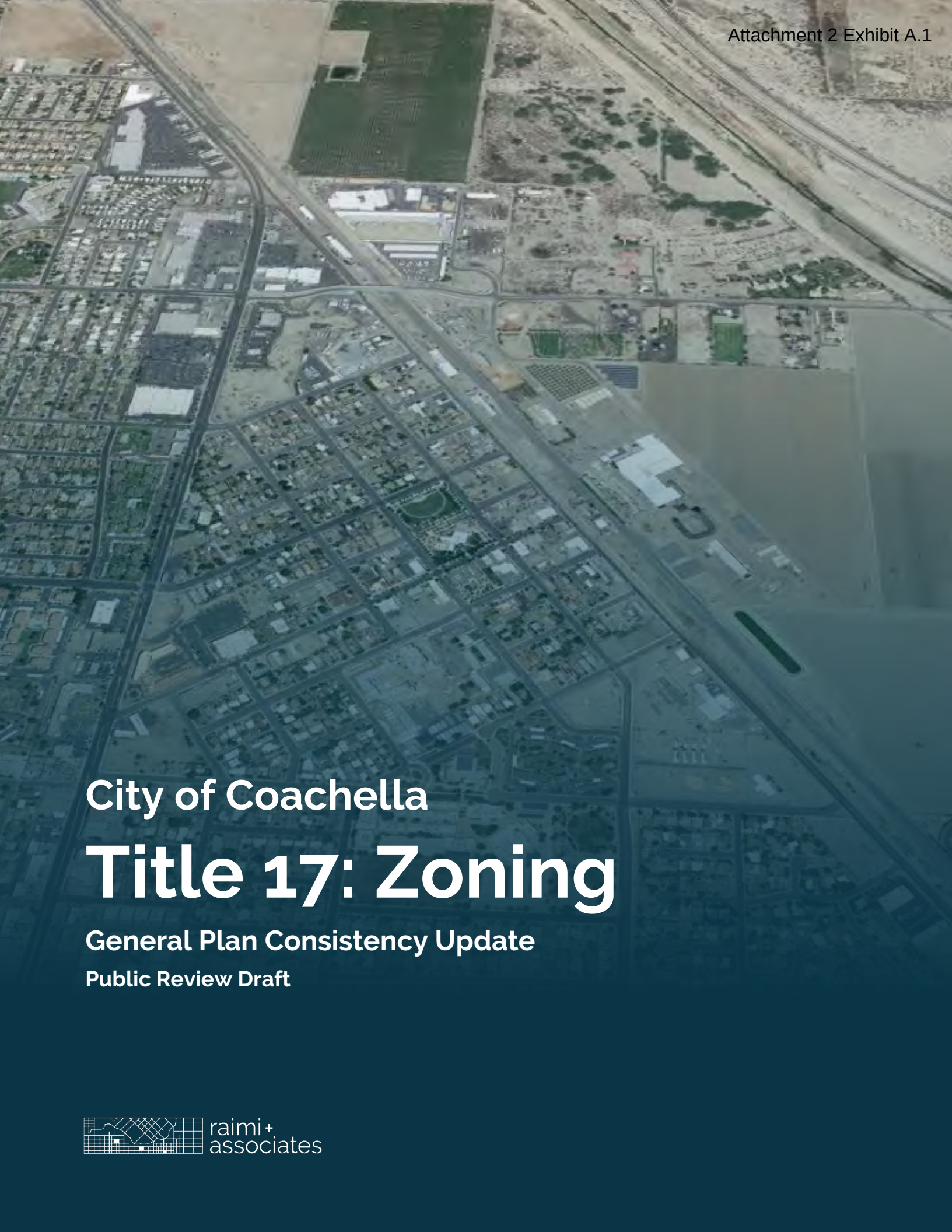
ENVIRONMENTAL REVIEW:

The City's proposed Zoning Code and General Plan Amendment is in accordance with Section §15183 (Projects Consistent with a Community Plan or Zoning) of the California Environmental Quality Act (CEQA) Guidelines, subsection (a) which states that additional environmental review is not required for projects "which are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified", except as might be necessary to determine whether there are project-specific significant effects. In this case, the proposed project is consistent with the City's General Plan 2035 and Final Environmental Impact Report (EIR), which were adopted and certified by the City Council on April 22, 2015. Therefore, the proposed project is consistent with State CEQA Guidelines Section §15168(c)(2) since it is within the programmatic scope covered by the Final EIR and there is no substantial evidence that the proposed Zoning Code Update would require additional environmental analysis.

Similarly, the proposed project is consistent with CEQA Guidelines Section §15183 (d)(1)(C) since it meets the consistency with "a general plan of a local agency", and with Section §15183 (d) (2) which states that "an EIR was certified by the lead agency for the…. general plan".
Additionally, the proposed project is consistent with CEQA Guidelines Section §15162(a) in that no subsequent environmental documentation will be required for the proposed project. Specifically, the proposed project is not proposing any substantial changes to the City's GP 2035 [§15162(a)(1)], would not result in substantial changes due to the GPU and Zoning Code Update [§15162(a)(2)], nor would it present new information of substantial importance, which was not known and could not have been known with the exercise of reasonable due diligence at the time the previous EIR was certified as complete, showing any of the following [§15162(a)(3)]:

A. The project will have one or more significant effects not discussed in the previous EIR
B. Significant effects previously examined will be substantially more severe than shown in the previous EIR
C. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative
D. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

A memorandum of the consistency findings for the Zoning Consistency Update project with CEQA is provided as Attachment 3.



City of Coachella

Title 17: Zoning

General Plan Consistency Update

Public Review Draft

raimi + associates

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Chapter 17.11 R-R (RURAL RANCHO) ZONE 8
Chapter 17.12 R-E RESIDENTIAL ESTATE ZONE 12
Chapter 17.13 S-N SUBURBAN NEIGHBORHOOD ZONE 15
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Chapter 17.06 DEFINITIONS

The following definitions shall be added to this chapter:

Artisan manufacturing/flex space. Limited fabrication, assembly, or light industrial activities that provide ancillary warehousing and storage, require minimal outdoor storage, and require minimal heavy vehicle delivery/pick-up, and are in support of a primary research and development and/or industrial permitted land use in the applicable zone. Also includes any commercial use (charitable or for profit) or space for the creation, exhibition, or production of artistic or craft pieces, including art installations, ceramic products manufacturing, crafts, glass work, jewelry, painting, sculpture, and welding activities limited to the production of art.

Polanco park. Mobile home parks developed under the provisions of the 1992 bill AB 3526, commonly known as the Polanco Bill. These MHPs are intended to serve as farmworker housing and may not contain more than twelve units.

Public Utility. Public utilities include, but not limited to, reservoirs, utility substations, including electrical distribution and transmission substations.

Chapter 17.08 ZONING DISTRICTS DESIGNATED

17.08.010 Zones established.

For the purpose of this title as stated in Chapter 17.02, the city is divided into the following zones:

A-R	Agricultural R~~r~~eserve zone
~~A-T~~R-R	Rural ~~Agricultural transition~~ zone
R-E	Residential E~~e~~state zone
~~R-S~~S-N	Suburban Neighborhood~~Single-family~~ zone
~~R-M~~G-N	General Neighborhood~~Multiple-family~~ zone
U-N	Urban Neighborhood zone
U-E	Urban Employment zone
R-D	Resort District zone
DT-PV	Downtown Pueblo Viejo zone
DT-TR	Downtown Transition zone
R-MH	Mobilehome Park subdivision zone
C-N	Neighborhood C~~c~~ommercial zone
C-G	General C~~c~~ommercial zone
~~C-T~~R-C	Regional~~Tourist~~ C~~c~~ommercial zone
M-S	Manufacturing S~~s~~ervice zone
M-H	Heavy I~~i~~ndustrial zone
M-W	Wrecking Y~~y~~ard zone
O-S	Open Space zone
SP	Specific Plan
PUD	Planned Unit Development overlay

(Prior code § 014.01)

17.08.020 Official zoning map.

The areas assigned to these zones, their designations, and the boundaries of said zones shown on the map hereto attached and made part of this chapter, are hereby established. Said map being designated as the "Official Zoning Map" and such map and its proper notations, references, and other information shown thereon shall be as much a part of this chapter as if the matters and information set forth by such map were fully described in this chapter.

(Prior code § 014.02)

17.08.030 Interpretation of district boundaries.

Where uncertainty exists as to the boundaries of any zone shown on the official zoning map, the following rules shall apply:

A. Where zone boundaries are indicated a approximately following street lines, alley lines, or lot lines, such lines shall be construed to be such boundaries.

B. In the case of unsubdivided property, or where the zone boundary divides a lot, the location of such boundary unless the same are indicated by dimension, shall be determined by use of the scale appearing on said zoning map.

C. Where any public street or alley is officially vacated or abandoned, the area comprising such vacated street or alley shall acquire the zone classification of the property to which it reverts.

(Prior code § 014.03)

17.08.040 Area zoning symbols.

A. Where a number follows the zoning symbol on any zoning map hereafter adopted, the following interpretations shall govern the minimum permitted lot area:

1. Where the number is less than one hundred (100), it shall designate an area in acres;

2. Where the number is greater than one hundred (100), it shall designate an area in square feet;

3. In no case shall an area zoning symbol be established which would reduce the minimum lot area below that required in the zone itself.

B. The addition or deletion of such numbers to zoning symbols shall be deemed a change of zone, and shall be accomplished in accord with all provisions of Chapters 17.70 through 17.82.

C. Where no number follows the zoning symbol, the minimum building site shall be that prescribed by the designated zone.

(Prior code § 014.04)

17.08.050 References to other parts.

References made in this section to other parts of this chapter are designated thus as Section 17.02.190.

(Prior code § 014.05)

Chapter 17.10 A-R AGRICULTURAL RESERVE ZONE

17.10.010 Intent and purpose.

This zone is intended to preserve certain designated prime agricultural lands within the city and protect those lands, which are deemed to be agricultural preserves, from the intrusion of urban development incompatible with agricultural land uses. This zone designation is reserved for only those lands which are subject to recorded Williamson Act contracts pursuant to Government Code, Section 51200 et seq. This zone implements the Agricultural Rancho land use designation in the General Plan.

(Prior code § 018.01)

17.10.020 Permitted uses.

The following uses are permitted in the A-R (Agricultural Reserve) zone subject to all provisions of this chapter:

A. Primary Uses.

1. The growing of field crops, trees, vegetables, fruits, berries, flowers, and nursery stock.
2. Animal raising, noncommercial, small animals, such as poultry, birds, fish, fowl, rabbits, chinchilla, mice, frogs, earthworms, bees, and others of similar nature, form, and size, including hatching and fattening, and involving eggs or similar products derived therefrom.
3. Animal grazing, commercial, limited to horses, cattle, sheep, and goats and including their supplementary feeding; provided such grazing is not a part of, nor conducted in conjunction with any dairy, livestock feed yard, livestock sales yard or commercial riding academy located on the premises.
4. Polanco mobilehomes.
5. Public and private parks.~~;~~
6. Public Utility Facilities (City-initiated).

B. Accessory Uses. The following buildings, structures, and uses are permitted when clearly incidental and accessory to the primary permitted use:

1. Single-Family Dwellings. No more than one such dwelling shall be permitted on one lot regardless of the size of the lot.
2. Storage of tools, supplies, equipment, and petroleum products intended for use on the premises, but not for resale.
3. Housing and storage (including corrals, coops, pens, etc.) for animals and for crop products produced on the premises.
4. Parking facilities, including cars, trucks, and vehicles owned by persons residing on the premises.
5. Accessory living quarters for persons employed on the premises, or for temporary use by guests of occupants on the premises. Such quarters shall not be rented or leased to persons not employed on the premises. Where not a part of the main building, such quarters shall be separated from the main building by twenty-five (25) feet.
6. Permitted Signs. Only the following signs shall be permitted:

a. One unlighted identification sign not to exceed twenty (20) square feet in area.

b. One unlighted sign pertaining to the rental, sale, or lease of the premises, not to exceed twelve (12) square feet in area. Such signs shall be located at last ten (10) feet from any property line.

7. Home occupations, subject to the provisions of Section 17.58.010.

C. Conditional Uses. The following may be permitted in the A-R (Agricultural Reserve) zone, subject to obtaining a conditional use permit as specified in Section 17.74.010.

~~2~~1. One temporary stand~~,~~ of temporary construction, for the display and sale of agricultural products produced on the premises, and placed not less than twenty-five (25) feet from any street or highway upon which such property fronts. When granting approval for such a temporary stand, the ~~planning commission~~Planning Commission shall set a maximum time limit not to exceed one year on each such stand. Said time limit may be renewed at the option of the Planning C~~c~~ommission.~~;~~

2. Animal raising, commercial; small animals, such as poultry, birds, fish, fowl, rabbits, chinchilla, mice, frogs, earthworms, bees, and others of similar nature, form, and size, including hatching and fattening, and involving eggs or similar products derived therefrom.

3. Apiaries (bee farming).

~~3~~4. Cemeteries, crematories, columbariums, and mausoleums~~;~~.

5. Dairy farms.

~~4. Reserved;~~

~~5. Reserved;~~

6. Farms or establishments for the selective or experimental breeding of cattle or horses, or the raising and training of horses or show cattle.~~;~~

~~4~~7. Farm labor camps.

~~5~~8. Fruit and vegetable packing houses.

~~11~~9. Interim outdoor commercial cannabis cultivation, pursuant to Chapter 17.85.

~~6~~10. Kennels.

(Prior code § 018.02; Ord. No. 1171~~-~~, § 5, 8-25-21)

17.10.030 Property development standards.

The following standards of development shall apply in the A-R (Agricultural reserve) Zone:

A. Residential Density.

1. Maximum Density. 0.025 dwelling units/acre.

B. Lot Requirements.

1. Minimum Lot Size. Forty (40) acres, or one-sixteenth of a section as determined by government survey.

2. Minimum Lot Width. Six hundred (600) feet.

3. Minimum Lot Depth. Six hundred (600) feet.

~~B~~C. Yard Requirements.

1. Building Setback. A building setback of not less than sixty (60) feet from the center line of any street, public or private, or not less than twenty (20) feet from the established street line of any street shall be maintained.

2. Side Yard. Each lot shall have side yards of not less than twenty (20) feet.

3. Rear Yard. Each lot shall have a rear yard of not less than twenty-five (25) feet.

4. Animals. Housing for animals (including corrals, coops, pens, stables, etc.) as permitted in this zone shall not be located within thirty-five (35) feet of any building or structure which is used for human habitation or assembly of persons.

5. Feed and Crop Storage. Feed and crop products shall not be stored within:

   a. Fifty (50) feet of any front lot line.

   b. Twenty (20) feet of any residential lot line.

~~C~~D. Height Limits.

~~1. The maximum height of buildings or structures incidental to agricultural pursuits as permitted in Section 17.10.020 shall be equal to one-half the distance of such building or structure from any property line.~~

1~~2~~. The maximum height of the primary structure ~~all dwellings, living quarters, garages, and other buildings permitted in this zone~~ shall be two-and-a-half stories or thirty-five (35) feet, whichever is less.

2. The maximum height of accessory buildings or structures shall be 17 feet except that the maximum height of accessory buildings or structures incidental to agricultural pursuits as permitted in Section 17.10.020 shall be equal to one-half the distance of such building or structure from any property line.

E. Off-Street Parking.

1. ~~Off-street parking shall be provided for each dwelling unit. Parking for no less than four vehicles shall be provided on-site.~~Refer to Section 17.54.010.

~~E. Architectural Review.~~

~~1. Allow mobilehomes in any residential zone subject to the architectural review process as set forth in Section 17.72.010 of this title.~~

~~2. All mobilehomes subject to this review process shall be certified under the National Mobilehome Construction and Safety Act of 1974; and permanent foundations shall be approved by the building official; and roof material. Roof overhang and exterior finish materials shall be the same as typically used on conventional single-family structures.~~

~~3. All mobilehomes shall be compatible with surrounding development.~~

~~4. All mobilehomes subject to the same development standards that apply to a conventional single-family dwelling.~~

~~5. All mobilehomes shall be allowed to be placed upon any lot of record.~~

(Prior code § 018.03)

Chapter 17.~~12~~ 11 R-R (RURAL RANCHO)~~A-T AGRICULTURAL TRANSITION~~ ZONE

17.~~12~~11.010 Intent and purpose.

~~This zone has the purpose of permitting the continued agricultural use of those lands suited to eventual development in other uses and zones, pending proper timing for the economical provisions of utilities, major streets, and other facilities, so that compact, orderly development will occur.~~ This zone accommodates low intensity residential development within a preserved rural landscape which is intended to serve as a buffer between Agriculture and any of the urban uses or as the edge of the urbanized City. It is intended to provide for the establishment of residential areas which are to be developed at low density and with reasonable and adequate limitations, safeguards, and controls for the keeping and maintenance of horses in those areas of the city where noncommercial equestrian activities may be an integral part of the neighborhood amenities. This zone implements the Rural Rancho land use designation in the General Plan.

~~(Prior code § 020.01)~~

17.~~12~~11.020 Permitted uses.

The following uses are permitted in the ~~A-T~~R-R (Rural Rancho) zone subject to all provisions of this chapter:

A. Primary Uses.

1. Dwellings, single-family detached. No more than one such dwelling shall be permitted on one lot regardless of the size of the lot.

2. The growing of field crops, trees, vegetables, fruits, berries, flowers, and nursery stock, including wholesaling of crops produced upon the premises.

~~2~~3. Animal raising, noncommercial, small animals, such as, poultry, birds, fish, fowl, rabbits, chinchillas, mice, frogs, earthworms, bees, and others of similar nature, form, and size, including hatching and fattening, and involving eggs or similar products derived therefrom.

~~3. Animal grazing, commercial, limited to horses, cattle, sheep and goats and including their supplementary feeding; provided such grazing is not a part of, nor conducted in conjunction with any dairy, livestock feed yard, livestock sales yard or commercial riding academy located on the premises.~~

4. Public and private parks.

5. Public Utility Facilities (City-initiated).

B. Accessory Uses. The following buildings, structures, and uses are permitted when clearly incidental and accessory to the primary permitted use:

1. ~~1. Single-Family Dwellings. No more than one such dwelling shall be permitted on one lot regardless of the size of the lot.~~ Accessory dwelling units and Junior accessory dwelling units, per Section 17.60.010.H. (Accessory Dwelling Units).

2. Accessory structures, non-habitable, including private garages or carports, garden greenhouses, recreation rooms, pool bathhouses, or private stables and swimming pools.

~~2~~3. Storage of tools, supplies, equipment, and petroleum products intended for use on the premises, but not for resale.

~~3~~4. Housing and storage (including corrals, coops, pens, etc.) for animals and for crop products produced on the premises.

5. Keeping of horses with the following specifications:

a. Minimum Lot Area. Twenty thousand (20,000) square feet.

b. Minimum Lot Area Per Horse. Five thousand (5,000) square feet.

c. No stable, shelter or corral shall be located within thirty-five (35) feet of any dwelling or other building used for human habitation.

d. Horses are kept or maintained for the private use of the family residing on the premises, except that a maximum of two horses owned by residents in the neighborhood may be boarded.

~~4~~6. Pens and other shelter for domestic, noncommercial animals and pets. Such shelter shall not be nearer than thirty-five (35) feet from any building used for human habitation.

7. Parking facilities, including cars, trucks, and vehicles owned by persons residing on the premises.

~~5. Accessory living quarters for persons employed on the premises, or for temporary use by guests of occupants on the premises. Such quarters shall not be rented or leased to persons not employed on the premises. Where not a part of the main building, such quarters shall be separated from the main building by twenty-five (25) feet.~~

~~6~~8. Permitted Signs. Only the following signs shall be permitted:

a. One unlighted identification sign not to exceed ~~twenty~~ twelve (~~20~~12) square feet in area.

b. One unlighted sign pertaining to the rental, sale, or lease of the premises, not to exceed twelve (12) square feet in area. Such signs shall be located at least ten (10) feet from any property line.

~~7~~9. Home occupations, subject to the provisions of Section 17.58.010.

10. Public Utility Facilities (City-Initiated)

C. Conditional Uses. The following may be permitted in the ~~A-T~~R-R (Rural Rancho) zone, subject to obtaining a conditional use permit as specified in Section 17.74.010.

~~1. Public and private parks; .~~

~~2~~1. Animal Raising, Commercial. Small animals, such as, poultry, birds, fish, fowl, rabbits, chinchilla, mice, frogs, earthworms, bees, and others of similar nature, form, and size, including hatching and fattening, and involving eggs or similar products derived therefrom~~;~~.

~~5~~2. Borrow pits, gravel pits, and other recovery of natural mineral resources~~;~~.

~~10~~3. Campgrounds, private, containing picnic areas, overnight camping facilities and temporary parking for travel trailers and camper trucks~~;~~.

4. Cemeteries, crematories, columbariums, and mausoleums.~~;~~

5. Clubs and lodges, private, nonprofit when site fronting on an arterial street.~~;~~

6. Dairy farms~~;~~.

~~4~~7. Equestrian establishments, provided that in no case shall permanent maintenance or stabling of horses, storage of feed, riding arenas, or storage or maintenance of equipment be permitted

within three hundred feet of the boundary of any ~~R-S or RM~~residential zone except for A-R (Agricultural Reserve) zone.~~;~~.

~~6~~8. Farms or establishments for the selective or experimental breeding of cattle or horses, or the raising and training of horses or show cattle.~~;~~

~~12~~9. Farm labor camps~~; and,~~.

~~11~~10. Fruit and vegetable packing houses~~;~~.

~~7~~11. Golf courses (public and private).

~~13~~12. Interim outdoor commercial cannabis cultivation, pursuant to Chapter 17.85.

13. Kennels.~~;~~

14. Mobilehomes.

14. One temporary stand~~,~~ of temporary construction, for the display and sale of agricultural products produced on the premises, and placed not less than twenty-five (25) feet from any street or highway upon which such property fronts. When granting approval for such a temporary stand, the ~~planning commission~~Planning Commission shall set a maximum time limit not to exceed one year on each such stand. Said time limit may be renewed at the option of the Planning C~~c~~ommission~~;~~

~~14~~15. Swimming, polo, and country clubs.

(Prior code § 020.02; Ord. No. 1171, § 6, 8-25-21)

17.~~12~~11.030 Property development standards.

The following standards of development shall apply in the R-R (Rural Rancho) Zone:

A. Residential Density.

1. Minimum Density. 0.4 dwelling units/acre.

2. Maximum Density. 1 dwelling unit/acre.

~~A~~B. Lot Requirements.

1. Minimum Lot Size. ~~Five acres.~~ One acre.

2. Minimum Lot Width. ~~Two hundred sixty~~One hundred twenty (~~260~~120) feet.

3. Minimum Lot Depth. ~~Two hundred sixt~~One hundred twenty~~y~~ (120~~260~~) feet.

~~B~~C. Yard Requirements.

1. Building Setback. A building setback of not less than sixty (60) feet from the center line of any street, public or private, or not less than twenty (20) feet from the established street line of any street shall be maintained.

2. Side Yard. Each lot shall have side yards of at least twenty (20) feet in width.

3. Rear Yard. Each lot shall have a rear yard of at least twenty-five (25) feet.

4. Animals. Housing for animals (including corrals, coops, pens, stables, etc.) as permitted in this zone shall not be located within thirty-five (35) feet of any building or structure which is used for human habitation or assembly of persons.

5. Feed and Crop Storage. Feed and crop products shall not be stored within:

   a. Fifty (50) feet of any front lot line.

   b. Twenty (20) feet of any residential lot line.

~~C~~D. Height Limits.

1. ~~2.~~ The maximum height of the primary structure shall be two-and-a-half stories or thirty-five (35) feet, whichever is less.

2. The maximum height of accessory buildings or structures shall be 17 feet except that the maximum height of accessory buildings or structures incidental to agricultural pursuits as permitted in Section 17.10.020 shall be equal to one-half the distance of such building or structure from any property line.

3. The maximum height of accessory dwelling units shall be per Section 17.60.010.H. (Accessory Dwelling Units).

~~The maximum height of all dwellings, living quarters, garages, and other buildings permitted in this zone shall be two stories or thirty-five (35) feet, whichever is less.~~

~~1. The maximum height of buildings or structures incidental to agricultural pursuits as permitted in Section 17.10.020 shall be equal to one-half the distance of such building or structure from any property line.~~

~~D~~E. Off-Street Parking. Off-street parking shall be provided for, subject to the requirements of Section 17.54.010 of this chapter.

~~E~~F. Architectural Review. All development in the R-R, (Rural Rancho) Zone, is subject to architectural review as set forth in Section 17.72.010 of this title.

1. S~~Allow s~~ingle-family dwellings (one only per parcel) in the ~~A-T~~R-R (Rural Rancho) zone are subject to the architectural review process as set forth in Section 17.72.010 of this chapter. Approval of such applications shall be made only after review by the planning division and concurrence by the director therefor.

2. All mobilehomes subject to this review process shall ~~h~~be certified under the National Mobilehome Construction and Safety Act of 1974; and permanent foundations shall be approved by the Building Official; and roof material, roof overhang and exterior finish materials shall be the same as typically used on conventional single-family structures.

3. All mobilehomes shall be compatible with surrounding development.

4. All mobilehomes subject to the same development standards that apply to a conventional single-family dwelling.

5. All mobilehomes shall be allowed to be placed upon any lot of record.

(Prior code § 020.03)

Chapter 17.124 R-E RESIDENTIAL ESTATE ZONE

17.12.010 Intent and purpose.

This zone is intended to provide for the establishment of residential areas which are to be developed at low density and with reasonable and adequate limitations, safeguards, and controls for the keeping and maintenance of horses in those areas of the city where noncommercial equestrian activities may be an integral part of the neighborhood amenities. This zone implements the Estate Rancho land use designation in the General Plan.

(Prior code § 025.01)

17.~~14~~12.020 Permitted uses.

The following uses are permitted in the R-E (Residential Estate) zone subject to all provisions of this chapter.

A. Primary Uses.

1. Dwellings, single-family detached. No more than one such dwelling shall be permitted on one lot regardless of the size of the lot.

2. Public and private parks.

3. Public Utility Facilities (City-initiated).

B. Accessory Uses. The following buildings, structures, and uses are permitted when clearly incidental and accessory to the primary permitted use.

1. ~~Accessory structures, habitable, including guest houses, accessory living quarters and servants quarters.~~ Accessory dwelling units and Junior accessory dwelling units, per Section 17.60.010.H. (Accessory Dwelling Units)

2. Accessory structures, non-habitable, including private garages or carports, garden greenhouses, recreation rooms, pool bathhouses, or private stables and swimming pools.

3. Keeping of horses with the following specifications:

   a. Minimum Lot Area. Twenty thousand (20,000) square feet.

   b. Minimum Lot Area Per Horse. Five thousand (5,000) square feet.

   c. No stable, shelter or corral shall be located within thirty-five (35) feet of any dwelling or other building used for human habitation.

   d. Horses are kept or maintained for the private use of the family residing on the premises, except that a maximum of two horses owned by residents in the neighborhood may be boarded.

4. Parking facilities, such as cars, trucks, and vehicles owned by persons residing on the premises.

5. Home occupations, subject to the provisions of Section 17.58.010.~~,~~

6. Pens and other shelter for domestic, noncommercial animals and pets. Such shelter shall not be nearer than thirty-five (35) feet from any building used for human habitation.

7. Permitted Signs. Only the following signs shall be permitted:

   a. One unlighted identification sign not to exceed eight (8) square feet in area.

b. One unlighted sign pertaining to the rental, sale, or lease of the premises, not to exceed twelve (12) square feet in area. Such sign shall be located not less than ten (10) feet from any property line.

8. The growing of field crops, trees, vegetables, fruits, berries, and nursery stock, including wholesaling of crops produced upon the premises.

C. Conditional Uses. The following uses may be permitted in the RE zone, subject to obtaining a conditional use permit as specified in Section 17.74.010.

1. Clubs and lodges, private, nonprofit when site fronting on an arterial street~~;~~.

2. Public and private golf courses.~~; and~~

3. School, private, nonprofit.

(Prior code § 025.02)

17.~~14~~12.030 Property development standards.

The following standards of development shall apply in the R-E (Residential Estate) Zone:

A. Residential Density.

1. Minimum Density. 1 dwelling unit/acre.

2. Maximum Density. 2.2 dwelling unit/acre.

~~A~~B. Lot Requirements.

1. Minimum Lot Area. Twenty thousand (20,000) square feet.

2. Minimum Lot Width. One hundred (100) feet.

3. Minimum Lot Depth. One hundred (100) feet.

~~B~~C. Yard Requirements.

1. Building Setback. A building setback of not less than sixty (60) feet from the center line of any street, public or private, or not less than twenty (20) feet from the established street line of any street shall be maintained.

2. Side Yard. Each lot shall have side yards of at least twenty (20) feet in width.

3. Rear Yard. Each lot shall have a rear yard of at least twenty-five (25) feet.

C. Height Limits.

1. The maximum height of ~~till dwellings, living quarters, garages, and other buildings~~the primary structure ~~permitted in this zone~~ shall be two-and-a-half stories or thirty-five (35) feet, whichever is less. ~~except provided herein. No two-story structure shall be in any single-family zone where there is another dwelling within one hundred fifty (150) feet of the exterior boundaries of the property boundary.~~

2. The maximum height of accessory buildings or structures shall be 17 feet except that the maximum height of accessory buildings or structures incidental to agricultural pursuits as permitted in Section 17.10.020 shall be equal to one-half the distance of such building or structure from any property line.

3. The maximum height of accessory dwelling units shall be per Section 17.60.010.H. (Accessory Dwelling Units).

D. Off-Street Parking. Off-street parking shall be provided for, subject to the requirement of Section 17.54.010 of this title.

E. Architectural Review. All development in the R-E~~,~~ (Residential Estate) Zone, is subject to architectural review as set forth in Section 17.72.010 of this title.

1. M~~Allow m~~obilehomes ~~in any residential zone~~ are subject to the architectural review process as set forth in Section 17.72.010 of this title.

2. All mobilehomes subject to this review process shall be certified under the National Mobilehome Construction and Safety Act of 1974; and permanent foundations shall be approved by the building official; and roof material, roof overhang and exterior finish materials shall be the same as typically used on conventional single-family structures.

3. All mobilehomes shall be compatible with surrounding development.

4. All mobilehomes subject to the same development standards that apply to a conventional single-family dwelling.

(Prior code § 025.03)

Chapter 17.~~16~~13 ~~R-S RESIDENTIAL SINGLE-FAMILY~~ S-N SUBURBAN NEIGHBORHOOD ZONE

17.~~16~~13.010 Intent and purpose.

This zone is intended to provide areas within the city where development is limited to low-density concentrations of single-family dwellings, and to stabilize and protect the residential character of such areas. It has the further purpose of the provision of community facilities needed to complement urban residential areas and for institutions which require a residential environment and to minimize traffic congestion and to avoid an overload of utilities designed to service only low-density residential uses. The provisions of this zone are intended to encourage a suitable environment for family life through the regulation of densities of development, yards, fencing, heights, and similar aspects of development. This zone implements the Suburban Neighborhood land use designation in the General Plan.

(Prior code § 030.01)

17.~~16~~13.020 Permitted uses.

The following uses are permitted in the ~~R-S~~S-N (~~residential single-family~~Suburban Neighborhood) zone subject to all provisions of this chapter:

A. Primary Uses.

1. Single-family detached dwelling~~;~~. No more than one principal dwelling unit shall be located on each lot.
2. Family daycare homes~~;~~.
3. Public parks and playgrounds.~~;~~
4. Temporary subdivision sales offices~~;~~.
5. The keeping of household pets so long as the number thereof does not exceed four dogs or cats, or a combination thereof, over four months of age, and other household pets that shall not be a public nuisance due to odors, noise, or public health considerations~~;~~.
6. ~~Licensed day care centers for five or less children; and~~
7. Such other similar uses as are approved by the ~~planning commission~~Planning Commission.
8. Public Utility Facilities (City-initiated).
9. Community gardens (subject to site plan review).

~~B. Conditional Uses. The following uses are permitted in the R-S (residential single-family) zone subject to the acquisition of a conditional use permit in accordance with the provisions of Section 17.74.010:~~

1. ~~Single-family detached residential subdivisions using flexible standards of the planned development overlay zone in Chapter 17.38;~~
2. ~~Public and quasi-public uses of an educational or religious type, including public and parochial elementary schools, junior high schools, high schools and colleges, commercial child daycare and pre-school facilities, churches, parsonages and other religious institutions;~~
3. ~~Public and private golf courses;~~
4. ~~Fire stations, police stations;~~

~~5. Libraries, museums;~~

~~6. Parks, playgrounds, court games and community centers;~~

~~7. Public utility distribution substations and public service facilities;~~

~~8. Private lighted or unlighted tennis courts and such other similar uses not to include swimming pools and spas;~~

~~9. Commercial radio and television towers.~~

~~C~~B. Accessory Uses. The uses listed below are allowed as incidental uses to an existing permitted or conditional use on the site.

1. Utility and recreational uses including garages, carports, pool cabana, storage shed, laundry room, electrical equipment room, shade structure, and similar uses subject to the provisions of Chapter 17.60.
2. Swimming pools and related equipment, outdoor kitchen countertops and gas-fired pits/barbeque grills, subject to the provisions of Chapter 17.60.
3. Court games and ~~Outdoor~~ outdoor play courts with lighting up to ten (10) feet in height.
4. Greenhouses, date orchards, and other fruit and vegetable gardens for private use.
5. Home occupations, and cottage food operations, subject to the provisions of Section 17.58.010.
6. Accessory dwelling units and Junior accessory dwelling units, per Section 17.60.010.H. (Accessory Dwelling Units).

~~Secondary housing units, subject to the regulations listed below.~~

~~a. One secondary housing unit may be located on a site that contains a single-family residence with an approved two-car garage.~~

~~b. The secondary housing unit may be located only on sites with at least five thousand five hundred (5,500) square feet of lot area.~~

~~c. A detached secondary housing unit shall be located in the rear yard portion of the site, and shall not be within ten (10) feet of a corner street line.~~

~~d. The secondary housing unit shall be subject to an administrative architectural review by the planning director, and shall comply with current residential design guidelines and/or match the exterior building materials of the neighborhood.~~

~~e. The habitable floor area of a secondary housing unit may be up to thirty (30) percent of the size of the main dwelling or eight hundred (800) square feet, whichever is greater.~~

~~f. An attached secondary housing unit shall provide a twenty-foot rear yard setback, and a combined side yard setback of fifteen (15) feet, with no less than five feet on any one side. A detached secondary housing unit shall provide a minimum rear yard setback of fifteen (15) feet, a minimum side yard setback of five feet, and shall provide a minimum distance of ten (10) feet from any other structure or from any corner street line.~~

~~g. The secondary housing unit shall utilize sewer and water services and shall pay the appropriate fees, subject to review and approval by the city's utilities staff.~~

~~h. Off-Street Parking. A secondary housing unit up to six hundred forty (640) square feet must provide one covered parking space in a garage or carport. A secondary housing unit larger than six hundred forty (640) square feet shall provide two covered parking spaces in a garage or carport. The~~

~~parking requirements for the secondary housing unit shall be in addition to the two-car garage required for the main residence.~~

~~i. Address and Building Permit Required. The owner of the property shall obtain a separate address, a building permit, and pay all applicable development impact fees for the secondary housing unit as a separate dwelling unit on the site.~~

C. Conditional Uses. The following uses are permitted in the S-N (Suburban Neighborhood) zone subject to the acquisition of a conditional use permit in accordance with the provisions of Section 17.74.010:

1. Apiaries (bee farming).

~~9~~2. Commercial radio and television towers.

3. Fire stations, police stations.

4. Libraries, museums.

5. Community centers.

6. Parking lots.

7. Private lighted or unlighted tennis courts and other similar uses, except for ~~not to include~~ swimming pools and spas.

~~Single-family detached residential subdivisions using flexible standards of the planned development overlay zone in Chapter 17.38;~~

~~8~~2. Public and quasi-public uses of an educational or religious type, including public and parochial elementary schools, junior high schools, high schools and colleges, commercial child daycare and pre-school facilities, churches, parsonages, and other religious institutions~~;~~.

~~3~~9. Public and private golf courses~~;~~.

~~4. Fire stations, police stations;~~

~~5. Libraries, museums;~~

~~6. Parks, playgrounds, court games and community centers;~~

~~7~~10. Public utility distribution substations and public service facilities~~;~~.

~~8. Private lighted or unlighted tennis courts and such other similar uses not to include swimming pools and spas;~~

~~9. Commercial radio and television towers.~~

~~10. Parking lots~~

~~11. Apiaries (bee farming)~~

11~~2~~. Single-family detached residential subdivisions using flexible standards of the planned development overlay zone in Chapter 17.38.

12. Special Event Establishments on a parcel ~~2~~two (2) acres or greater.

D. Prohibited Uses. The following uses are expressly prohibited in the S-N (Suburban Neighborhood) district:

1. Outdoor advertising displays and billboards.

(Prior code § 030.02)

(Ord. No. 1026, § 6, 1-12-11; Ord. No. 1075, § 3, 6-10-15)

17.~~16~~13.030 Property development standards.

The following standards of development shall apply in the S-N (Suburban Neighborhood) ~~R-S (residential single-family)~~ zone:

A. Residential Density.

1. Minimum Density. 2 dwelling units/acre.

2. Maximum Density. 8 dwelling units/acre.

~~General Development Standards.~~

~~1. Building height shall not exceed thirty (30) feet; not to exceed two stories;~~

~~2. Not more than one principal dwelling unit shall be located on each lot;~~

~~3. Front yard setbacks in subdivision developments may be reduced by twenty-five (25) percent provided the average of all such setbacks is not less than the minimum for the district; and~~

~~4. Off-street parking spaces shall be provided and continuously maintained (free of storage or other obstructions) in accordance with the requirements set forth in Section 17.56.010.~~

~~B~~B. Lot Area Requirements. The minimum lot area for any new lot created in the S-N (Suburban Neighborhood)~~R-S (residential single-family)~~ zone shall be as follows:

1. Interior Lots. ~~Seven~~ Five thousand four~~two~~ hundred (~~7,200~~5,400) square feet; however, the average lot size for any subdivision shall be a minimum of ~~seven~~ five thousand (~~7~~5,000) square feet.

2. Corner Lots. ~~Seven~~ Six thousand ~~two hundred~~ (~~7,200~~6,000) square feet.

~~3. Exception. Whenever a lot is adjacent to a lower density zoning district or an existing developed parcel with a larger lot size than required in the R-S zone, a transition or buffer shall be provided between the adjacent property and a new subdivision, which may include, but is not limited to, lot size, lot width, lot depth, increased setbacks or slopes. The purpose of this transition shall be to minimize the disparity between different densities of development. The adequacy of this transition shall be subject to the review and approval of the planning commission and the city council on a case-by-case basis.~~

~~4. In the implementation of subsection 3 of this section, any change in a lot size which would leave the lot at a size at least seventy-five (75) percent the size of the largest adjacent developed lot will be presumed appropriate, absent unusual circumstances, and provided the minimum average lot size in the adjacent zone is eight thousand (8,000) square feet or greater. Any application to change a lot to a size lower than said seventy-five (75) percent standard will be permitted only upon showing of good cause. It is the intent of this paragraph to set a standard but also to allow flexibility.~~

~~5~~3. Minimum lot width shall be ~~sixty~~ fifty (~~60~~50) feet; corner lots shall be ~~seventy~~ sixty (~~70~~60) feet minimum. Knuckle or cul-de-sac lots shall be forty (40) feet, provided the average width is ~~sixty~~ fifty (50~~60~~) feet.

~~6~~4. Minimum lot depth shall be ~~one hundred~~eighty (~~100~~80) feet.

C. Yard Requirements.

~~7~~1. Minimum side yards shall be ~~fifteen (15) feet combined, one of five feet, the other ten (10) feet~~ five (5) feet and maintained ~~if~~ free and clear of obstructions from ground or wall-mounted equipment.

~~8~~2. Minimum street side yard shall be ten (10) feet.

~~9~~3. Minimum front yard shall be fifteen (15) feet for the habitable portion of the residence, and twenty (20) feet for front-loading garages. Side-loaded garages shall be a minimum of twelve (12) feet from the front property line. The percentage of side-loaded garages shall not exceed fifty (50) percent within any block face.

~~10~~4. Minimum rear yard shall be twenty (20) feet for the main residence. Accessory structures shall comply with the rear yard regulations of Section 17.60.010(F).

~~3~~5. Front yard setbacks in subdivision developments may be reduced by twenty-five (25) percent provided the average of all such setbacks is not less than the minimum for the district.~~; and~~

~~11~~D. Maximum Lot Coverage.

1. The maximum lot coverage by all buildings, main and accessory structures, shall be fifty~~orty~~ (5~~4~~0) percent, except as allowed per Section 17.60.010.H. (Accessory Dwelling Units).

E. Height Limits.

1. Building height for the primary structure shall not exceed thirty-five (35) feet; not to exceed three stories.

2. Building height for accessory structures shall not exceed seventeen (17) feet; not to exceed one story.

3. The maximum height of accessory dwelling units shall be per Section 17.60.010.H. (Accessory Dwelling Units).

F. Off-Street Parking.

~~4~~1. Off-street parking spaces shall be provided and continuously maintained (free of storage or other obstructions) in accordance with the requirements set forth in Section 17.56.010.

2. All new single-family homes shall provide a two-car garage with a minimum clear dimension of twenty (20) feet by twenty (20) feet. An approved two-car carport in the rear yard may satisfy the minimum parking requirements for an existing single-family dwelling and would qualify the home for a garage conversion into habitable space, provided the driveway and drive approach serving the garage are completely removed and replaced with front yard landscaping.

~~C~~G. Additional Regulations and Standards.

1. Architectural review by the ~~planning commission~~Planning Commission is required for development projects involving the construction of more than three dwelling units. The ~~planning commission~~Planning Commission shall make a decision pursuant to Chapter 17.72 after conducting a public hearing. An administrative architectural review is required by the planning director for up to two units concurrent with building plan check. ~~after routing and the director shall determine if the architectural review occur with building permit plan check. The director shall determine if submitted plans for three or fewer units be routed for for agency comments, for projects involving new construction of three or fewer dwelling units.~~

~~2. Minimum Lot Size/Unit Size.~~

~~a. New single family residential subdivisions in the residential zones shall provide a minimum lot size of seven thousand two hundred (7,200) square feet.~~

~~b. All new single family homes shall provide a minimum floor area of one thousand fifty (1,050) square feet for one- and two-bedroom homes, and one thousand two hundred (1,200) square feet for three-bedroom or larger homes.~~

~~c. All new single family homes shall provide a four hundred (400) square foot garage.~~

~~3~~2. Covered Parking. All new ~~single family~~single-family homes shall provide a two-car garage with a minimum clear dimension of twenty (20) feet by twenty (20) feet. An approved two-car carport in the rear yard may satisfy the minimum parking requirements for an existing ~~single family~~single-family dwelling~~,~~ and would qualify the home for a garage conversion into habitable space, provided the driveway and drive approach serving the garage are completely removed and replaced with front yard landscaping.

~~4~~3. Landscaping in the front yard and within the public right-of-way abutting a site shall include the following.

a. A minimum of one twenty-four-inch box shade tree and one fifteen-gallon shade tree.

b. A minimum of twenty (20) shrubs, espaliers, and succulent plants. Landscaping shall include vertical shrubs to adequately screen the sides of utility boxes or cables boxes without obstructing access to the utility boxes.

c. Ground cover in the form of decomposed granite for yard or planter areas less than ten (10) feet in width, and ¾-inch pea gravel or larger gravel for planter or yard areas larger than ten (10) feet in width.

d. The use of sod shall be limited to no more than ~~fifty~~ twenty ~~(5~~20) percent of the total ~~required~~ front yard area. The remainder of the yard shall be landscaped utilizing a variety of drought tolerant plant materials including shrubs, espaliers, and succulents.

e. The front yard area between the front building line of the home and the street line shall not be paved more than sixty (60) percent of the total front yard area. Those areas that are not paved shall be landscaped in accordance with this section.

f. A minimum thirty-inch landscaped planter is required along the interior property line abutting a residential driveway serving an attached garage, unless the side yard serves as an approved driveway, pursuant to Section 17.54.010(H).

g. A permanent underground irrigation system shall be installed for the front yard and public right-of-way areas of the site.

h. All trees, plants and groundcovers located in the front yard and in the adjacent public right-of-way shall be maintained by the land-owner/occupier as needed to avoid overgrowth~~,~~ and shall be adequately irrigated to avoid loss of plants. Dead plants shall be re-planted as needed with new plantings to provide a well-maintained front yard appearance.

~~5. Walls or fences not exceeding six feet in height shall be constructed in all side and rear yards along the property lines starting at the beginning of any primary structure. In subdivisions of five or more dwellings, solid masonry walls shall be required on side and rear property lines of those dwellings forming the boundaries of the respective subdivision.~~

~~6~~4. Refer to Section 16.32.170 of the Coachella Municipal Code for proposed changes in product sizes within single-family residential tracts in which a previously approved product was constructed.

D. Fencing. All developments in the S-N (Suburban Neighborhood) ~~R-S (residential single family)~~ zone shall have fencing as follows:

1. A six-foot high fence on all rear property lines and interior side lot lines. Fences shall be solid and substantially built. Openings in such fences shall be protected by doors which are normally kept closed.

   a. All wood fences shall be provided with a two-inch by four-inch plate, top and bottom, and shall be well braced.

   b. The fence material shall be a minimum of three-fourths inch boards and shall be vertical in alignment and without interruption.

2. In subdivisions of five or more units, fencing on all rear property lines and those side yard lot lines of those units denoting the boundaries of the subdivisions shall be of solid masonry construction. Such walls shall be finished with caps of appropriate size. Opening for pedestrian and bicycle connections shall be provided at no less than 250-foot intervals to improve connectivity with the surrounding neighborhood.

3. Front and street side yard fencing shall conform to Section 17.60.010(D (3) of this code.

4. If a fence exists at the required location, the requirement may be waived. Waiver may be granted if the chief building official, with the concurrence of the director of community development, finds that the existing fence is of sound construction with an expected life of at least ten (10) years.

E. All new single-family residential development shall be designed pursuant to the design standards included in Chapter 17.19 (Supplemental Standards for Single-family Residential).

~~E. Prohibited Uses. The following uses are expressly prohibited in the R-S (residential single-family) district:~~

~~1. Outdoor advertising displays and billboards.~~

~~F. Lot Coverage. In no case shall more than forty-five (45) percent of the total lot area be covered by the combined area of the main building(s) and accessory building(s).~~

(Ord. 909, 2004; prior code § 030.03)

(Ord. No. 1021, § 2, 7-28-10; Ord. No. 1075, § 4, 6-10-15)

~~Chapter 17.18 R-O 6000 RESIDENTIAL OVERLAY ZONE~~

~~17.18.010 Intent and purpose.~~

~~This zone is intended to provide adequate housing in a satisfying living environment for all persons regardless of age, race, ethnic background, national origin, religion, family size, marital status, handicap or any other arbitrary factor so long as such use is consistent with sound standards of public health and safety. It has the further purpose of maintaining and promoting residential living environments compatible and in harmony with the previously established patterns of development of existing low and moderate-income housing. As such, the objective of this chapter is to provide the city with a device needed to correct existing shortages and to meet projected growth needs within the city. The content of this chapter is intended to provide incentives to developers to build a range of housing that is affordable to city residents.~~

~~(Prior code § 031.01)~~

17.18.020 Permitted uses.

The following uses are permitted in the R-O 6000 zone subject to all provisions of this chapter:

A. Primary Uses.

1. One-family dwellings, subject to the following minimum dwelling unit sizes:

   a. One-bedroom units shall not be permitted.

   b. Two-bedroom units shall have a minimum of eleven hundred (1,100) square feet of living area.

   c. Three-bedroom units shall have a minimum of twelve hundred (1,200) square feet of living area.

2. Minimum Dwelling Unit Sizes.

   a. One and two bedroom units. One thousand (1,000) square feet.

   b. Three bedrooms or more. One thousand one hundred fifty (1,150) square feet.

3. Household pets and gardens as permitted in the R-S zone.

4. Such other similar uses as are approved by the planning commission.

B. Conditional Uses. The following uses may be permitted subject to obtaining a conditional use permit:

1. Secondary housing units subject to the provisions of Section 17.16.020(D).

2. Multiple-family dwelling units;

3. Manufactured homes, provided they comply with the city's development standards and design guidelines for new single family homes;

4. Family daycare homes;

5. Boardinghouses, transient occupancy facilities, facilities used for the purposes of providing shelter for migrant agricultural workers, and other such facilities needed for emergency housing;

6. Public utility structures and public service facilities;

7. Hospitals;

8. Schools and colleges, not including art, business or trade schools, both public and private;

9. Parks and recreational facilities such as tennis courts and swimming pools without incidental commercial uses, both public and private; and

10. Planned unit development subject to the provisions of Chapters 17.38 and 17.52.

C. Prohibited Uses. The following uses are expressly prohibited in the R-O 6000 district:

1. Outdoor advertising displays or billboards.

(Prior code § 031.02)

(Ord. No. 1075, § 5, 6-10-15)

17.18.030 Property development standards.

A. Required Provisions. At least ten (10) percent of all units in one-family and multifamily units constructed will be required to be affordable to persons earning less than one hundred twenty (120) percent of the median-range income group throughout Riverside County. Half of the "below market rate" or subsidized units are

required to be made available to households earning less than eighty (80) percent of the median county income.

B. Lot Requirements. All newly created lots shall meet the following minimum dimensions:

1. Minimum Lot Area. Six thousand (6,000) square feet.

2. Minimum Lot Width. As specified in Section 17.60.010. The width of corner lots shall be sufficient to meet all setback requirements.

3. Maximum Lot Coverage. The maximum lot coverage by all buildings, main and accessory shall be forty (40) percent.

C. Yard Requirement.

1. Minimum Front Yard Setback Depth. Twenty (20) feet except where the garage is a side entry (the door of the garage is perpendicular to the street) then twelve (12) feet. The percentage of side-entry garages with reduced setbacks shall not exceed fifty (50) percent within a subdivision.

2. Rear Yard. Each lot shall have a minimum rear yard of fifteen (15) feet.

3. Minimum Side Yard Width.

a. Interior Lots. Side yard setbacks shall be measured from the property line to the point representing the finished surface of the exterior wall of the dwelling unit. The minimum distance allowed shall not be less than five feet.

b. Corner Lots. Side yard setbacks shall be a minimum of ten (10) feet on the street side and a minimum of five feet on the interior lot side.

D. Height Limits.

1. The maximum height of all dwellings, living quarters, garages and other buildings permitted in this zone shall be two stories or thirty-five (35) feet, whichever is less.

E. Off-Street Parking. Off-street parking shall be provided for, subject to the requirements of Section 17.54.010 of this title.

F. Application Procedure.

1. Individual one-family and two-family dwellings on random lots shall require the approval of the director of community development.

2. Multiple dwelling units, either one-family or two-family, shall require approval of the planning commission through the architectural review process.

G. Lot Coverage. In no case shall more than forty-five (45) percent of the total lot area be covered by the combined area of the main building(s) and accessory building(s).

H. Refer to Section 16.32.170 of the Coachella Municipal Code for proposed changes in product sizes within single-family residential tracts in which a previously approved product was constructed.

(Prior code § 031.03)

(Ord. No. 1021, § 3, 7-28-10)

Chapter 17.~~20~~14 ~~R-M MULTIPLE-FAMILY RESIDENTIAL~~ G-N GENERAL NEIGHBORHOOD ZONE

17.~~20~~14.010 Intent and purpose.

This zone is intended to provide for the establishment and expansion of detached and attached single-family and ~~multiple-family~~multiple-family residential development areas at various medium and high population densities and related open space and community services, all located in conformance with the general plan. This zone implements the General Neighborhood land use designation in the General Plan.

(Prior code § 032.01)

17.~~20~~14.020 Permitted uses.

The following uses are permitted in the ~~R-M~~G-N (General Neighborhood) zone, subject to all provisions of this chapter:

A. Primary Uses.

1. Single-family and duplex dwellings~~: unit sizes.~~

   a. Detached ~~S~~single-family dwellings shall conform to the standards as set forth in the ~~R-S~~S-N (~~single-family~~Suburban Neighborhood) zone (Chapter 17.16) and Chapter 17.19 (Supplemental Standards for Single-Family Residential).

   b. Duplex dwellings, attached or detached. ~~shall conform to the standards as set forth in the R-O (residential overlay) zone (Chapter 17.18).~~

   c. Attached single-family such as rowhouses.

   c. Small lot single-family subdivisions.

2. Triplex or Fourplex.

~~single-family townhouses, two-family townhouses and two-family detached dwellings.~~

3. Multi-family dwellings (5+ units).~~, 3. No mobilehomes shall be allowed.~~

4. Public Utility Facilities (City-initiated).

B. Accessory Uses. The following buildings, structures, and uses are permitted when clearly incidental and accessory to the primary permitted use.

1. Accessory structures, non-habitable, including private garages, carports, garden greenhouses, recreation rooms or pool bathhouses and swimming pools.

2. Accessory dwelling units and Junior accessory dwelling units, per Section 17.60.010.H. (Accessory Dwelling Units).

~~2~~3. Permitted Signs. Only the following signs shall be permitted:

   a. One unlighted identification sign of a maximum of twenty (20) square feet in area, placed on the wall of the building, containing only the name and address of the building.

   b. One unlighted sign pertaining to the rental, sale, or lease of the premises, not to exceed ten (10) square feet in area.

~~c. Conditional Uses. The following uses may be permitted in the R-M zone, subject to obtaining a conditional use permit as specified in Section 17.74.010.~~

C. Conditional Uses. The following uses are permitted in the G-N (General Neighborhood) zone subject to obtaining a conditional use permit in accordance with the provisions of Section 17.74.010:

1. All conditional uses listed in Section 17.16.020(C) of the ~~R-S~~S-N (Suburban Neighborhood) zone~~;~~.
2. Boarding and lodging houses.~~;~~
3. Child nurseries, day care centers~~;~~.
4~~4~~. Hospitals, convalescent homes, rest homes, and sanitaria, excepting animal hospitals; subject to the following:
   a. Minimum lot size shall be five acres.
   b. All buildings shall be at least fifty (50) feet removed from any lot lines.
5. Professional offices and uses accessory thereto, including medical and dental laboratories; subject to the following:
   a. Minimum lot size shall be twenty thousand (20,000) square feet.
   b. Access on arterial or collector.

(Prior code § 032.02)

17.~~20~~14.030 Property development standards.

The following standards of development shall apply in the G-N (General Neighborhood) zone:

A. Residential Density.

1. Minimum Density. 8 dwelling units/acre
2. Maximum Density. 25 dwelling units/acre

~~A~~B. ~~Density and~~ Lot ~~Size~~ Area Requirements.

1. Single-family detached residential subdivisions shall ~~comply with the allowable density range of the general plan land use designators.~~ have ~~A~~a minimum lot size of four~~five~~ thousand (~~5,000~~4,000) square feet ~~shall be required~~. The minimum lot width and depth for an interior lot shall be 40 feet and 75 feet respectively. The minimum lot width for a corner lot shall be 45 feet.
2. Single-family attached residential subdivisions shall ~~comply with the allowable density range of the general plan land use designators. A~~have a minimum lot size of two~~four~~ thousand five hundred (~~4~~2,500) square feet ~~shall be required~~. The minimum lot width and depth for an interior lot shall be 30 feet and 50 feet respectively. The minimum lot width for a corner lot shall be 35 feet.
3. ~~Multiple-family~~Multiple-family residential developments of five or more dwelling units shall ~~comply with the allowable density ranges (dwelling units per acre) of the general plan land use designators.~~have ~~A~~a minimum site area of ten thousand (10,000) square feet ~~is required for multifamily developments of five or more dwelling units~~. ~~Multifamily residential developments on less than ten thousand (10,000) square feet of site area shall be limited one dwelling unit per three thousand two hundred (3,200) square feet of land area.~~ The minimum lot width and depth for an interior lot shall be 60 feet and 100 feet respectively. The minimum lot width for a corner lot shall be 70 feet.

~~B~~C. Yard Requirements.

1. Front Yard. Each lot or building site shall have a front yard of at least fifteen (15) feet in depth for single-family residential development and ten (10) feet for multifamily housing types.

2. Side Yard. Each lot or building site shall have a minimum side yard as follows:

   a. Interior and Corner Lots. Ten (10) percent of the lot width, but not less than five feet, and need not be greater than ten (10) feet, except as specified below.

   b. Street Side of Corner Lots. Ten (10) feet.

3. Rear Yard. Each lot or building site shall have a minimum rear yard of twenty (20) feet.

D~~C~~. Height Limits.

1. ~~1.~~ The maximum height of all buildings shall be three stories, or forty-five (45) feet, whichever is less.

2. The maximum height of all accessory structures shall be one story, or 15 feet, whichever is less.

3. The maximum height of accessory dwelling units shall be per Section 17.60.010.H. (Accessory Dwelling Units).

~~D~~E. ~~Distance Between Buildings.~~

~~1. Between two main buildings: Twenty (20) feet;~~

~~2. Between a main building and an accessory buildingstructure, or between two accessory buildingsstructures: Ten (10) feet;~~

~~3. Between a single-family dwelling and either another single-family dwelling or a multiple-family dwelling: Twenty (20) feet;~~

~~4. Where one or both of the main buildings above are three stories in height, the distance enumerated above shall be increased by five feet.~~

~~E~~E. Usable Open Space.

1. ~~1.~~ Single-family detached and attached residential subdivisions shall provide a minimum of 250 square feet per unit.

2. Multifamily developments shall provide a minimum of 250 square feet total per unit, minimum 150 square feet of private open space required for ground-level units and 80 square feet of private open space for upper-level units. The remaining area shall be provided as common open space. Portions of spaces required under the yard and distance between buildings provisions of this section may be included in the calculation of usable open space, provided they are integrated with and clearly usable as part of a larger area per Section E.3 below.

~~Usable open space equal to twenty-five (25) percent of the indicated required lot area per dwelling unit shall be provided for each multiple-family dwelling unit. Portions of spaces required under the yard and distance between buildings provisions of this section may be included in the calculation of usable open space, provided they are integrated with and clearly usable as part of a larger area.~~

~~2~~3. Usable Open Space Standards:

   a. Usable open space may be provided as private outdoor living areas, balconies, decks, or as common recreational-leisure areas. Except in the case of balconies, such areas shall be landscaped.

b.~~3.~~ Usable open space, when provided as common recreational leisure area, may extend into the required front yard to within five feet of the front lot line, subject to the following provisions:

~~i~~a. No more than forty (40) percent of the required front yard may be so used.

~~b~~ii. No permanent structures, except swimming pools and those structures required by law, shall be permitted in the required front yard.

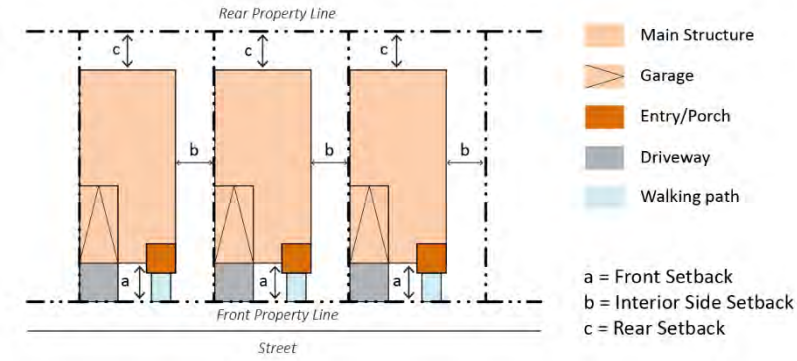
~~c~~iii. Such areas shall be screened from the street and adjacent properties by landscaping and/or decorative fencing of a maximum height of forty-two (42) inches, except where a greater height is required by law.

~~d~~iv. The remaining portion of the required front yard, except for access drives and walks, shall be landscaped and maintained.

~~F~~F. Off-Street Parking. Off-street parking shall be provided for each dwelling unit subject to the requirements of Section 17.54.010 of this title.

G. Zero Lot Line Option. If new zero lot line single-family residential developments are proposed, these standards shall apply:

1. The total setback may be aggregated on one side of the dwelling unit, with no setback required on the opposite side. The minimum setback on one side of the dwelling shall be ten feet. See diagram below:



2. All or part of the setback requirements of interior yards along property lines adjoining other private lots may be waived with the written approval of the City and the property owner of the lot adjoining the yard which is being encroached upon. This written agreement shall take the form of a zero-lot line agreement which shall be recorded on the chain of title of both properties involved. The zero-lot line agreement shall describe in detail the extent of said waiver. Zero lot line agreements shall be executed between private property owners only. Swimming pools are not eligible for zero lot line agreements.

3. Approval of a zero-lot line agreement shall be subject to the following requirements:

a. All building and fire code requirements related to construction shall be met.

b. Approval regarding the provision of adequate access shall be obtained by the Fire Department.

c. Where the setback is reduced to less than three feet, a maintenance access easement of five feet in width shall be provided on the adjoining property.

H. All new single-family residential development shall be designed pursuant to the design standards included in Chapter 17.19 (Supplemental Standards for Single-family Residential).

I. All new multi-family residential development shall be designed pursuant to the City of Coachella Multi-Family Objective Design Standards.

~~G~~J. Architectural Review. All development in the ~~R-M~~G-N (General Neighborhood) zone is subject to architectural review as set forth in Section 17.72.010 of this title.

~~H. Minimum Dwelling Unit Sizes.~~

~~a. Minimum floor area per dwelling unit:~~

~~Efficiency~~	~~600 square feet~~
~~One bedroom~~	~~750 square feet~~
~~Two bedroom~~	~~900 square feet~~
~~Each additional bedroom~~	~~150 square feet~~

~~b. Refer to Section 16.32.170 of the Coachella Municipal Code for proposed changes in product sizes within single-family residential tracts in which a previously approved product was constructed.~~

(Prior code § 032.03)

(Ord. No. 1021, § 4, 7-28-10; Ord. No. 1075, § 6, 6-10-15)

Chapter 17.15 U-N URBAN NEIGHBORHOOD ZONE

17.15.010 Intent and purpose.

This zone is intended to provide for the establishment of high-intensity, walkable, transit-ready neighborhoods with a variety of types of housing - predominantly multi-family of various types. These compact neighborhoods are located within easy walking distance of parks, schools, shops, transit, and employment. This zone implements the Urban Neighborhood land use designation in the General Plan.

17.15.020 Permitted uses.

The following uses are permitted in the U-N (Urban Neighborhood) zone, subject to all provisions of this chapter:

A. Primary Uses.

1. Multi-family dwellings (5+ units).
2. Attached single-family dwellings such as rowhouses.
3. Small lot single-family subdivisions.
4. Duplex, Triplex or Fourplex.
5. Neighborhood retail uses under 10,000 square feet, along Major Arterials, Major Arterials with Enhanced Bicycle Facilities, Primary Arterials, and Primary Arterials with Enhanced Bicycle Facilities, per Chapter 17.24 (C-N Neighborhood Commercial Zone).
6. Restaurants along Major Arterials, Major Arterials with Enhanced Bicycle Facilities, Primary Arterials, and Primary Arterials with Enhanced Bicycle Facilities, per Chapter 17.24 (C-N Neighborhood Commercial Zone).
7. Child nurseries, day care centers.
8. Public Utility Facilities (City-initiated).

B. Accessory Uses. The following buildings, structures, and uses are permitted when clearly incidental and accessory to the primary permitted use.

1. Accessory dwelling units and Junior accessory dwelling units, per Section 17.60.010.H. (Accessory Dwelling Units).
2. Accessory structures, non-habitable, including private garages, carports, garden greenhouses, recreation rooms or pool bathhouses and swimming pools.
3. Permitted Signs. Only the following signs shall be permitted:
   a. One unlighted identification sign of a maximum of twenty (20) square feet in area, placed on the wall of the building, containing only the name and address of the building.
   b. One unlighted sign pertaining to the rental, sale, or lease of the premises, not to exceed ten (10) square feet in area.

C. Conditional Uses. The following uses are permitted in the U-N (Urban Neighborhood) zone subject to obtaining a conditional use permit in accordance with the provisions of Section 17.74.010:

1. All conditional uses listed in Section 17.13.020(C) of the S-N (Suburban Neighborhood) zone.
2. Boarding and lodging houses.

3. Child nurseries, day care centers.

4. Hotels.

~~7~~5. Medical Offices.

D. Prohibited Uses. The following uses are prohibited in the U-N (Urban Neighborhood) zone:

1. Mobilehomes.

2. Motels.

3. Outdoor advertising and billboards.

17.15.030 Property development standards.

The following standards of development shall apply in the U-N (Urban Neighborhood) zone:

A. Residential Density and Non-Residential Intensity.

1. Minimum Density. 20 dwelling units/acre.

2. Maximum Density. 38 dwelling units/acre.

3. Maximum non-residential FAR. 0.5, where allowed.

B. Lot Area Requirements.

1. Single-family attached residential subdivisions shall have a minimum lot size of one thousand eight hundred (1,800) square feet. The minimum lot width and depth for an interior lot shall be 25 feet and 45 feet respectively. The minimum lot width for a corner lot shall be 30 feet.

2. Multiple-family residential developments of five or more dwelling units shall have a minimum site area of ten thousand (10,000) square feet.

3. Developments with stand-alone commercial uses or mixed uses shall have a minimum site area of twenty thousand (20,000) square feet.

C. Yard Requirements.

1. Front Yard. Each lot or building site shall have a front yard of at least ten (10) feet in depth.

2. Side Yard. Each lot or building site shall have a minimum side yard as follows:

a. Interior and Corner Lots. Ten (10) percent of the lot width, but not less than five feet, and need not be greater than ten (10) feet, except as specified below.

b. Street Side of Corner Lots. Ten (10) feet.

3. Rear Yard. Each lot or building site shall have a minimum rear yard of fifteen (15) feet.

D. Height Limits.

1. The maximum height of all buildings shall be four stories, (50) feet, whichever is less.

2. The maximum height of all accessory structures shall be one story, or 15 feet, whichever is less.

3. The maximum height of accessory dwelling units shall be per Section 17.60.010.H. (Accessory Dwelling Units).

E. Usable Open Space.

1. Single-family detached and attached residential subdivisions shall provide a minimum of 200 square feet per unit.

2. Multifamily developments shall provide a minimum of 200 square feet total per unit, minimum 120 square feet of private open space required for ground-level units and 60 square feet of private open space for upper-level units. The remaining area shall be provided as common open space. Portions of spaces required under the yard and distance between buildings provisions of this section may be included in the calculation of usable open space, provided they are integrated with and clearly usable as part of a larger area.

3. Usable Open Space Standards:

   a. Usable open space may be provided as private outdoor living areas, balconies, decks, or as common recreational-leisure areas. Except in the case of balconies, such areas shall be landscaped.

   b. Usable open space, when provided as common recreational leisure area, may extend into the required front yard to within five feet of the front lot line, subject to the following provisions:

      i. No more than forty (40) percent of the required front yard may be so used.

      ii. No permanent structures, except swimming pools and those structures required by law, shall be permitted in the required front yard.

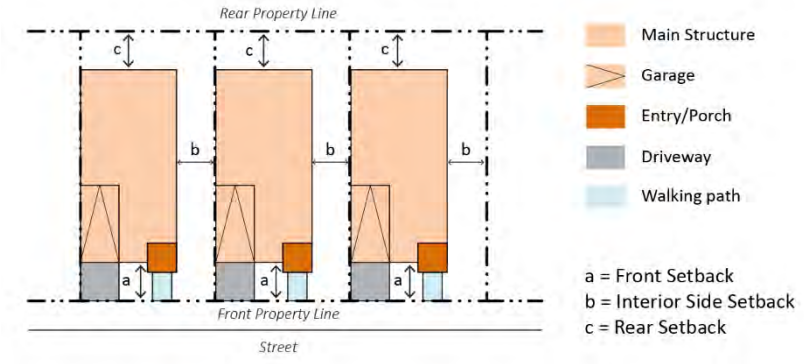
      iii. Such areas shall be screened from the street and adjacent properties by landscaping and/or decorative fencing of a maximum height of forty-two (42) inches, except where a greater height is required by law.

      iv. The remaining portion of the required front yard, except for access drives and walks, shall be landscaped and maintained.

G. Off-Street Parking. Off-street parking shall be provided for each dwelling unit or commercial use subject to the requirements of Section 17.54.010 of this title.

H. Zero Lot Line Option. If new zero lot line single-family residential developments are proposed, these standards shall apply:

1. The total setback may be aggregated on one side of the dwelling unit, with no setback required on the opposite side. The minimum setback on one side of the dwelling shall be ten feet. See diagram below:



2. All or part of the setback requirements of interior yards along property lines adjoining other private lots may be waived with the written approval of the City and the property owner of the

lot adjoining the yard which is being encroached upon. This written agreement shall take the form of a zero-lot line agreement which shall be recorded on the chain of title of both properties involved. The zero-lot line agreement shall describe in detail the extent of said waiver. Zero lot line agreements shall be executed between private property owners only. Swimming pools are not eligible for zero lot line agreements.

3. Approval of a zero-lot line agreement shall be subject to the following requirements:

   a. All building and fire code requirements related to construction shall be met;

   b. Approval regarding the provision of adequate access shall be obtained by the Fire Department; and,

   c. Where the setback is reduced to less than three feet, a maintenance access easement of five feet in width shall be provided on the adjoining property.

I. All new single-family residential developments shall be designed pursuant to the design standards included in Chapter 17.19 (Supplemental Standards for Single-family Residential).

J. All new multi-family residential developments shall be designed pursuant to the City of Coachella Multi-Family Objective Design Standards.

K. Architectural Review. All development in the U-N (Urban Neighborhood) zone is subject to architectural review as set forth in Section 17.72.010 of this title.

Chapter 17.16 U-E URBAN EMPLOYMENT ZONE

17.16.010 Intent and purpose.

This zone is intended to provide for the establishment of a range of employment uses such as office and research and development in a mixed, campus setting. The employment uses are supported by retail, service, and similar uses. Residential uses are allowed in residential-only buildings or in a mixed-use configuration with ground-floor retail. Also allowed are higher education uses (such as a college or university) designed in an urban setting. This zone implements the Urban Employment Center land use designation in the General Plan.

17.16.020 Permitted uses.

The following uses are permitted in the U-E (Urban Employment) zone, subject to all provisions of this chapter:

A. Primary Uses.

1. Office uses of all types, including but not limited to the following:

a. Medical and dental offices.

b. Administrative, business, executive and editorial.

c. Professional offices.

d. Financial, insurance, real estate offices, including banks and related institutions.

e. General offices.

2. Research and Development.

3. Neighborhood retail uses per Chapter 17.24 (C-N Neighborhood Commercial Zone).

4. Restaurants per Chapter 17.24 (C-N Neighborhood Commercial Zone).

5. Artisan manufacturing/flex space.

6. Multi-family dwellings (5+ units), except that no new residential uses are permitted in the area bounded by Avenue 53, Tyler Street, Avenue 54, and Shady Lane.

7. Public Utility Facilities (city-initiated).

8. Child nurseries, day care centers.

B. Accessory Uses. The following buildings, structures, and uses are permitted when clearly incidental and accessory to the primary permitted use.

1. Accessory structures, non-habitable, including arcades (shade structures), parking garages, garden greenhouses, community gardens, recreation rooms or pool bathhouses and swimming pools.

2. Accessory dwelling units and Junior accessory dwelling units, per Section 17.60.010.H. (Accessory Dwelling Units), except that no new residential uses are permitted in the area bounded by Avenue 53, Tyler Street, Avenue 54, and Shady Lane.

3. Permitted Signs. Per Chapter 17.56 (Signs).

C. Conditional Uses. The following uses are permitted in the U-E (Urban Employment) zone subject to obtaining a conditional use permit in accordance with the provisions of Section 17.74.010:

~~6~~1. Bars and Cocktail lounges

2. College/University.

~~4~~3. Community Gardens

4. Hotels/Motels.

5. Light Industrial uses as permitted in the M-S (Manufacturing Service) Zone, and as stand-alone uses operating indoors.

~~5~~6. Microbrewery and taprooms.

7. Special Event Establishments.

17.16.030 Property development standards.

The following standards of development shall apply in the U-E (Urban Employment) zone:

A. Residential Density and Non-Residential Intensity.

1. Minimum Density. 30 dwelling units/acre.

2. Maximum Density. 65 dwelling units/acre.

3. Maximum non-residential FAR. 2.0.

B. Lot Area Requirements.

1. Developments with stand-alone commercial or light industrial uses or mixed uses shall have a minimum site area of twenty thousand (20,000) square feet.

2. Stand-alone multiple-family residential developments shall have a minimum site area of ten thousand (10,000) square feet.

C. Yard Requirements.

1. Front Yard. Where one or both adjoining zones are residential, a yard shall be provided which is equal in depth to the average of the required front yards of the adjoining zones.

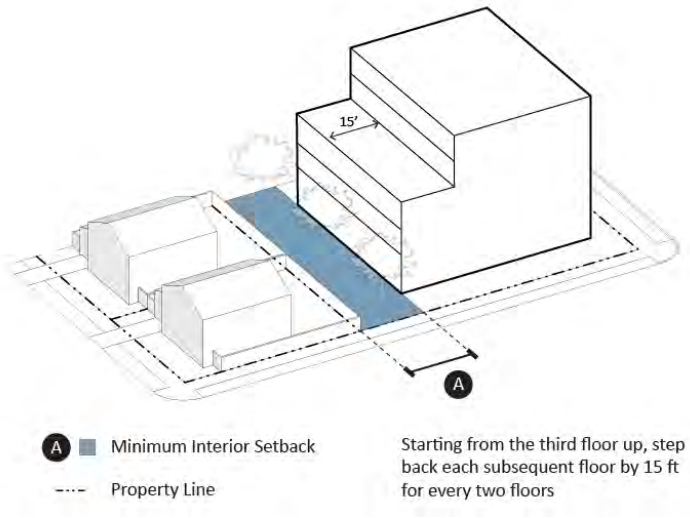
2. Side Yard. Where a parcel in the U-E (Urban Employment) zone adjoins a street or residential zone, there shall be a side yard of not less than ten (10) feet on the side or sides adjoining said street or residential zone. In the case of a reversed corner lot, the side yard adjoining the street shall be not less than the required front yard of the adjoining key lot to the rear.

3. Rear Yard. Where a parcel in the U-E (Urban Employment) zone adjoins a residential zone, there shall be a rear yard of not less than ten (10) feet adjoining that residential zone. This shall not apply where there exists a public alley separating the two zones.

4. Permitted Encroachments in Required Yards. The yards required in subsections 1—3 of this section may be used as part of an automobile parking area, provided however that a minimum three-foot wide screen planting strip shall be maintained adjacent to the street right-of-way lines.

D. Height Limits.

1. The maximum height of all buildings shall be five stories, or seventy-five (75) feet, whichever is less, except that for properties adjacent to a single-family zone, starting from the third floor up, each subsequent floor shall be stepped back by 15 ft for every two floors. See diagram below:



2. The maximum height of all accessory structures shall be one story, or 15 feet, whichever is less. Accessory structures exceeding 15 feet may be approved up to 35 feet subject to Architectural Review by the Planning Commission.

3. The maximum height of accessory dwelling units shall be per Section 17.60.010.H. (Accessory Dwelling Units)

E. Distance Between Buildings.

1. Between two main buildings: Twenty (20) feet.

2. Between a main building and an accessory structure, or between two accessory structures: Fifteen (15) feet.

F. Usable Open Space.

1. Greater than 25,000 square feet non-residential portion of developments shall provide three percent of the gross building area as usable open space. Common open space may be utilized for employees or publicly accessible open space. If the open space is over 1,000 square feet and provided as publicly accessible, up to 50 percent may count toward the required residential common open space (if in a mixed-use project).

2. Multifamily developments shall provide a minimum of 150 square feet total per unit, minimum 120 square feet of private open space required for ground-level units and 60 square feet of private open space for upper-level units. The remaining area shall be provided as common open space. Portions of spaces required under the yard and distance between buildings provisions of this section may be included in the calculation of usable open space, provided they are integrated with and clearly usable as part of a larger area.

3. Usable Open Space Standards:

a. Usable open space may be provided as private outdoor living areas, balconies, decks, or as common recreational-leisure areas. Except in the case of balconies, such areas shall be landscaped.

b. Usable open space, when provided as common recreational leisure area, may extend into the required front yard to within five feet of the front lot line, subject to the following provisions:

i. No more than forty (40) percent of the required front yard may be so used.

ii. No permanent structures, except swimming pools and those structures required by law, shall be permitted in the required front yard.

iii. Such areas shall be screened from the street and adjacent properties by landscaping and/or decorative fencing of a maximum height of forty-two (42) inches, except where a greater height is required by law.

iv. The remaining portion of the required front yard, except for access drives and walks, shall be landscaped and maintained.

G. Off-Street Parking. Off-street parking shall be provided for each dwelling unit or commercial use subject to the requirements of Section 17.54.010 of this title.

H. All new multi-family residential development shall be designed pursuant to the City of Coachella Multi-Family Objective Design Standards.

I. Architectural Review. All development in the U-E (Urban Employment) zone is subject to architectural review as set forth in Section 17.72.010 of this title.

J. Other Property Development Standards.

1. All uses shall be conducted entirely within a completely enclosed building, except for off-street parking and loading facilities, and certain uses permitted subject to a conditional use permit.

Chapter 17.17 R-D RESORT DISTRICT

17.17.010 Intent and purpose.

This zone is intended to provide for and encourage a neighborhood organized around a recreational, entertainment or vacation destination, providing a range of residential options, neighborhood-serving retail, service and restaurant amenities, and lodging. This zone also allows a range of entertainment and destination uses not allowed in other areas, such as theme parks, that require large amounts of land and that draw visitors to the c~~C~~ity. This zone implements the Resort District land use designation in the General Plan.

17.17.020 Permitted uses.

The following uses are permitted in the R-D (Resort District) zone, subject to all provisions of this chapter:

A. Primary Uses.

1. Hotel.
2. Motel.
3. Restaurants.
4. Retail establishments.
5. Exhibit hall, tourist centers.
6. Single-family and duplex dwellings:
    a. Detached single-family dwellings shall conform to the standards as set forth in the S-N (Suburban Neighborhood) zone (Chapter 17.13) and Chapter 17.19 (Supplemental Standards for Single-Family Residential).
    b. Duplex dwellings, attached or detached.
    c. Attached single-family such as rowhouses.
    c. Small lot single-family subdivisions.
7. Triplex or Fourplex.
8. Multi-family dwellings (5+ units) shall conform to standards as set forth in G-N (General Neighborhood) zone (Chapter 17.14) and the City of Coachella Multi-Family Objective Design Standards.
9. Outdoor Uses. Only the following outdoor uses are permitted:
    a. Golf courses and driving ranges.
    b. Private s~~S~~wimming pools; tennis courts, and similar recreational amenities.
10. Public Utility Facilities (City-initiated).

B. Tourist-Related Uses. The following uses are permitted only where integrated with and clearly incidental to a primary use, and where part of a hotel or motel building, and where the intent is to serve the needs of tourists:

1. Barber or beauty shop.

2. Drugstores.

3. Tobacco, candy, newspaper, and magazine counter.

4. Laundromat, clothes cleaning agency.

5. Travel agency.

6. Automobile rental agency office (no auto storage or service permitted.)

C. Accessory Uses. The following buildings, structures, and uses are permitted when clearly incidental and accessory to primary permitted use:

1. Dwelling, where used by a proprietor, manager, or custodian of a use permitted within this zone.

2. Recreational buildings, structures, and uses designated to serve the patrons of primary permitted use.

3. Signs as follows, subject to all provisions of Section 17.56.010 of this title.

a. One unlighted sign pertaining to the rental, sale, or lease of the premises, not to exceed twenty (20) square feet in area.

b. Advertising signs pertaining to the goods and services sold on the premises, or to the name of the establishment. The total aggregate area of all signs pertaining to any one establishment shall be two hundred fifty (250) square feet.

4. Other accessory uses customarily appurtenant to a primary permitted use.

D. Conditional Uses. The following uses may be permitted the R-D (Resort District) zone subject to obtaining a conditional use permit as specified in Section 17.74.010.

1. Animal hospital and veterinary services.

2. Automobile service stations.

3. Bar or cocktail lounge.

4. Billiard parlor.

5. Bowling alley.

6. Bus terminals, depots, and similar transit facilities.

7. Car washes as part of a multi-tenant retail center.

8. Clubs and lodges.

9. Dance hall.

10. Drive-in or walk-up or other fast-food service establishments.

11. Pet care services.

12. Skating rinks.

13. Special event establishments.

14. Sports complex.

15. Taprooms and microbreweries.

16. Theater.

17. Tourist camps.

18. Theme parks.

17.17.030 Property development standards.

The following standards of development shall apply in the R-D (Resort District) zone:

A. Residential Density and Non-Residential Intensity.

1. Maximum Density. 8 dwelling units/acre.

2. Maximum non-residential FAR. 0.1; an increase to 0.75 may be granted for theme parks and other entertainment related uses.

B. Lot Requirements.

1. Minimum Lot Size. The minimum lot size shall be ten thousand (10,000) square feet.

2. Minimum Lot Width. None.

3. Minimum Lot Depth. None.

4. Maximum Lot Coverage. None.

C. Yard Requirement.

1. Front Yard. Each lot or building site shall have a front yard of at least fifteen (15) feet in depth, except where one or both adjoining zones are residential, in which case the required yard shall be increased to equal the average of the required front yards of the adjoining zones.

2. Side Yard. There shall be no side yard requirement except where a R-D zone adjoins a street or a residential zone, in which case there shall be a side yard of not less than ten (10) feet on the side or sides adjoining said street or residential zones. In the case of a reversed corner lot, the side yard adjoining the street shall be not less than the required front yard of the adjoining key lot to the rear.

3. Rear Yard. There shall be no rear yard requirement except where the R-D zone adjoins a residential zone, in which case there shall be a rear yard of not less than ten (10) feet adjoining that residential zone. This shall not apply where there exists a public alley separating the two zones.

4. Permitted Encroachments in Required Yards.

a. The yards required in subsections 1—3 of this section may be used as part of an automobile parking area, provided however that a minimum three-foot wide screen planting strip shall be maintained adjacent to the planned highway right-of-way line.

b. Swimming pools provided as an accessory use to a hotel or motel may encroach into the rear two-thirds of the required front yard.

D. Height Limits.

1. The maximum height of hotel buildings shall be seven stories or eighty-five (85) feet, whichever is less. The maximum height of all other buildings shall be four stories or fifty (50) feet, whichever is less.

2. Notwithstanding the above, the maximum height of any building located within fifty (50) feet of any single-family residential zone, or any agricultural zone, shall be two-and-a-half stories or

thirty-five (35) feet, whichever is less. Vehicular rights-of-way shall be included in calculating the distance.

E. Distance Between Buildings. No requirements, except that buildings not actually adjoining shall be provided with a minimum eight-foot separation.

F. Off-Street Parking and Loading. Off-street parking and loading facilities shall be provided in accordance with the provisions of Section 17.54.010.

G. Screening. Where the R-D (Resort District) zone abuts upon a residential zone, there shall be provided screening not less than six feet, or more than eight feet in height on the zone boundary line. Said screening shall be reduced to forty-two (42) inches in height within a required yard adjacent to a street or highway.

H. Other Property Development Standards.

1. All uses shall be conducted entirely within a completely enclosed building, except for off-street parking and loading facilities; those outdoor uses permitted by Section 17.28.020(A)(7), and certain uses permitted subject to a conditional use permit by Section 17.28.020(D).

2. No building or structure having exterior walls of sheet metal shall be erected in this zone.

I. All new single-family residential development shall be designed pursuant to the design standards included in Chapter 17.19 (Supplemental Standards for Single-family Residential).

J. All new multi-family residential development shall be designed pursuant to the City of Coachella Multi-Family Objective Design Standards.

K. Architectural Review. All development in the R-D (Resort District) Zone, is subject to architectural review as set forth in Section 17.72.010 of this title.

Chapter 17.18 DT-PV DOWNTOWN PUEBLO VIEJO AND TR-PV DOWNTOWN TRANSITION ZONES

17.18.010 Intent and purpose.

The Downtown Zone (DT-PV) and Downtown Transition (TR-PV) zones are intended to provide for and encourage the orderly development of the core of the Pueblo Viejo District, the core of the Pueblo Viejo District is envisioned, by the city's General Plan and Pueblo Viejo Vision Plan, as a higher-density mixed-use (either vertical and/or horizontal) downtown area that provides for a wide variety of multi-family residential housing, office, and retail uses. The Downtown Zone (DT-PV) zone encourages a high-energy pedestrian-friendly environment with street-facing buildings, maintained building lines, a variation of architectural character, and sidewalk and public spaces to provide for gathering spaces and promote outdoor activities including dining, public art, and passive recreation. Motorized vehicle access would minimize impacts on a highly connected pedestrian environment with alley and rear entry access, parking in structures or internal to blocks, and services located behind buildings, in alleyways or rear parking areas. The use of the public realm is encouraged with on-street dining and temporary uses encouraged on sidewalks and adjoining setbacks for these purposes. The Downtown Transition (TR-PV) Zone area serves to transition commercial development from that along Grapefruit Boulevard to the core of the Pueblo Viejo around Veteran's Park and City Hall. The DT-PV and TR-PV zones implement the Downtown Center and Downtown Transition land use designations in the General Plan respectively.

17.18.020 Permitted uses.

The following uses are permitted in the DT-PV (Downtown) and TR-PV (Downtown Transition) zones, subject to all provisions of this chapter:

A. Primary Uses.

1. Retail

a) Antique dealers and shop.
b) Art dealers.
c) Art related retail - art and architecture supply shops and studios.
d) Beer and/or winemaking supply retail stores.
e) Bookstore.
f) Candle shops.
g) Clothing and clothing accessories stores.
h) Collectors' shops.
i) Cosmetics, beauty supplies and perfume stores.
j) Drugstores or retail pharmacies.
k) Electronics and appliance stores.
l) Flag and banner shops.
m) Florist shops.
n) Fruit and vegetable markets.
o) Hardware stores.
p) Health and personal care stores.
q) Home furnishing stores.
r) Jewelry, luggage, and leather goods stores.
s) Meat, fish, and seafood markets (No on-site slaughtering).

t) Office machinery and equipment rental and leasing.
u) Office supplies, stationery, and gift stores.
v) Home security equipment stores.
w) Optical goods stores.
x) Other building materials dealers or retail stores (Except lumber stores, fencing dealers, garage door dealers and prefabricated building dealers – no construction or trade services permitted).
y) Paint and wallpaper stores.
z) Pet and pet supply stores.
aa) Photographic services and photofinishing.
bb) Religious goods store.
cc) Restaurants, delicatessens, and other eating establishments (No drive-thru permitted).
dd) Retail bakeries.
ee) Specialty food stores (No on-site slaughtering).
ff) Sporting goods, hobby, musical instrument, toy stores.
gg) Supermarkets and other grocery stores.
hh) Trophy (including awards and plaques) shops.

2. Lodging
   a) Hotels.
   b) Resort hotels.
   c) Motels.
3. Entertainment (Amusement Arcades - Indoor and Bowling Centers).
4. Office, Professional (Medical, construction, finance, real estate, music and video production, health care, newspaper/media, scientific and technical services other than testing laboratories, event promotions, construction industry, telemarketing/contact centers, banks, finance and insurance retail, social advocacy organizations, informational, Independent Artists, Writers, and Performers, Business Professional, Labor, Political and Similar organizations, Tourist Information Centers, Sound Recording Industries, recreational and youth sport teams).
5. Personal Care Services (Including Day Spas, Depilatory or Electrolysis Salons, Beauty Salons, Saunas, Ear Piercing Services, Steam or Turkish Baths, Hair Replacement or Weaving Services, Tanning Salons, or Permanent Makeup Salons, Hair, Nail and Skin Care Services, Barber Shops).
6. Public/Quasi Public and Institutional Uses (Libraries and Archives, Employment Centers, Educational Services, Business Service Centers, Civic and Social organizations, Fitness and Recreational Sports Centers).
7. Residential (Multi-family of 5+ units).
8. Service - business support services except collection agencies, administrative services, Computer Systems Design and Related Services, Travel Arrangement and Reservation Services, Pet Care Services (Except Animal Shelters, Outdoor Boarding Services, Outdoor Catteries, Dog Pounds, Guard Dog Training Services and Outdoor Kennels, Reupholstery and Furniture Repair, Tailor and Alterations Stores, Jewelry Repair Shops, Dry-Cleaning and Laundry Services (Except Linen and Uniform Supply and Industrial Launderers), Footwear and Leather Goods Repair, Other Personal and Household Goods Repair and Maintenance.
9. Existing single family residential uses built before July 1st, 2019.

B. Accessory Uses. The following buildings, structures, and uses are permitted when clearly incidental and accessory to the primary permitted use.

1. Accessory dwelling units and Junior accessory dwelling units, per Section 17.60.010.H. (Accessory Dwelling Units).
2. Accessory structures, non-habitable, including arcades (shade structures), carports, parking garages, garden greenhouses, community gardens, recreation rooms or pool bathhouses and swimming pools.
3. Dwelling, where used by a proprietor, manager, or custodian of a use permitted within this zone.
4. Outdoor dining areas.
5. Permitted Signs. Per Chapter 17.56 (Signs).

C. Conditional Uses. The following uses are permitted in the DT-PV and TR-PV zones subject to obtaining a conditional use permit in accordance with the provisions of Section 17.74.010:

1. Commercial
   a) Alcoholic beverage sales (For Off-premise consumption).
   d) Appliance repair and maintenance.
   e) Automobile service stations.
   f) Bar or cocktail lounge.
   g) Caterers.
   h) Check cashing establishments (not permitted on 6th Street).
   i) Consignment shops.
   j) Gun and ammunitions sales as a component of a sporting goods store.
   k) Locksmiths.
   l) Microbreweries, Tasting rooms, Wine tasting facilities and Micro-distilleries.
   m) Non-storefront retailer and non-storefront retail microbusiness. A non-storefront retailer or non-storefront retail microbusiness shall have a minimum of one hundred (100) feet separation from any residential structure; be at least five hundred (500) feet from any other storefront retail or non-storefront retail cannabis business; and may not be located in the City's Pueblo Viejo District. For purposes of this chapter, "Pueblo Viejo District" shall be that area in the city bounded by Cesar Chavez Street to the south, 1st Street to the west, Grapefruit Boulevard to the north, and 9th Street to the east.
   n) Post services.
   o) Smoke shop or Hookah shops and lounges.
   p) Scenic and sightseeing transportation.
   q) Thrift stores in which at least 50 percent of the gross receipts are from the sale of a secondhand tangible personal property.
3. Live/Work dwellings.
4. Lodging - Bed and Breakfast Inns.
5. Entertainment.
   a) Billiard and pool halls.
   b) Dance halls.
6. Office, Professional (Laboratory- research, Laboratory - support, Medical and diagnostic laboratories, Performing arts companies, Scientific research and development services, Testing

laboratories, Outpatient care centers, Animal hospitals and Veterinary services (No Outdoor Facilities).

7. Public/Quasi Public and Institutional Uses (Community gardens, Child day care centers, Emergency services stations (including Police and Fire), Funeral homes and Funeral services, Interurban and Rural bus transportation, Museums, Historical sites, and Similar institutions (Except Zoos), Standalone commercial parking lot or Parking structures (private), Theaters and auditoriums, Urban transit systems.

8. Personal care services (Massage, Tattoo parlor).

9. Unclassified (Jewelry and silverware manufacturing, Recycling center, Neighborhood only, Major Public Utility facilities).

17.18.030 Property development standards.

The following property development standards shall apply to all land and permitted or conditionally permitted buildings located within their respective Downtown zones.

A. General Development Standards. Table 17.18.030A, Downtown Zone Development Standards, lists the site development standards required for Downtown (DT-PV) and Downtown Transition (TR-PV) Zone projects.

Table 17.18.030A

Development Standards Downtown Zones

Standard	DT-PV Downtown Zone	DT-PV Downtown Transition Zone
Residential Density & Non-residential Intensity Minimum Density Maximum Density	 20 dwelling units/acre 65 dwelling units/acre	 No minimum 25 dwelling units/acre
Maximum Floor Area Ratio (FAR) for non-residential uses	3.0	1.5
Lot Area, Minimum -Standalone commercial uses or mixed uses	10,000 square feet	5,000 square feet
Lot Area, Minimum - Multifamily Minimum	5,000 square feet ***(1)***	5,000 square feet ***(1)***
Lot Frontage, Maximum	N/A	70%
Front Yard requirement	Where one or both adjoining zones are zoned residential, the front yard shall be the average of the adjoining zones.	The average of front setbacks for existing structures on the block face. For all other lots, the maximum front setback shall be ten (10) feet. For corner lots, the side setback shall be the average setbacks for existing structures.

Side Yard Requirement	Where a DT-PV zone adjoins a street or residential zone, the minimum side yard is 10 feet. Otherwise, no side yard is required.	Minimum of five 5 feet. 10 feet if adjacent to single-family residential use.
Rear Yard Requirement	Where the DT-PV zone adjoins a residential zone, the minimum rear yard shall be 10 feet. ***(2)*** No other rear yard is required except as required by Building Code.	Minimum 10 feet when adjoining a residential zone. Minimum 20 feet when adjoining a building or structure in residential use.
Encroachments for Colonnades or Arcades	Colonnades and/or arcades may occur forward of the property line and may encroach upon the rights of way if an encroachment permit is approved by the Department of Public Works. Colonnades and/or arcades that encroach within the rights of way must not impede pedestrian traffic and be setback a minimum of six (6) feet from the curb line. Encroachments are not permitted on Grapefruit Boulevard and Cesar Chavez Street.	Colonnades and/or arcades may occur forward of the property line and may encroach upon the rights of way if an encroachment permit is approved by the Department of Public Works. Colonnades and/or arcades that encroach within the rights of way must not impede pedestrian traffic and be setback a minimum of six (6) feet from the curb line. Encroachments are not permitted on Grapefruit Boulevard and Cesar Chavez Street.
Height Limits –– Building(s)	5 stories or 75 feet, whichever is less.	3 stories or 50 feet, whichever is less.
Height Limits – Accessory Structure(s)	1 story or 15 feet, whichever is less.	1 story or 15 feet, whichever is less.
Stepbacks	All buildings exceeding four stories in height shall require a minimum of ten (10) foot additional front setback (including corner lots) for stories above the fourth story. ***(3)***	Adjacent to a single-family zone, starting from the third floor up, each floor shall be stepped back by 15 feet for every floor. See diagram in Section 17.16.030 D (1). All buildings over two stories shall have a 10-foot additional front setback.

Usable Open Space Standards	Multifamily developments: 150 square feet total of private open space per unit minimum. 10 square feet per unit or 1,000 square feet total, whichever is greater shall be required for common open space for a common recreation and/or leisure area. Usable open space may be provided as private outdoor living areas, balconies, decks, or as common recreational-leisure areas ***(4).*** Usable common open space may extend into the required front yard to within five feet of the front lot line ***(5).***	Multifamily developments: 150 square feet total per unit minimum. 120 square feet of private open space required for ground-level units 60 square feet of private open space for upper-level units. 10 square feet per unit or 1,000 square feet total, whichever is greater required for common open space for common recreation/leisure area. Usable open space may be provided as private outdoor living areas, balconies, decks, or as common recreational-leisure areas ***(4).*** Usable common open space may extend into the required front yard to within five feet of the front lot line ***(5).***
Public Open Space	Development over one-half (1/2) acre or more in gross land area, must provide a minimum of ten (10) percent of the development for public open space. ***(6)***	NA

(1) All development shall maintain existing block sizes. New development without existing streets shall mimic prevailing block dimensions with maximum block lengths no longer than 500 feet.

(2) This standard does not apply where zones are separated by an alley.

(3) An additional five (5) foot setback for every additional story shall be required on building facades facing 5th or 7th Street.

(4) Except in the case of balconies, such areas shall be landscaped.

(5) Subject to the following provisions:

i. No more than forty (40) percent of the required front yard may be so used.

ii. No permanent structures, except swimming pools and those structures required by law, shall be permitted in the required front yard.

iii. Such areas shall be screened from the street and adjacent properties by landscaping and/or decorative fencing of a maximum height of forty-two (42) inches, except where a greater height is required by law.

iv. The remaining portion of the required front yard, except for access drives and walks, shall be landscaped and maintained. "

(6) Public open space must be accessible from the public realm. Applicant may make a payment to the City in lieu of public space reservation for larger park or plaza development within the Pueblo Viejo upon approval of the Planning Director or their designee.

B. Off-Street Parking. Off-street parking shall be provided for each dwelling unit or commercial use subject to the requirements of Section 17.54.010 of this title, except where the following provisions shall supersede those of 17.54.010:

Table 17.18.030B

Off-Street Parking Standards

Mixed-Use Development Parking Requirements		
Standard	DT-PV Downtown Zone	DT-PV Downtown Transition Zone
All Mixed-use development	Three (3) spaces for 1,000 square feet of gross floor area	Three (3) spaces for 1,000 square feet of gross floor area
Single-Use Development Parking Requirements		
Standard	DT-PV Downtown Zone	DT-PV Downtown Transition Zone
Multi-family residential	Minimum: 1.25 spaces per unit plus one guest space per every five (5) units. Maximum: 1.33 spaces per unit plus one guest space per every five (5) units.	Minimum: 1.25 spaces per unit plus one guest space per every five (5) units. Maximum: 1.33 spaces per unit plus one guest space per every five (5) units.
Office	Four (4) spaces per 1,000 square feet of gross floor area.	Four (4) spaces per 1,000 square feet of gross floor area.
Retail	Minimum: 3.75 spaces per 1,000 square feet of gross floor area. Maximum: four (4) spaces per 1,000 square feet of gross floor area	Minimum: 3.75 spaces per 1,000 square feet of gross floor area. Maximum: four (4) spaces per 1,000 square feet of gross floor area
Restaurants and Drinking places	Minimum: twelve (12) spaces per 1,000 square feet of gross floor area. Maximum: fifteen (15) spaces per 1,000 square feet of gross floor area.	Minimum: twelve (12) spaces per 1,000 square feet of gross floor area. Maximum: fifteen (15) spaces per 1,000 square feet of gross floor area.

Notes:

1. No development that was not approved or in existence prior to July 1st, 2019, shall be allowed to locate off-street parking areas adjacent to the primary street.

2. On-street parking that is within five hundred (500) feet of the main entrance(s) of a development may be utilized to satisfy the requirement for off-street parking subject insofar as the property owner enters into an agreement with the City of Coachella creating a parking easement over the property owner's parking lot allowing public parking after regular business hours and weekends to increase the public parking supply in the Downtown Center Zone.

3. Shared curb-cuts are required for all new development in the DT-PV Zone. All curb-cuts are subject to City approval. An internal circulation plan with provisions for shared curb-cuts and internal circulation with neighboring properties is required.

4. New development must consider existing development and provide connections to existing development within each block to allow for internal block circulation.

5. All internal vehicle circulation roads, except for those leading to non-public areas or loading access, must include sidewalks with compliant ADA facilities and landscaping. Pedestrian facilities must connect all building entrances, retail entrances and residential entrances. Safe and adequate pedestrian connectivity within the development and connections to adjacent development and existing pedestrian facilities is required.

6. The parking requirements of this section may be reduced, with the approval of the Planning Commission, if any of the following provisions are provided for in the circulation plan:

a. The proposed development is located within a Business Improvement District or a special district that institutes shared-parking, timed parking restrictions, and/or paid parking.

b. The proposed development incorporates paid parking into the development.

c. A cooperative use agreement is executed with another property owner to provide for a portion of the required parking of the proposed development.

d. A payment-in-lieu agreement is executed with the City or another entity responsible for parking management to defray the cost for accommodating additional demand generated by the proposed development.

e. Land set-aside or structural design of proposed parking surface lots or structured parking is provided to allow for expansion to accommodate additional parking supply when demand exceeds approved supply. The parking study must justify current supply, based upon current demand, and provide for future demand thresholds that would trigger the expansion of additional supply. Any future demand thresholds and supply expansion provisions shall become a condition of approval and continued use of the property.

f. The property owner enters into an agreement with the City of Coachella creating a parking easement over the property owner's parking lot allowing public parking after regular business hours and weekends.

7. Exemptions from off-street parking near existing public -parking –within the Downtown Center zone are permitted insofar as the property owner enters into an agreement with the City of Coachella, if determined necessary by the Planning Director, creating a parking easement over the property owner's parking lot allowing public parking after regular business hours and weekends to increase the public parking supply in the Downtown Center z~~Z~~one. Exemptions are permitted under the following scenarios:

a. Uses within existing commercial buildings located within five hundred (500) feet of a publicly owned- parking- lot shall be exempt from this subsection.

b. Uses within existing buildings more than 500 feet from publicly owned parking will be required to meet the -parking -requirements except that the required number of -parking- spaces may be reduced by sixty (60) percent with the approval of the ~~planning commission~~Planning Commission as a part of architectural review.

c. Expansions of any existing buildings will be required to meet the -parking- requirements except that the required number of -parking- spaces may be reduced by sixty (60) percent with the approval of the Planning Commission as a part of architectural review.

C. Mixed Use Development Standards.

1. Buildings may be oriented initially in integrated-horizontal development or vertical mixed-use patterns depending upon current market demands.

2. Integrated horizontal mixed-use development must include a mix of at least two (2) uses including one use being residential.

3. Residential uses may be allowed on the first floor of a building provided all of the following are met:

   a. The first floor must be a minimum of fifteen (15) feet in height to accommodate modern commercial and retail activities, even if the initial use is residential in nature.

   b. The first floor must be reconfigurable to accommodate a transition to non-residential uses in the future.

   c. No ownership tenure is allowed for first-floor residential use along the primary frontage.

4. The lower floor of proposed parking garages that face or partially face Sixth Street must include usable commercial space along the frontage and are required to follow the architectural guidelines for parking garages.

5. The lower floor of proposed parking garages that face or partially face Sixth Street must include usable commercial space and are required to follow the architectural guidelines for parking garages.

D. Standards for Outdoor Dining Areas.

1. Required parking shall be provided for outdoor seating areas, except for common outdoor seating areas not attributable to a single establishment.

2. Sound amplification devices, such as speakers, shall be limited to devices that are necessary to provide low-level background music. Noise levels shall comply with Chapter 7.04 of the City of Coachella Municipal Code. The Planning Director or their designee may waive this provision, except for Chapter 7.04 compliance, on a temporary or permanent basis in conjunction with a waiver granted in part © above.

3. Outdoor dining areas are subject to all permit approvals and the design guidelines and configuration, and design must be included on any drawings and application submissions.

4. Outdoor dining areas located adjacent to, or within the public rights-of-way must leave a minimum of five (5) feet of sidewalk, for clear pedestrian path of travel.

5. All outdoor dining within the public rights-of-way must obtain an encroachment permit from the City Engineering Department.

6. Outdoor dining areas that include the sales of alcohol must meet all requirements and regulations of the California Department of Alcoholic Beverage Control.

K. All new multi-family residential development shall be designed pursuant to the City of Coachella Multi-Family Objective Design Standards.

L. Architectural Review. All non-residential development is subject to the Pueblo Viejo Design Guidelines as the governing architectural guidelines for the zone.

M. All development in the DT-PV (Downtown) and TR-PV (Downtown Transition) zones is subject to architectural review as set forth in Section 17.72.010 of this title.

N. Signage. The provisions of Chapter 17.56 and the design guidelines in the Pueblo Viejo Design Guidelines shall apply to all signs within Downtown zones.

F. Affordable housing Requirements. A minimum of ten (10) percent of all residential units for projects of more than 10 units must be priced for low and/or moderate-income residents. Units should be disbursed

throughout the structure and must proportionally reflect the size of market rate units. While trim detail may vary, the overall quality of building materials may not depart from those used within market rate units within the same structure. See Chapter 17.88 (Density Bonus and Development Incentives) for additional information.

G. Existing Uses and Structures at the Time of Adoption of this Section

1. All uses, lots, structures, and characteristics, except for signage, that were lawful, and in existence, prior to July 1st, 2019, shall remain as legally conforming uses, lots, structures, and characteristics with all the previous entitlements intact provided:

   a. the use, lot, structure and/or characteristics remain otherwise lawful.

   b. No use, lot, structure and/or characteristics may cease operation for a period greater than one (1) year.

   c. No use, lot, and/or structure may be abandoned for a period greater than one (1) year.

   d. If the use, lot, structure and/or characteristics fall within a permitted and/or conditional use, as defined in -section 17.17.020, the provisions of this section will no longer apply and the previous use, lot, structure and/or characteristics must fully comply with the provisions of this zone thereafter.

2. If the provisions of this section are no longer met, the property is then subject to the provisions of Chapter 17.78 of this ordinance.

Chapter 17.19 SUPPLEMENTAL STANDARDS FOR SINGLE-FAMILY RESIDENTIAL

17.19.010 Intent and purpose.

New single-family structures, and alterations to existing single-family structures, shall comply with the supplemental standards in this Section.

17.19.020 Detached Single-Family Residential Standards.

A. Purpose. The following detached single-family residential design standards are intended to ensure that single-family detached homes are well-designed while allowing for flexibility and creativity. A broad range of configurations are allowed including cluster homes, cottages, auto courts, and other configurations that meet the allowed density requirements and development standards of the applicable zone.

B. Applicability. This section shall apply to allowed construction or installation of all detached single-family residential structures, additions thereto, and all accessory structures including but not limited to garages, guest houses, and second dwelling units, except as otherwise authorized by State law or per Section 17.60.010.H. (Accessory Dwelling Units).

C. Site Planning Standards

1. Access and Connectivity

a. External Connectivity. Streets within any proposed subdivision or building site shall be aligned with existing and planned streets in the surrounding area to create a continuous street pattern. All streets in any subdivision or development site shall connect to other streets and to existing and planned streets outside the proposed subdivision or development to the extent feasible. Any cul-de-sac or other dead-end street longer than 300 feet shall be connected to other streets by a pedestrian path. If a development is gated, it shall provide frequent pedestrian and bicycle connections between the gated community and surrounding areas at distances no more than 600 feet apart.

b. Pedestrian Pathways/Sidewalks. New development shall be required to provide pedestrian pathways/sidewalks connecting to the public sidewalk and other planned or existing pedestrian routes or trails. A pedestrian pathway/sidewalk shall connect the primary common building entry or entries to the public sidewalk on each street frontage. Pedestrian pathways/sidewalks, a minimum of five feet wide, shall be provided from the public right-of-way to all primary common entryways and common areas, guest parking, and centralized trash enclosures (if provided). This is not applicable to a typical single-family detached residential subdivision.

2. Street and Pathway Landscaping. All publicly accessible private streets and pathways shall provide a combination of trees, shrubs, and ground cover in a minimum five-foot-wide planting strip. Trees shall be planted at a minimum of one tree for every 40 feet of linear street/path. Shrubs and groundcover shall cover at least 30 percent of the planting strip.

3. Parking

a. Parking Location. Curb cuts and driveways providing access to parking shall be provided from an alley or secondary/private street, rather than from the public right-of-way, whenever such alley or secondary/private access is feasible. Parking is not allowed in the front setback area for individual lots and building sites, except within approved driveways.

b. Garage Design

1. A fully enclosed two-car garage with a clear and free minimum interior dimension of 20 feet in width and 22 feet in length shall be provided, except on lots having a width of 50 feet or less, a fully enclosed tandem garage with a clear and free minimum interior dimension of 12 feet in width by 44 feet in depth may be provided. All garages shall be constructed in compliance with the City Building & Safety Division requirements.

2. Detached garage structures shall be designed using at least two of the same exterior finish materials and/or colors used on the principal structure and shall be provided with decorative sectional roll-up doors constructed of durable material, such as wood or metal. Doors constructed of plywood sheeting shall not be allowed.

3. When the width of the driveway exceeds 20 feet in width (as measured five feet in front of the garage), a decorative driveway, which may consist of paver treatments, colored concrete, decorative concrete finishes, or other treatments as approved by the Director, shall be required. Stamped concrete shall not be allowed.

4. Services and Utilities

a. Utilities. All new utility boxes and equipment and utility connections shall be undergrounded unless otherwise prohibited by the utility provider (e.g., water backflow prevention device that must be placed above ground) or the City Engineer grants an exemption following his/her determination that such undergrounding is not practicable.

b. Utility Hookups. Utility hookups and an area to accommodate installation of a clothes washer and dryer shall be provided within the primary structure or within an enclosed accessory structure.

c. Location of Above-ground Utilities and Service Areas. All above-ground utilities and equipment (e.g., electric and gas meters, fire sprinkler valves, irrigation backflow prevention devices, etc.), shall be integrated into building and landscape design and located to minimize impact on the pedestrian experience and neighboring properties by adhering to the below standards:

d. Utilities and equipment shall be located on non-primary street frontages, alleys, parking areas, and/or at the rear or side of buildings.

e. Utilities and equipment shall be fully screened from view and not be located within the front or street side setback area of the lot or development site.

f. Air-Conditioning Equipment. No new roof-mounted air conditioning equipment or evaporative coolers visible from the public right-of-way shall be allowed. Push through air conditioning units or evaporative coolers may be allowed on any side or rear elevation, as long as they are not visible from any public right-of-way. Air conditioning equipment shall be ground-mounted, set back a minimum of five feet from any side or rear property line and shall not be located within the required front yard setback.

5. Refuse and Recycling.

a. Single-family residential development projects do not require communal or shared trash and recycling areas/containers. In such cases, no enclosure structure shall be required, however individual trash and recycling containers shall be stored in such a manner that containers are not visible from public view from the front of the property. Containers may be placed in public view for purposes of collection only on the scheduled collection day and shall be removed from public view following said collection.

b. For cluster homes, cottages, and auto courts, common refuse and recycling containers and collection areas shall be adequate in capacity, number, and distribution to accommodate all waste generation of the site. The number of containers and collection areas shall be reviewed by

the local disposal service and approved by the Director. Common refuse and recycling collection areas shall be located inside of enclosures located along alleys, in parking areas, or at the rear or side of buildings and shall be fully screened from view per the screening standard in CMC Section 17.19.020.B.5.c (Service, Utility, and Equipment Screening) below. Communal refuse collection areas shall be prohibited on primary frontages.

c. Service, Utility, and Equipment Screening. Screening of common refuse collection areas, utilities, and equipment shall be equal to or higher than the height of the equipment to be screened. Screening materials shall consist of a primary exterior finish material used on other portions of the residential units.

C. Building and Façade Design Standards

1. Architectural Variability. For all developments involving five or more contiguous lots, there shall be multiple "distinctly different" front façade designs. No more than two houses shall be of the same front façade design as any other house directly adjacent along the same block face and side of the street. Mirror images of the same configuration do not meet the intent of "distinctly different." "Distinctly different" shall mean that a single-family dwelling's elevation must differ from other house elevations in the following criteria. The number of required different front ~~facade~~façade designs shall be in accordance with Table 17.19-1. Architectural Variability.

a. Number of stories (optional);

b. Modulation strategies~~–~~ - at least one ((see CMC Section 17.19.020.C.2 (Façade Modulation and Articulation);

c. Articulation strategies~~–~~ - at least one ((see CMC Section 17.19.020.C.2 (Façade Modulation and Articulation); and,

d. Variation in materials~~–~~ - different material palette, with a different primary material.

Table 17.19-1. Architectural Variability

Total number of Dwelling Units	Minimum Number of Façade Designs
4 – 8	2
9 – 20	3
21 – 30	4
31 – 40	5
41 – 60	6
61 – 100	7
>100	8

2. Façade Modulation and Articulation

a. Modulation. Residential units shall employ at least two of the following building modulation strategies:

1. Varied roof forms, including but not limited to changes in roof height, offsets, change in direction of roof slope, dormers, parapets, etc.;

2. Use of balconies, front porches, overhangs, or covered patios; and/or,

3. Projections, offsets, and/or recesses of the building wall at least one foot in depth, including but not limited to bay windows, chimneys, brackets, and cornices.

b. Articulation. All building elevations that face a street or a cluster driveway shall employ varied façade articulation of wall surfaces. Facades shall incorporate at least three of the following features, consistent in design style, which provide articulation and design interest:

1. Variation in texture or material, provided all exterior wall textures and materials are consistent with the overall architectural style of the dwelling;

2. Decorative trim elements that add detail and articulation, such as door surrounds with at least a two-inch depth, decorative eave detailing, belt courses, etc.;

3. Railings with a design pattern and materials such as wood, metal, or stone which reinforces the architectural style of the building;

4. Decorative window elements such as, lintels, shutters, window boxes, etc.; and/or,

5. Increased roof overhangs at least 18 inches deep.

c. Side and Rear Elevations. In no case shall any side or rear elevation be a solid blank wall with no articulation. Side facades facing a private street or common driveway shall include details which are compatible with those on the ~~front~~ façade~~facade~~, with similar types and treatments of roofs, windows, shutters, planter boxes, and other architectural elements.

3. Window Trim or Recess. Trim at least two inches in depth shall be provided around all windows, or windows shall be recessed at least two inches from the plane of the surrounding exterior wall. Foam trim material is prohibited.

4. Building Entries.

a. Orientation.

1. Dwelling units that abut a public right-of-way shall orient the primary entryway toward the public street. Exceptions to this requirement may be approved by the Director or his/her designee for projects where the project site is located on a Major or Primary Arterial (with and without Bicycle facilities), provided the façade facing the public street is designed with similar details and treatments to those of the front façade.

2. Dwelling units located in the interior of a development shall orient the primary entryway toward and be visible from a private street, pedestrian pathway, or open space that is connected to a public right-of-way or private street.

b. Projection or Recess. Building entrances shall have a roofed projection (such as a porch) or recess with a minimum depth of at least six feet and a minimum area of 36 square feet. Exceptions to this requirement may be approved by the Director or his/her designee for alternative designs that create a welcoming entry feature facing the street, such as a trellis or landscaped courtyard entry.

c. Grade. Ground floor/entry height shall be a maximum of three feet above grade.

5. Building Roofs.

a. Roof Form. Primary roof forms shall be gable, hipped, flat, or shed.

b. Roof Pitch. Steep roofs with a rise to run ratio over 6:12 (26.6 degrees) are prohibited.

c. Gable Overhangs. All residential structures shall have eave and gable overhangs of not less than 12 inches measured from the vertical side of the residential structure, unless overhangs are

architecturally incompatible with the design of the structure as approved by the Director or his/her designee.

d. Roof Materials. Roof materials shall be non-combustible; shake and composite shingles shall be prohibited on any new single-family residential structure.

e. Roof Vents. All roof vents shall be flat or similar style.

6. Colors and Materials.

a. Variation in Materials. Each home shall incorporate at least three materials for facades.

b. Siding Materials. Siding material shall consist of stucco, wood, brick, stone, or decorative concrete block. Synthetic products of a similar appearance, equivalent durability, and providing equivalent fire resistance may be allowed. Metal siding, if utilized, shall be non-reflective and horizontally overlapping. The exterior covering material shall extend to a point at or near grade except that if an approved solid wood, metal, concrete, or masonry perimeter foundation is used, the exterior covering material need not extend below the top of the foundation.

c. Building Component Colors. All vents, gutters, downspouts, flashing, electrical conduits, etc., shall be painted to match the color of the adjacent surface.

7. Transitions and Privacy.

a. Window Placement. Windows on adjacent units shall be offset by at least three feet to avoid direct sightlines into and from neighboring properties.

b. Upper-Story Decks and Balconies. Upper-story decks and/or balconies over 20 square feet in area shall be setback a minimum of 15 feet from the property line when adjacent to a single-family zoned property.

c. Landscape Buffer. For development projects of six units or more, a landscaped planter strip of at least three feet in width shall be provided along the abutting property line between a small lot subdivision/development and any adjoining low-density residential zoning district boundaries. Trees shall be planted within this area every 20 to 40 feet on center (depending on the tree species and canopy at maturity) to provide screening between the small lot subdivision/development and the adjacent low-density residential uses.

8. Accessory Structures. Accessory structures over 120 square feet such as detached garages, porches, pergolas, and other similar structures shall be architecturally compatible with the primary residential structure by incorporating at least two of the same colors, materials, design elements, or roof materials. Attached solid patio covers with a 3:12 pitch or greater shall substantially match the existing roof material and color. If a pitch less than 3:12 is proposed, the roof shall only be required to match the color of the primary structure roof. If open lattice is proposed, it shall match the existing trim color of the primary structure.

Chapter 17.20 to 17.21 RESERVED

Chapter 17.22 R-MH MOBILEHOME PARK SUBDIVISION

17.22.010 Intent and purpose.

It is the intent of this chapter to provide regulations for the placement of mobilehomes on individual lots within an approved subdivision specifically designed and designated for the sale, not rental, of lots to accommodate mobilehomes as the dwelling unit. The minimum site that may be zoned for this purpose shall be twenty (20) acres, including one-half but not to exceed thirty-three (33) feet of width of adjacent boundary streets dedicated to the public. This zone implements mobilehomes in several General Plan land use designations.

(Prior code § 036.01)

17.22.020 Permitted uses.

The following uses are permitted in the R-MH (Mobilehome) zone, subject to all provisions of this chapter:

A. Primary Uses.

1. Mobilehomes for residential use; in no event shall more than one mobilehome be used for residential purposes on a lot.

B. Accessory Uses. The following buildings, structures, and uses are permitted when clearly incidental and accessory to the primary permitted use:

1. Patio slab, awning, carport or garage, swimming pool, pool bathhouse, storage, and washroom building.

2. Permitted Signs. Only the following signs shall be permitted:

a. One nameplate not to exceed one foot square in area.

b. One unlighted sign pertaining to the rental, sale, or lease of the premises, not to exceed six feet in area. Such signs shall be located at least ten (10) feet from any property line.

C. Conditional Uses. The following uses may be permitted in the R-MH (Mobilehome) zone, subject to obtaining a conditional use permit as specified in Section 17.74.010.

1. Community recreation facilities for the use of individual lot owner within the subdivision may be developed after the provisions for their continued and proper operation have been approved by the ~~planning commission~~Planning Commission. The maintenance of the community recreation and service areas shall be assured by provisions in the deeds, such as covenants running with the land, providing for participation by the individual lot owners and the responsibility and cost thereof.

2. Temporary real estate tract offices, to be used only during the original sale of the subdivision, but not to exceed a period of one year.

(Prior code § 036.02)

17.22.030 Property development standards.

A. Lot Requirements.

1. Minimum Lot Area. Four thousand five hundred (4,500) square feet.
2. Minimum Lot Width. Forty (40) feet.
3. Minimum Lot Depth. Ninety (90) feet.
4. Minimum Street Frontage. Not less than thirty-five (35) feet.

B. Yard Requirement.

1. Minimum Front Yard Depth. Twenty (20) feet.
2. Minimum Side Yard Width. Five (5) feet.
3. Minimum Rear Yard. Five (5) feet.

C. Height Limit.

1. Primary Use. Fifteen (15) feet.
2. Accessory Use. Fifteen (15) feet.
3. Conditional Use. Two (2) stories or thirty-five (35) feet, whichever is less.

D. Off-Street Parking. Off-street parking shall be provided for, subject to the requirements of Section 17.54.010 of this title.

E. On-Site Recreation.

1. A concrete slab or other standard metal or wood deck containing at least two hundred (200) square feet shall be installed on each lot prior to placing a mobilehome on each lot for residential purposes. This area is to be in addition to any area required for parking.

(Prior code § 036.03)

17.22.040 Other regulations.

A. No R-MH (Mobilehome) zone shall be applied to an area containing structures that do not conform to the R-MH (Mobilehome) zone.

B. Camping and boat trailers may be stored on the property providing they are kept on the rear half of the lot. All other materials shall be maintained within a completely enclosed storage structure.

C. All trailers and mobilehomes shall be kept mobile.

D. All trailers and mobilehomes shall carry a current state license.

(Prior code § 036.04)

Chapter 17.24 C-N NEIGHBORHOOD COMMERCIAL ZONE

17.24.010 Intent and purpose.

This zone is intended to provide for ~~everyday~~every day~~,~~ convenience shopping intended to serve residential neighborhoods, consistent with the environmental requirements of such neighborhoods. Convenience shopping facilities are those which provide space for retail and service businesses serving the immediate neighborhood. This zone also provides the opportunity for multi-family housing mixed in with the neighborhood serving uses, all within convenient walking or biking distance of nearby neighborhoods. These areas provide gathering places for the residents of surrounding neighborhoods. The provisions of this zone are intended to minimize or eliminate, insofar as possible, any conflicting aspects of commercial land use within residential neighborhoods, particularly as related to traffic, type of activity, and site requirements. This zone implements the Neighborhood Center land use designation in the General Plan.

(Prior code § 040.01)

17.24.020 Permitted uses.

The following uses are permitted in the C-N (Neighborhood Commercial) zone, subject to all provisions of this chapter:

A. Primary Uses.

1. Local retail businesses primarily intended to serve the immediate neighborhood, provided that no one use shall exceed ~~five~~ ten thousand (~~5~~10,000) square feet of floor area, including the following:
    a. Grocery, fruit, or vegetable store; meat market.~~;~~
    b. Meat, fish, or dressed poultry (no live poultry) sales.~~;~~
    c. Bakery.~~;~~
    d. Drugstore.~~;~~
    ~~e. Reserved;~~
    ~~f~~e. Hardware store.~~; and~~
    ~~g~~f. Restaurant, ~~cafe~~café, or soda fountain, not including entertainment, dancing, sale of liquor, beer, or other alcoholic beverages.
2. Local service businesses primarily intended to serve the immediate neighborhood, including the following:
    a. Barber or beauty shop.~~;~~
    b. Child care centers.~~;~~
    c. Clothes cleaning and laundry pickup stations, laundromat, coin-operated ~~dry cleaning~~dry-cleaning establishment.~~;~~
    d. Offices of physicians, dentists, optometrists, chiropractors, accountants, and realtors.~~; and~~
    e. Tailor, dressmaker.
3. Multi-tenant retail, up to 35,000 square feet of floor area.
4. Public Utility Facilities (City-initiated).

B. Accessory Uses. The following buildings, structures, and uses are permitted when clearly incidental and accessory to the primary permitted use:

1. Signs as follows, subject to all provisions of Section 17.56.010 of this title.

a. One unlighted sign pertaining to the rental, sale, or lease of the premises, not to exceed twenty (20) square feet in area.

b. Advertising signs pertaining only to the goods and services sold on the premises, or to the name of the establishment. The total aggregate area of all signs pertaining to any one establishment shall be eighty (80) square feet.

2. Canopies, arcades, carports, or similar shading devices.

3. Other accessory buildings, structures and uses customarily appurtenant to a primary permitted use.

C. Conditional Uses. The following uses may be permitted in the C-N (Neighborhood Commercial) zone, subject to obtaining a conditional use permit as specified in Section 17.74.010 of this title.

1. Those uses allowed as conditional uses by Section 17.1612.020(C) of the R-SS-N (Suburban Neighborhood) zone;.

2. Multi-family residential (5+ units).

3. Ambulance services.

4. Automobile accessories and parts.

2. Lodges, fraternal organizations, and clubs;

35. Automobile service stations;.

4. Dwelling units, Residential (5+ units)multiple-family, limited to second story;

5. Liquor sales, subject to Section 17.74.015; and

566. Automotive repair garage as an accessory to automobile service station.

7. Bars and cocktail lounges.

8. Bowling, pool, or billiard centers.

9. Bus terminals, depots, and similar transit facilities.

10. Check cashing services.

11. Commercial cannabis testing laboratories, pursuant to Chapter 17.85.

12. Non-storefront cannabis retailers and non-storefront retail microbusinesses, pursuant to Chapter 17.84.

13. Car washes.

14. Commercial parking lots.

15. Commercial psychic activities.

16. Dance halls.

617. Drive-in, walk-up, or other fast-food establishments;.

18. Engineering research and testing firms and laboratories.

3619. Hotels, motels.;

~~7. Bus terminals, depots, and similar transit facilities;~~

~~8. Thrift Stores;~~

~~9. Ambulance services;~~

~~10. Car washes;~~

20. Laundromat/coin operated laundry so long as a full-time attendant is provided.

21. Liquor sales, subject to Section 17.74.015.

22. Lodges, fraternal organizations, and clubs.

23. Mattress manufacture.

24. Mortuaries.

~~33~~25. Neighborhood recycling centers, pursuant to Chapter 17.90~~11. Pawn shops;~~

~~12. Bowling, pool, or billiard centers;~~

~~13. Commercial parking lots;~~

~~14. Tourist camps;~~

~~15. Automotive repair garage as an accessory to automobile service station;~~

~~16. Commercial psychic activities;~~

~~17. Liquor sales, subject to Section 17.74.015;~~

~~18. Automobile accessories and parts;~~

~~19~~26.

26. New and used automobile sales and mobilehome sales, located on sites with frontage on Cesar Chavez Street provided that a ten-foot landscaped setback from the planned highway right-of-way line be maintained.~~;~~

27. Pawn shops. ~~20. Engineering research and testing firms and laboratories;~~

~~21. Truck, farm implement and machinery sales and rental, sale of parts;~~

~~22. Laundromat/coin operated laundry so long as a full-time attendant is provided;~~

~~23. Plumbing shop, provided all outside storage is completely screened;~~

~~24~~8. Parcel or overnight delivery services.~~;~~

~~25~~9. Photocopying, photo processing and blueprinting~~;~~.

~~23~~30. Plumbing shop, provided all outside storage is completely screened.~~;~~

~~26.~~31. Printing establishments.~~;~~

32. Private lodges, clubs, meeting halls.

33. Special event establishments.

~~26. Mattress manufacture;~~

~~27. Reserved;~~

~~28. Mortuaries;~~

~~29~~34. Swap meet, indoor.~~;~~

305. Swap meet, outdoor~~;~~.

36. Taproom.

~~31. Multi-tenant retail;~~

327. Tattoo and body piercing parlors~~;~~.

38. Thrift stores.

39. Truck, farm implement and machinery sales and rental, sale of parts.

~~33. Neighborhood recycling centers, pursuant to Chapter 17.90;~~

~~34. Commercial cannabis testing laboratories, pursuant to Chapter 17.85;~~

~~35. Non-storefront cannabis retailers and non-storefront retail microbusinesses, pursuant to Chapter 17.84.~~

~~36. Hotels, motels;~~

~~37. Private lodges, clubs, meeting halls;~~

~~38. Check Cashing services;~~

~~39. Dance Halls;~~

~~40. Bars and Cocktail Lounges;~~

~~42. Special Event Establishments;~~

~~43. Taproom~~

(Prior code § 040.02)

(Ord. No. 1088, § 1, 12-14-16)

17.24.030 Property development standards.

The following standards of development shall apply in the C-N (Neighborhood Commercial) zone:

A. Residential Density and Non-Residential Intensity.

1. Minimum Density. 15 dwelling units/acre, when residential uses are provided.

2. Maximum Density. 40 dwelling units/acre.

3. Maximum FAR. 1.5.

~~A~~B. Lot Requirements.

1. Minimum Lot Area. Five thousand (5,000) square feet.~~;~~ ~~parcels not contiguous to C-N (Neighborhood Commercial) zoned property shall have a minimum area of one-half acre~~twenty thousand (20,000) square feet~~.~~

2. Minimum Lot Width. Fifty (50) feet.

3. Minimum Lot Depth. None.

4. Maximum Lot Coverage. No limit.

~~B~~C. Yard Requirements.

1. Front Yard. Where one or both adjoining zones are residential, a yard shall be provided which is equal in depth to the average of the required front yards of the adjoining zones.

2. Side Yard. Where a C-N (Neighborhood Commercial) zone adjoins a street or a residential zone, there shall be a side yard of not less than ten (10) feet on the side or sides adjoining such street or residential zone. In the case of a reversed corner lot, the side yard adjoining the street shall be not less than the required front yard of the adjoining key lot to the rear.

3. Rear Yard. Where the C-N (Neighborhood Commercial) zone adjoins a residential zone, there shall be a rear yard of not less than ten (10) feet adjoining that residential zone. In the case of a building or structure for residential use, there shall be a rear yard of not less than twenty (20) feet.

4. Permitted Encroachments in Required Yard. The yards required in subsections 1—3 of this section may be used as part of an automobile parking area, provided however that a minimum three-foot wide screen planting strip shall be maintained adjacent to the planned highway right-of-way line.

~~C~~D. Height Limit. The maximum height of any building or structure shall be ~~two~~ three stories or ~~thirty-five~~fifty (~~35~~50) feet, whichever is less.

~~D~~E. Distance Between Buildings. Buildings not actually adjoining shall be provided with a minimum eight-foot separation.

~~E~~F. Off-Street Parking and Loading. Off-street parking and loading facilities shall be provided in accordance with the provisions of Section 17.54.010.

~~F~~G. Screening. Where the C-N (N~~n~~eighborhood C~~c~~ommercial) zone abuts upon any residential zone, there shall be provided screening not less than six feet or more than eight feet in height on the zoning boundary line. Said screening shall be reduced to forty-two (42) inches in height within a setback area adjacent to a street or highway.

~~G~~H. Other Property Development Standards.

1. All residential uses shall follow the site development standards for U-N (Urban Neighborhood) zone, except as noted in this subsection.

2. Any structure originally designed or intended for residential purposes may be used for service businesses, (except clothes cleaning, etc.) as permitted in this zone, subject to all provisions of this article, and further subject to the following conditions:

   a. The required front yard of the structure shall be permanently maintained in landscaping as defined in Section 17.60.010(D)(4).

   b. All parking shall be provided to the rear of the residential structure.

   c. All structures shall conform to all provisions of the applicable building, housing, and fire codes of the city.

   d. Signs permitted shall be limited to a total surface area twenty (20) square feet.

   e. No structure shall be used for residential and commercial uses at the same time.

2. All uses shall be conducted entirely within a completely enclosed building, except for off-street parking and loading facilities, and automobile service stations permitted subject to Section 17.24.020(C)(3).

~~H~~I. All new multi-family residential development shall be designed pursuant to the City of Coachella Multi-Family Objective Design Standards.

J. Architectural Review. All development in the C-N (Neighborhood Commercial) zZone, is subject to architectural review as set forth in Section 17.72.010 of this title.

(Prior code § 040.03)

Chapter 17.26 C-G GENERAL COMMERCIAL USE ZONE

17.26.010 Intent and purpose.

This zone is intended to provide for and encourage the orderly development of commercial areas designed to serve ~~the~~ community-wide needs. Such areas provide a wide variety of goods and services~~,~~ and must be consistent with the overall development of the city and its environs. The provisions of this zone are intended to ~~insure~~ensure that such commerce will be compatible with adjacent, noncommercial development, and to minimize the undesirable effects of heavy traffic, type of activity, and to set forth site requirements. This zone implements the Suburban Retail land use designation in the General Plan.

(Prior code § 042.01)

17.26.020 Permitted uses.

The following uses are permitted in the C-G (General Commercial) zone, subject to all provisions of this chapter:

A. Primary Uses.

1. All uses permitted by ~~subsection~~ Section 17.24.010 A of ~~this section~~ the C-N (Neighborhood Commercial) zone except laundromats/coin-operated ~~dry cleaning~~dry-cleaning establishments.

2. Retail Uses~~;~~:

a. Antique shop.

b. Appliance store.

c. Automobile accessories and parts.

d. Art gallery.

e. Bicycle shop.

f. Bookstore.

g. Cigar or tobacco store.

h. Clothing or apparel sales.

i. Confectionery store.

j. Department store.

~~k. Dress or millinery shop~~

k. Drugstore.

l. Electronics store.

m. Furniture store.

n. Grocery store.

~~n. Hobby shop.~~

o. Interior decorator.

p. Jewelry store.

q. Lapidary.

r. Motorcycle sales and accessories.

~~q. Notions store.~~

s. Pet shop, including grooming, but no kennel.

t. Photographic supplies.

~~u. Radio and television.~~

u. Restaurant without liquor sales.

v. Shoe store.

w. Sporting goods store.

x. Toy store.

y. Unfinished furniture sales (new).

z. Yardage store.

~~31~~3. Multi-tenant retail.

4. Service Businesses.

a. Bicycle repair shop~~;~~.

b. Blueprinting service~~;~~.

c. Business, trade schools~~;~~

d. Drafting service~~;~~

e. Drycleaning establishments.

f. Exhibition ha~~l~~ll, theater, auditorium~~;~~

~~f~~g. Hotels and~~,~~ motels~~;~~

~~g. Job printer;~~

h. Library or reading room~~;~~

i. Locksmith~~;~~

j. Medical or dental clinic~~;~~.

k. Microfilm service~~;~~.

~~1~~l. Mortuary~~;~~.

m. Photo studio~~;~~.

n. ~~n.~~ Private lodges, clubs, meeting halls~~;~~

o. Radio, television repair~~;~~

p. Rental of household, sickroom, and office equipment~~;~~.

q. Secretarial service~~;~~.

r. Shoe repair~~;~~.

s. Small appliance repair~~;~~.

t. Studio, dancing, music, art, etc.

u. Telephone answering service~~;~~.

v. Tuxedo/costume rental.

~~u. drycleaners~~

~~4~~5. Office uses of all types, including but not limited to the following:

a. Medical and dental offices~~;~~.

b. Administrative, business, executive and editorial.~~;~~

c. Professional offices.~~;~~

d. Financial, insurance, real estate offices, including banks and related institutions.~~;~~

e. General offices.

~~5~~6. Outdoor Uses. Only the following outdoor uses are permitted:

~~a. Automobile service stations, including self-service stations or self-service islands at a store, but only if such self-service establishments maintains restroom facilities for both sexes and water and air for the vehicles;~~

~~b. New and used automobile sales and mobile homemobilehome sales, provided that a ten-foot landscaped setback from the planned highway right-of-way line be maintained;~~

a~~c~~. Plant nurseries, provided that all areas devoted to outdoor storage of other than live plant material shall be completely screened from view from arterial highways and abutting residential properties. No bulk storage of sand, gravel, fertilizer, or other chemical or organic materials is permitted.~~;~~

~~d. Auto parking and loading area;~~

~~e. Storage yards; provided, that a ten (10) foot landscaped setback from planned street right-of-way be permanently maintained and that all outside storage shall be completely screened from view from streets, highways, and abutting properties. Bulk storage of sand, gravel or other materials which may be conveyed by wind onto adjacent properties shall be located within walled structures allowing enclosure on all sides.~~

7. Public Utility Facilities (City-initiated).

B. Accessory Uses. The following buildings, structures, and uses are permitted when clearly incidental and accessory to a primary permitted use:

1. Wholesaling of products.

2. The manufacturing, processing, treatment, or storage of products which is clearly incidental to the retail or service business conducted on the premises, provided that:

a. The premises are not the primary source of the production of goods sold on the premises.

b. Not more than twenty-five (25) percent of the ground floor area shall be used for such purposes.

c. No motor exceeding one horsepower be used for manufacturing, treatment, or processing in connection therewith, and that the total horsepower so used shall not exceed five horsepower. This restriction shall not apply to air conditioning equipment.

d. No portion of any building or premises so used shall be less than fifty (50) feet from any residential district.

3. Dwelling, where used by a proprietor, manager, or custodian of a use permitted within this zone~~, provided that the minimum floor area of such a dwelling shall be that which may be required in the R-M zone~~.

4. Signs as follows, subject to all provisions of Section 17.56.010 of this title:

a. One unlighted sign pertaining to the rental, sale, or lease of the premises, not to exceed twenty (20) square feet in area.

b. Advertising signs pertaining only to the goods and services sold on the premises, or to the name of the establishment. The total aggregate area of all signs pertaining to any one establishment shall be one hundred fifty (150) square feet for those establishments with less than one thousand five hundred (1,500) square feet of gross floor area, and two hundred fifty (250) square feet for those establishments with one thousand five hundred (1,500) or more square feet of gross floor area.

5. Canopies, arcades, carports, or similar shading devices.

6. Other accessory uses customarily appurtenant to a primary permitted use.

C. Conditional Uses. The following uses may be permitted in all sectors of the CG zone subject to obtaining a conditional use permit pursuant to Chapter 17.74.

1. Ambulance services.

2. Automobile accessories and parts.

3. Automotive repair garage as an accessory to automobile service station.

4. Automobile service stations, including self-service stations or self-service islands at a store, but only if such self-service establishments maintain restroom facilities for both sexes and water and air for the vehicles.

5. Bars and Cocktail Lounges.

6. Bowling, pool, or billiard centers.

7. Bus terminals, depots, and similar transit facilities.

8. Car washes.

9. Ceramic products manufacture.

10. Check Cashing services.

11. Commercial cannabis testing laboratories, pursuant to Chapter 17.85.

12. Commercial parking lots.

13. Commercial psychic activities.

14. Dance Halls.

15. Drive-in, walk-up, or other fast-food establishments.

~~16. Drycleaners~~

16. Engineering research and testing firms and laboratories.
17. Laundromat/coin operated laundry so long as a full-time attendant is provided.
18. Liquor sales, subject to Section 17.74.015.
19. Mattress manufacture.
20. Mini-Storage Warehouse as accessory to a permitted use.
21. Multi-bay auto repair.
22. Mortuaries.
23. Neighborhood recycling centers, pursuant to Chapter 17.90;
24. New and used automobile sales and mobilehome sales, provided that a ten-foot landscaped setback from the planned highway right-of-way line be maintained.
25. Non-storefront cannabis retailers and non-storefront retail microbusinesses, pursuant to Chapter 17.84.
26. Pawn shops.
27. Parcel or overnight delivery services.
28. Photocopying, photo processing and blueprinting.
29. Plumbing shop, provided all outside storage is completely screened.
30. Printing establishments.
31. Sign manufacture.
32. Special Event Establishments.
33. Taproom.
34. Tattoo and body piercing parlors.
35. Thrift stores (Reconditioned or used merchandise sales)
36. Tourist camps.
37. Truck, farm implement and machinery sales and rental, sale of parts.
38. Swap meet, indoor.
39. Swap meet, outdoor.

~~D. Area-Specific Conditional Uses. Because of unique or special constraints, the following uses may be permitted within certain specified sectors of the C-G (General Commercial) zone subject to obtaining a conditional use permit as specified in Section 17.74.010. Each use is followed by a general location designating areas within the C-G (General Commercial) zoning district where these applications may be approved.~~

~~1. North of Mitchell Drive and East of Frederick Street:~~

~~a. Automotive repair garage, body and fender works, within a completely enclosed building.~~

~~b. Upholstering and reupholstering establishments within a completely enclosed building.~~

~~c. Prohibited in all other areas.~~

~~2. North of the Highway 86/Highway III split or south of Avenue 52:~~

~~a. Mini-storage warehouses.~~

~~b. Storage yards:~~

~~(a) Building materials, retail sales.~~

~~(b) Lumber yards, retail sales.~~

~~(c) Equipment rental yards.~~

~~Prohibited in all other areas.~~

~~E~~D. Prohibited Uses. The following uses are prohibited in the C-G (General Commercial) zone:

1. Residential.

2. Mobilehomes.

(Prior code § 042.02)

(Ord. No. 1033, § 2, 1-11-12; Ord. No. 1065, § 2, 6-11-14; Ord. No. 1088, § 2, 12-14-16; Ord. No. 1108, § 1, 7-12-17; Ord. No. 1161-, § 2, 5-27-20)

17.26.030 Property development standards.

The following standards of development shall apply in the C-N (Neighborhood Commercial) zone:

A. Non-Residential Intensity.

1. Maximum FAR. 1.0.

B~~A~~. Lot Requirements.

1. Minimum Lot Size. Ten thousand (10,000) square feet; Parcels not contiguous to C-G (General Commercial) zoned property shall have a minimum area of five (5) acres.

2. Minimum Lot Width. Fifty (50) feet.

3. Minimum Lot Depth. None.

4. Maximum Lot Coverage. No limit.

~~B~~C. Yard Requirements.

1. Front Yard. Where one or both adjoining zones are residential, a yard shall be provided which is equal in depth to the average of the required front yards of the adjoining zones.

2. Side Yard. Where a C-G (General Commercial) zone adjoins a street or residential zone, there shall be a side yard of not less than ten (10) feet on the side or sides adjoining said street or residential zone. In the case of a reversed corner lot, the side yard adjoining the street shall be not less than the required front yard of the adjoining key lot to the rear.

3. Rear Yard. Where the C-G (General Commercial) zone adjoins a residential zone, there shall be a rear yard of not less than ten (10) feet adjoining that residential zone. This shall not apply where there exists a public alley separating the two zones.

4. Permitted Encroachments in Required Yards. The yards required in subsections 1—3 of this section may be used as part of an automobile parking area, provided however that a minimum three-foot wide screen planting strip shall be maintained adjacent to the planned highway right-of-way lines.

~~C~~D. Height Limits.

1. The maximum height of any building within one hundred thirty (130) feet of any residential zone shall be two stories or thirty-five (35) feet, whichever is less. Vehicular rights-of-way shall be included in calculating distance. The distance of one hundred thirty (130) feet is a minimum setback and setbacks requirements may be increased based on safety, privacy, views, noise, and light issues.

2. The maximum height of all other buildings shall be fifty (50) feet or three stories, whichever is less.

D. Distance Between Buildings. Buildings not actually joined, shall be provided with a minimum eight-foot separation.

E. Off-Street Parking And Loading. Off-street parking and loading facilities shall be provided in accordance with the provisions of Section 17.54.010.

F. Screening. Where the C-G (General Commercial) general commercial zone abuts any residential zone, there shall be provided screening not less than six feet or more than eight feet in height on the zone boundary line. Said screening shall be reduced to forty-two (42) inches in height within a required yard adjacent to a street or highway.

~~G. Other Property Development Standards.~~

~~1. Any structure originally designed or intended for residential purposes may be used for the purposes indicated below, subject to the following conditions:~~

~~a. The required front yard of the residential structure shall be permanently maintained in landscaping as defined in Section 17.60.010(D)(4).~~

~~b. All parking shall be provided to the rear of the residential structure.~~

~~c. All structures shall conform to all provisions of the applicable building, housing and fire codes of the city.~~

~~d. Signs permitted shall be limited to a total surface area of twenty (20) square feet.~~

~~e. No structure shall be used for residential and commercial uses at the same time.~~

~~f. The following uses shall be permitted:~~

~~(A) All uses permitted by Section 17.26.020(A)(4).~~

~~(B) Antique shop;~~

~~(C) Art gallery;~~

~~(D) Bather and beauty shop;~~

~~(E) Bookstore;~~

~~(F) Drafting service;~~

~~(G) Dressmaker;~~

~~(H) Gift shop;~~

~~(I) Hobby shop;~~

~~(J) Interior decorator;~~

~~(K) Knitting shop;~~

~~(L) Restaurant; and~~

~~(M) Tailor.~~

~~2. All uses shall be conducted entirely within a completely enclosed building, except for off-street parking and loading facilities, those outdoor uses permitted by Section 17.26.020(A)(5) and certain uses permitted subject to a conditional use permit by Section 17.26.020(C).~~

~~H~~G. Architectural Review. All development in the C-G (Ggeneral Ccommercial) ~~use~~ zone, is subject to architectural review as set forth in Section 17.72.010 of this title.

~~I~~H. Non-storefront retailer and non-storefront retail microbusiness. A non-storefront retailer or non-storefront retail microbusiness shall have a minimum of one hundred (100) feet separation from any residential structure; be at least five hundred (500) feet from any other storefront retail or non-storefront retail cannabis business; and may not be located in the City's Pueblo Viejo District. For purposes of this chapter, "Pueblo Viejo District" shall be that area in the city bounded by Cesar Chavez Street to the south, 1st Street to the west, Grapefruit Boulevard to the north, and 9th Street to the east.

(Prior code § 042.03)

(Ord. No. 1161-, § 3, 5-27-20)

Chapter 17.28 ~~C-T TOURIST COMMERCIAL~~ R-C REGIONAL COMMERCIAL ZONE

17.28.010 Intent and purpose.

This zone is intended to provide for and encourage ~~t~~a wide range of shopping and entertainment in a variety of urban and suburban formats. These include regional shopping centers, mixed destination centers or similar uses.~~he orderly development of commercial areas designed to serve the needs of tourists and the vacationing and motoring public, consistent with the overall development of the community. Such uses constitute an important an important activity to the community, and are vital to its health and well-being. The provisions of this zone are intended to insure that tourist commercial areas will be compatible with adjacent development.~~ The uses allowed in this zone will cater to regional clientele and provide a unique amenity to all residents of the Coachella Valley and an important revenue source for the City. Implementing the Regional Retail land use designation in the General Plan, the primary purpose of the zone is to provide for commercial opportunities, with residential uses supporting the retail environment.

(Prior code § 046.01)

17.28.020 Permitted uses.

The following uses are permitted in the ~~C-T~~R-C (Regional Commercial) zone, subject to all provisions of this chapter:

A. Primary Uses.

1. All retail establishments including big box retail (>35,000 square feet).

2. Automobile rental.

~~1~~3. Hotel.~~;~~

~~2~~4. Motel~~;~~.

~~3~~5. Resort.

~~4~~6~~3~~. Restaurants ~~without liquor sales.~~;

~~5. Retail establishments for the sale of souvenirs, curios, film, magazines and other products customarily provided to meet the needs of the public;~~

~~6~~7.

~~5. Exhibit hall, tourist centers;~~

~~6. Automobile club offices;~~

~~7. Outdoor Uses. Only the following outdoor uses are permitted:~~

~~a. Golf courses, driving ranges;~~

~~b.~~ Private s~~S~~wimming pools.~~;~~

~~7. Automobile rental;~~

~~8.~~ Public Utility Facilities (City-Initiated).

~~c. Automobile service station.~~

B. ~~Local service business~~ All uses permitted by S~~subsection A of this s~~ection 17.26.020 in Chapter 17.26~~the~~ C-G (General Commercial).

~~primarily intended to serve the immediate neighborhood, including the following:~~

~~a. Barber or beauty shop;~~

~~b. Drugstores;~~

~~c. Clothes cleaning and laundry pickup stations, laundromat, coin-operated dry-cleaning establishment;~~

~~d. Offices of physicians, dentists, optometrists, chiropractors, accountants, and realtors; and~~

~~e. Tailor, dressmaker.~~

~~B. Tourist-Related Uses. The following uses are permitted only where integrated with and clearly incidental to a primary use, and where part of a hotel or motel building, and where the intent is to serve the needs of tourists:~~

~~1. Barber or beauty shop;~~

~~2. Drugstores;~~

~~3. Tobacco, candy, newspaper and magazine counter;~~

~~4. Laundromat, clothes cleaning agency;~~

~~5. Travel agency;~~

~~6. Automobile rental agency office (no auto storage or service permitted.)~~

C. Accessory Uses. The following buildings, structures, and uses are permitted when clearly incidental and accessory to primary permitted use:

1. Dwelling, where used by a proprietor, manager, or custodian of a use permitted within this zone~~, provided that the minimum floor area of such a dwelling shall be that which may be required in the R-M zone~~.

2. Ice vending machines, of three-ton capacity or less subject to all other provisions of this zone. Such machines shall be located so as not to interfere with the movement of traffic on the site.

~~3. Recreational buildings, structures, and uses designated to serve the patrons of primary permitted use.~~

~~4. Signs as follows, subject to all provisions of Section 17.56.010 of this title.~~

~~a. One unlighted sign pertaining to the rental, sale, or lease of the premises, not to exceed twenty (20) square feet in area.~~

~~b. Advertising signs pertaining to the goods and services sold on the premises, or to the name of the establishment. The total aggregate area of all signs pertaining to any one establishment shall be two hundred fifty (250) square feet.~~

~~5. Other accessory uses customarily appurtenant to a primary permitted use.~~

D. Conditional Uses. The following uses may be permitted the ~~C-T~~R-C (Regional Commercial) zone subject to obtaining a conditional use permit as specified in Section 17.74.010.

1. Amusement center or theme park.

2. Automotive repair garage as an accessory to automobile service station.

3. Automobile service station.

4. Bars and Cocktail lounges.

5. Billiard parlor.

~~6~~3. Bowling alley~~;~~.

~~7~~67. Bus terminals, depots, and similar transit facilities.~~;~~

~~8~~78. Car washes as part of a multi-tenant retail center.~~;~~

9. Commercial Parking Lot.

10. Drive-in or walk-up or other fast-food service establishments.

11. Exhibition hall, conference center, theater, amphitheater, auditorium.

12. Golf courses, driving ranges.

13. Hospital Uses.

~~6~~14. Liquor sales, subject to Section 17.74.015;

~~8~~159. Medical offices.~~Tourist camps;~~

16. Microbreweries and taproom.

17. Mini-storage warehouse as an accessory to a permitted use.

18. Multiple-family residential (5+ units).

19. New and used automobile sales and recreational vehicle sales.

~~18~~20. Recreational vehicle storage as an accessory to a permitted use.~~;~~

21. Restaurants with liquor sales.

22. Skating rinks.

23. Special event establishments.

~~2~~14. Sports Complex.~~;~~

25. Theater, including drive-in.

(Prior code § 046.02)

(Ord. No. 1088, § 3, 12-14-16)

17.28.030 Property development standards.

The following standards of development shall apply in the R-C (Regional Commercial) zone:

~~A~~ A. Residential Density and Non-Residential Intensity.

1. Minimum Density. 10 dwelling units/acre, when residential uses are provided.

2. Maximum Density. 15 dwelling units/acre.

3. Maximum Non-Residential FAR. 2.0.

B. Residential uses shall follow the development standards in Section 17.14.030 for multi-family uses and the City of Coachella Multifamily Objective Design Standards.

C. Lot Requirements.

1. Minimum Lot Size. The minimum lot size shall be twentyen thousand (210,000) square feet for commercial uses.

2. Minimum Lot Width. None.

3. Minimum Lot Depth. None.

4. Maximum Lot Coverage. None.

DB. Yard Requirement.

1. Front Yard. Each lot or building site shall have a front yard of at least fifteen (15) feet in depth, except where one or both adjoining zones are residential, in which case the required yard shall be increased to equal the average of the required front yards of the adjoining zones.

2. Side Yard. There shall be no side yard requirement except where a C-TR-C (Regional Commercial) zone adjoins a street or a residential zone, in which case there shall be a side yard of not less than ten (10) feet on the side or sides adjoining said street or residential zones. In the case of a reversed corner lot, the side yard adjoining the street shall be not less than the required front yard of the adjoining key lot to the rear.

3. Rear Yard. There shall be no rear yard requirement except where the C-TR-C (Regional Commercial) zone adjoins a residential zone, in which case there shall be a rear yard of not less than ten (10) feet adjoining that residential zone. This shall not apply where there exists a public alley separating the two zones.

4. Permitted Encroachments in Required Yards.

   a. The yards required in subsections 1—3 of this section may be used as part of an automobile parking area, provided however that a minimum three-foot wide screen planting strip shall be maintained adjacent to the planned highway right-of-way line.

   b. Swimming pools provided as an accessory use to a hotel or motel may encroach into the rear two-thirds of the required front yard.

C. Height Limits.

1. The maximum height of any building located within one hundred fifty (150) feet of any R-S, single-family residential zone, or any agricultural zone, shall be one story or twenty (20) feet, whichever is less. Vehicular rights-of-way shall be included in calculating the distance.

2. The maximum height of all other buildings shall be two stories or thirty-five (35) feet, whichever is less, except that hotels shall have a maximum height of eighty-five (85) feet.

D. Distance Between Buildings. No requirements, except that buildings not actually adjoining shall be provided with a minimum eight footeight-foot separation.determined through site plan review.

E. Off-Street Parking and Loading. Off-street parking and loading facilities shall be provided in accordance with the provisions of Section 17.54.010.

F. Screening. Where the C-T zone abuts upon a residential zone, there shall be provided screening not less than six feet, or more than eight feet in height on the zone boundary line. Said screening shall be reduced to forty-two (42) inches in height within a required yard adjacent to a street or highway.

G. Other Property Development Standards.

1. All uses shall be conducted entirely within a completely enclosed building, except for off-street parking and loading facilities, those outdoor uses permitted by Section 17.28.020(A)(7), and certain uses permitted subject to a conditional use permit by Section 17.28.020(D).

2. No building or structure having exterior walls of sheet metal shall be erected in this zone.

H. Architectural Review. All development in the ~~C-T Tourist~~R-C (Regional Commercial) Zone, is subject to architectural review as set forth in Section 17.72.010 of this title.

(Prior code § 046.03)

Chapter 17.30 M-S MANUFACTURING SERVICE ZONE

17.30.010 Intent and purpose.

This zone is intended to provide for and encourage the orderly development of light manufacturing, wholesaling, and commercial service within the community. Such areas are vital to the community's economic health and well-being by providing employment and an important revenue source for the city. The provisions of this zone are intended to ~~insure~~ ensure that manufacturing service areas will be compatible with adjacent, non-industrial development and will protect such areas from potential hazards of industrial development.

(Prior code § 050.01)

17.30.020 Permitted uses.

The following uses are permitted in the M-S (Manufacturing Service) zone subject to all provisions of this chapter.

A. Primary Uses.

1. Automotive repair garage, body and fender works, within a completely enclosed building.
2. Bakery.
3. Boat building.
4. Bottling plant.
5. Cabinet shop.
6. Carpet cleaning plant.
7. Ceramic products manufacture.
8. Cleaning and dyeing plant.
9. Dairy products processing.
10. Drugs manufacture.
11. Electrical, electronic, or electro-mechanical machinery manufacturing.
12. Engineering research and testing firms and laboratories.
13. Food products processing, manufacturing, canning, preserving, and freezing.
14. Fruit and vegetable packing house.
15. Furniture manufacturing, refinishing.
16. Garment manufacture.
17. Glass manufacture.
18. Ice and cold storage plant.
19. Laboratories. Experimental, testing, motion picture.
20. Laundry.

21. Machine shop.
22. Metalworking, fabrication, or welding firm.
23. Newspaper printing plants.
24. Parcel delivery services.
25. Photo-engraving, photocopying, photo-processing, and blueprinting.
26. Plastic, fabrication firm.
27. Plumbing shop.
28. Prefabricated buildings manufacture.
29. Printing establishments.
30. Sales and rental of trucks, autos, farm machinery and implements, and truck and auto parts.
31. Sheet metal shop.
32. Sign manufacture.
33. Textile manufacture.
34. Tire rebuilding, recapping, and retreading.
35. Trailer, camper, mobilehome manufacturer or assembly.
36. Upholstering and reupholstering.
37. Wholesale business, storage buildings, and warehouses.
38. Woodworking shop.
39. Storage yards:
    a. Contractors' storage yards.
    b. Building materials
    c. Lumber yards.
    d. Machinery, truck rental yards.
    e. Draying and freight yard.
    f. Truck terminal.
40. Retail sales.
41. Restaurant.
42. Emergency shelters complying with the following criteria.
    a. Emergency shelters shall be operated by a responsible agency or organization, with experience in managing or providing social services.
    b. The shelter shall provide at least one qualified on-site supervisor at all times, plus one attendant for each fifty (50) occupants.
    c. A shelter shall not be approved when another homeless shelter ~~is existing~~exists within three hundred (300) feet of the proposed site.

d. Emergency shelters shall provide a setback of thirty (30) feet from the shelter building to any residential zone.

e. Parking shall be supplied at a ratio of one vehicle space per ten (10) beds, and one secured bicycle parking area designed to accommodate up to one bicycle per ten (10) beds.

f. Each shelter shall be limited to a maximum occupancy of fifty (50) persons, including warming shelters and daytime facilities.

g. A management plan shall be required to address how the immediate sheltering needs of individuals who may be turned away from the shelter will be handled. The management plan shall establish a maximum length of time for which clients may be accommodated.

43. Public Utility Facilities (City-Initiated).

B. Accessory Uses. The following buildings, structures, and uses are permitted when clearly incidental and accessory to a primary permitted use:

1. Detached dwelling, where used by a proprietor, manager, or custodian of a use permitted within this zone.~~;~~

2. Retail distribution of products produced on the premises (where not the primary retail outlet for said products).~~;~~

3. Storage of equipment, materials, finished products, or refuse basic to operations of a permitted use~~;~~.

4. Signs as follows, subject to all provisions of Section 17.56.010 of this title:

a. One unlighted sign pertaining to the rental, sale, or lease of the premises, not to exceed twenty (20) square feet in area.~~;~~

b. Advertising signs pertaining to the goods and services sold on the premises, or to the name of the establishment. The total aggregate area of all signs pertaining to any one establishment shall be two hundred (200) square feet~~;~~.

5. Other accessory uses customarily appurtenant to a primary permitted use.

C. Conditional Uses. The following uses may be permitted in the M-S (Manufacturing Service) zone subject to obtaining a conditional use permit as specified in Section 17.74.010.

1. Automotive repair garage as an accessory to automobile service station.

2. Breweries and Distilleries.

3. Cotton gins, oil mills, vegetable oil plants.

4. Exterminating or disinfecting service firm.

5. Metal plating.

6. Mini storage warehouse.

7. Non-storefront cannabis retailers and non-storefront retail microbusinesses, pursuant to Chapter 17.84.

8. Oil cloth or linoleum manufacture.

9. Paint, oil, shellac, turpentine, or varnish manufacture.

10. Plastic manufacture.

11. Planing mills.

12. Poultry dressing and packaging.

~~17~~13. Recreational Vehicle Storage. ~~subject to Development Agreement to ensure the use is revenue generating.~~ Such uses as standalone uses shall not exceed fifteen percent of the M-S Zone.

14. Restaurant with cocktail lounge.

15. Service stations.

16. Stone monument works.

17. Taproom.

18. Tattoo and body piercing parlors.

19. Wire and wire products manufacture.

D. Industrial-Related Uses. Certain non-industrial uses are functionally related to industrial areas. The following uses are permitted only when ~~re~~ intended to serve industrial areas and employees.

1. Restaurants and coffee shops~~;~~.

2. Industrial hospitals or clinics~~; and~~ .

3. Industrial training center.

(Ord. 925 § 1, 2005; Ord. 918 § 1, 2005; prior code § 050.02)

(Ord. No. 1033, § 3, 1-11-12; Ord. No. 1051, § 2, 5-22-13; Ord. No. 1161~~-~~, § 4, 5-27-20)

17.30.030 Property development standards.

The following standards of development shall apply in the M-S (Manufacturing Service) zone:

A. Non-Residential Intensity.

1. Maximum FAR. 1.0.

~~A~~B. Lot Requirements.

1. Minimum Lot Size. Ten thousand (10,000) square feet.

2. Minimum Lot Width. None.

3. Minimum Lot Depth. None.

4. Maximum Lot Coverage. None.

~~B~~C. Yard Requirements. None, except in the following instances:

1. Where an M-S (Manufacturing Service) zone abuts upon a street or highway where two-thirds of the property in the block on the opposite side of the street is zoned residential, a yard shall be provided of ten (10) feet in depth.

2. Where an M-S (Manufacturing Service) zone abuts upon a street or highway and where one or both adjoining zones are residential, a yard shall be provided which is equal in depth to the average of the required yards of the adjoining zones.

3. Where an M-S (Manufacturing Service) zone abuts upon a Major Arterial, Major Arterial with Enhanced Bicycle Facilities, Primary Arterial, and Primary Arterial with Enhanced Bicycle Facilities ~~primary highway~~ as designated on the circulation element of the general plan, a yard ~~shall be provided~~ of ten (10) feet in depth shall be provided.

4. Where an M-S (Manufacturing Service) zone directly abuts a residential zone, there shall be a yard of not less than thirty (30) feet adjoining that zone. This shall be reduced to twenty (20) feet where there exists a public alley separating the two zones.

5. Permitted Encroachments in Required Yards. The yards required in subsections 1—3 of this section may be used as part of an automobile parking area, provided however that a minimum three-foot wide screen planting shall be maintained adjacent to the planned highway right-of-way line.

~~C~~D. Height Limits.

1. The maximum height of any buildings or structures located within one hundred fifty (150) feet of any residential zone shall be two stories or thirty-five (35) feet, which ~~-~~ever is less. Vehicular rights-of-way shall be included in calculating distance.

2. The maximum height of all other buildings or structures shall be fifty (50) feet.

~~D~~E. Distance Between Buildings. No requirements, except that buildings not actually adjoining shall be provided with a minimum eight-foot separation.

~~E~~F. Off-Street Parking and Loading. Off-street parking and loading facilities shall be provided in accordance with the provisions of Section 17.54.010.

~~F~~G. Walls and Screening.

1. Where an M-S (Manufacturing Service) zone abuts upon any residential zone there shall be provided a solid masonry wall not less than six feet nor more than eight feet in height along the zone boundary. Said wall shall be reduced to forty-two (42) inches in height within a required yard adjacent to a street or highway.

2. Where property in an M-S (Manufacturing Service) zone is used for operations incidental to a primary permitted use, as a storage yard, or where material necessary to the conduct of a primary permitted use is stored outside, there shall be provided screening not less than six feet or more than eight feet in height. Said screening shall screen storage areas from adjacent residential and/or commercial zones.

~~G~~H. Other Property Development Standards.

1. No structure originally designed or intended for residential purposes shall be occupied by uses permitted in this zone, except when used as a dwelling by a proprietor, manager or custodian or custodian of a permitted use.

2. No use shall be established in any M-S (Manufacturing Service) zone which causes or emits any dust, gas, smoke, fumes, odors, noises, vibrations, electromagnetic disturbance, radiation, or other similar effects which are or may be detrimental to the public health, safety, or general welfare. All uses shall be continuously maintained so that they are neither obnoxious ~~or~~nor offensive by reason of the above emissions.

3. All lot area not in use by buildings shall be paved, planted, or otherwise surfaced to eliminate dust. Use of gravel, decomposed granite and similar materials is permitted, subject to continuous maintenance in a neat and sightly manner. Use of oil is permitted only where treated areas will not be visible from public streets, or adjacent residential or commercial zones. Yards and off-street parking and loading areas shall be treated as required in this title.

~~I~~H. Architectural Review. All development in the M-S~~,~~ (Manufacturing Service) z~~Z~~one~~,~~ is subject to architectural review as set forth in Section 17.72.010 of this title.

J~~I~~. Non-storefront retailer and non-storefront retail microbusiness. A non-storefront retailer or non-storefront retail microbusiness shall have a minimum of one hundred (100) feet separation from any residential structure; be at least five hundred (500) feet from any other storefront retail or non-storefront retail cannabis business; and may not be located in the City's Pueblo Viejo District. For purposes of this chapter, "Pueblo Viejo District" shall be that area in the city bounded by Cesar Chavez Street to the south, 1st Street to the west, Grapefruit Boulevard to the north, and 9th Street to the east.

(Prior code § 050.03; Ord. No. 1161-, § 5, 5-27-20)

Chapter 17.32 M-H HEAVY INDUSTRIAL ZONE

17.32.010 Intent and purpose.

This zone is intended to provide for and encourage the orderly development of heavy industrial areas within the community. Such areas are vital to the community's health and well-being and must be protected from intrusion by dwellings and inharmonious commercial uses. Such areas are vital to the community's economic health and well-being by providing employment and an important revenue source for the city. The provisions of this zone are intended to provide an industrial environment which will be compatible with the inherent characteristics of heavy industry, and also to provide proper safeguards and appropriate transition for surrounding land uses.

(Prior code § 055.01)

17.32.020 Permitted uses.

The following uses are permitted in the M-H (Heavy Industrial) zone subject to all provisions of this chapter.

A. Primary Uses.

1. All uses permitted by Section 17.30.020 of the M-S (Manufacturing Service) zone, except emergency shelters.~~;~~
2. Blacksmith shop~~;~~.
3. Cotton gins, oil mills, vegetable oil plants~~;~~.
4. Exterminating or disinfecting service firm~~;~~.
5. Glass manufacture~~;~~.
6. Hemp products manufacture~~;~~.
7. Heavy metals fabrication~~;~~.
8. Oil cloth or linoleum manufacture~~;~~.
9. Oil Paint, oil, shellac, turpentine, or varnish manufacture~~;~~.
10. Paper, pulp manufacture~~;~~.
11. Plastic manufacture~~;~~.
12. Planing mills~~;~~.
13. Poultry dressing and packaging.~~;~~
14. Public Utility Facilities (City-initiated).
~~14~~15. Railroad yards, repair shops.~~;~~
~~15~~16. Salt works.~~;~~
~~16~~17. Slaughterhouses.~~;~~
18~~7~~. Soap manufacture.~~;~~
19~~8~~. Stone monument works.~~; and~~
20~~19~~. Wire and wire products manufacture.

B. Accessory Uses. The following buildings, structures and uses are permitted when clearly incidental and accessory to a primary permitted use:

1. Detached dwelling, where used by a proprietor, manager, or custodian or a use permitted within this zone.~~;~~
2. Retail distribution of products produced on the premises where not the primary retail outlet for said products.~~;~~
3. Signs as permitted in the M-S (Manufacturing Service) zone.~~;~~
4. Storage of equipment, materials, finished products, or refuse basic to operations of a permitted use.~~; and~~
5. Other accessory uses customarily appurtenant to a primary permitted use.

C. Conditional Uses. The following uses may be permitted in the M-H (Heavy Industrial) zone subject to obtaining a conditional use permit pursuant to Chapter 17.74.

1. Acid manufacture.~~;~~
2. Animal (including fish) products manufacture or processing.~~;~~
3. Asphalt or asphaltic concrete manufacturing plants.~~;~~
4. Borrow pits.~~;~~
5. Brick yards.~~;~~
6. Breweries and alcoholic beverage manufacture~~;~~.
7. Bulk distributing stations—Hazardous materials~~;~~.
8. Cement block, concrete block manufacture, storage yards~~;~~.
9. Concrete ready-mix plants~~;~~.
10. Community recycling collection facilities, pursuant to Chapter 17.90~~;~~.
11. Creosote manufacture~~;~~.
12. Distillation of alcohol, bones, coal, coal tar, coke, wood~~;~~.
13. Drop forge industries~~;~~.
14. Explosives or fireworks manufacture~~;~~.
15. Feed yards, feed mills~~;~~.
16. Foundry~~;~~.
17. Gas manufacture, including but not limited to chlorine and other noxious gases.~~;~~
18. Glue manufacture.~~;~~
19. Livestock sales and feed yards.~~;~~
20. Lamp black manufacture.~~;~~
21. Prison, jail, correctional facility, or detention facility.~~;~~
22. Quarries.~~;~~
23. Rock crushing operations.~~;~~
24. Smelting operations.~~;~~

25. Tannery.~~;~~

26. Tar distillation or tar products manufacture.~~;~~

27. Transfer station, small scale, pursuant to Chapter 17.90.~~;~~

28. Winery.~~;~~

29. Non-storefront cannabis retailers and non-storefront retail microbusinesses, pursuant to Chapter 17.84.

30. Recreational Vehicle Storage ~~subject to Development Agreement to ensure the use is revenue generating. Such uses as~~such that standalone uses shall not exceed fifteen percent of the M-H Zone.

31. All conditional uses permitted by Section 17.30.020 of the M-S (Manufacturing Service) zone.

D. Industrial-Related Uses. Certain nonindustrial uses are functionally related to industrial areas. The following uses are permitted only where intended to serve industrial areas and employees.

1. Restaurants and coffee shops.~~;~~

2. Industrial hospital or clinics~~; and~~ .

3. Industrial training center.

(Prior code § 055.02)

(Ord. No. 1051, § 3, 5-22-13; Ord. No. 1065, § 3, 6-11-14)

(Ord. No. 1161~~-~~, § 6, 5-27-20)

17.32.030 Property development standards.

The property development standards of Section 17.30.030 shall apply to all M-H (Heavy Industrial) zones.

(Prior code § 055.03)

Chapter 17.34 M-W WRECKING YARD ZONE

17.34.010 Intent and purpose.

This zone is intended to provide for, and to encourage the orderly development of heavy industrial uses and recycling operations deemed to be of regional significance, but of such nature that extra care must be taken in the regulation of said uses to protect the community's health and wellbeing, and where said uses are subject to aesthetic and environmental conditions which require the provision of safeguards to control and suppress some of the heavier manifestations of said uses to prevent adverse effects on the community.

(Prior code § 057.01; Ord. No. 1065, § 4, 6-11-14)

17.34.020 Permitted uses.

The following uses are permitted in the M-W (Wrecking Yard) zone subject to all provisions of this chapter.

A. Primary Uses.

1. All uses permitted by Section 17.32.030(A) of the M-H (Heavy Industrial) zone.

B. Accessory Uses. The following buildings, structures, and uses are permitted when clearly incidental and accessory to a primary permitted use.

1. Those uses permitted by Section 17.32.020(B) of the M-H (Heavy Industrial) zone.

C. Conditional Uses. The following uses may be permitted in the M-W (Wrecking Yard) zone subject to obtaining a conditional use permit pursuant to Chapter 17.74 of this code.

1. Those conditional uses allowed by Section 17.32.020(C) in the M-H (Heavy Industrial) zone.

2. Automobile dismantling or wrecking yard.

3. Automobile impounding yard.

4. Community recycling collection facilities, pursuant to Chapter 17.90.

5. Construction and demo material recycling facilities pursuant to Chapter 17.90.

6. Wood and green waste recycling facilities, pursuant to Chapter 17.90.

7. Cannabis cultivation, manufacturing, distribution, testing, non-retail microbusiness, non-storefront retail, non-storefront retail microbusiness, storefront retail, and storefront retail microbusiness, facilities, pursuant to Chapters 17.84 and 17.85.

D. The following uses may be permitted in the M-W (Wrecking Yard) zone subject to obtaining a specific plan adoption pursuant to Chapter 17.36 of this code.

1. Transfer station, large scale, pursuant to Chapter 17.90.

(Prior code § 057.02; Ord. No. 1065, § 4, 6-11-14)

(Ord. No. 1083, § 2, 1-27-16; Ord. No. 1140, § 2(Exh. A), 7-10-19; Ord. No. 1161, § 7, 5-27-20)

17.34.030 Property development standards.

The following standards of development shall apply in the M-W (Wrecking Yard) zone:

A. Non-Residential Intensity.

1. Maximum FAR. 0.5.

~~A~~B. Lot Requirements.

1. Minimum Lot Area. Ten thousand (10,000) square feet.
2. Minimum Lot Width. One hundred (100) feet.
3. Minimum Lot Depth. One hundred (100) feet.
4. Maximum Lot Coverage. None.

~~B~~C. Yard Requirements and Height Limits. The yard requirements and height limits as set forth in Section 17.30.030(B) and (C), respectively, shall apply in the M-W (Wrecking Yard) zone.

~~C~~D. Enclosure Required. All operations and storage, including all equipment used in conducting an automobile dismantling or junk and salvage business, other than parking, shall be conducted within an enclosed building, or within an area enclosed by screening.

~~D~~E. Requirements for Screening. Where screening is provided, it shall be developed as provided in this chapter:

1. All screening shall be of a uniform height in relation to the ground upon which it stands~~,~~ and shall be a minimum of eight feet and shall not exceed ten (10) feet in height. Where screening exceeds a height of eight feet and is located on street or highway frontages, it shall be set back at least three feet from the lot line. The area between the screening and the lot line shall be fully landscaped.
2. Two gates not less than eight feet in height and not more than twelve (12) feet in width each, may be installed at a convenient place in said screening. Such gates shall be kept closed when not in use. Such gates shall be of material and color compatible with said screening.

~~E~~F. Paving. All driveways, fire lanes, or other access ways shall be paved with an asphalt surfacing or an oil and aggregate mixture to prevent emission of dust or tracking of dust and mud onto public rights-of-way, provided however, the ~~planning commission~~Planning Commission may approve other paving materials while provide, in their opinion, the equivalent in service and useful life.

~~F~~G. Parking Spaces.

1. Regardless of the size of the yard area, a minimum of six parking spaces shall be provided.
2. The parking spaces required herein shall not be used for the parking of vehicles used directly in the conducting of such use or of renovated, repaired, or reassembled vehicles which are owned, operated or in the possession of the proprietor of the automobile dismantling yard, or junk and salvage yard.

~~G~~H. Landscaping. At least two square feet of landscaping shall be provided for each lineal foot of street frontage and said landscaping shall be developed in accordance with a site plan that complies with the following criteria:

1. Landscaping shall be distributed along said frontage in accordance with the site plan approved by the planning commission.
2. No planting area shall have a horizontal dimension of less than three feet.

3. A permanent watering system or hose bibs shall be provided which satisfactorily irrigates all planted area. When hose bibs are utilized, they shall be located not more than twenty-five (25) feet apart.

4. All landscaped areas shall be continuously and properly maintained in good condition.

~~H~~I. Junk Outside Yard. No wrecked or dismantled vehicles, salvage or junk shall be placed or allowed to remain outside of the enclosed yard area.

~~I~~J. Junk Exceeding Height of Wall. No wrecked or dismantled vehicles, salvage or junk shall be stored at a height greater than that of the surrounding screening.

~~J~~K. Architectural Review. All development in the M-W~~,~~ (W~~w~~recking Y~~y~~ard) zone, is subject to architectural review as set forth in Section 17.72.010 of this title.

~~K~~L. Non-storefront retailer and non-storefront retail microbusiness. A non-storefront retailer or non-storefront retail microbusiness shall have a minimum of one hundred (100) feet separation from any residential structure; be at least five hundred (500) feet from any other storefront retail or non-storefront retail cannabis business; and may not be located in the City's Pueblo Viejo District. For purposes of this chapter, "Pueblo Viejo District" shall be that area in the city bounded by Cesar Chavez Street to the south, 1st Street to the west, Grapefruit Boulevard to the north, and 9th Street to the east.

(Prior code § 057.03)

(Ord. No. 1161~~-~~, § 8, 5-27-20)

Chapter 17.35 O-S OPEN SPACE ZONE

17.35.010 Intent and purpose.

The purpose of the Open Space zone is to provide opportunities for outdoor recreation and meet the recreational needs of City residents, and to provide land for development of parks, recreation, and open space that provide services to the community and support existing and new residential, commercial, and industrial land uses.

This zone also reserves areas for passive recreation, open space, habitat protection and enhancement, and hazard avoidance. This zone includes the City's public and private open space, golf courses and support structures. This zone implements the Parks and Open Space land use designation in the General Plan.

17.35.020 Permitted uses.

The following uses are permitted in the O-S (Open Space) zone subject to all provisions of this chapter.

A. Primary Uses.

1. Athletic fields, unlighted.
2. Open space, natural.
3. Parks and recreation facilities.
4. Preserved lands.
5. Public Utility Facilities (City-initiated).

B. Accessory Uses. The following buildings, structures, and uses are permitted when clearly incidental and accessory to a primary permitted use.

1. Kiosks.
2. Parking lots.
3. Playground equipment.
4. Swimming pools.

C. Conditional Uses. The following uses may be permitted in the O-S (Open Space) zone subject to obtaining a conditional use permit pursuant to Chapter 17.74 of this code.

1. Athletic fields, lighted.
2. Campground.
3. Special events.
4. Outdoor theaters.

17.35.030 Property development standards.

A. Lot Requirements.

1. Minimum Lot Area. Minimum lot area sufficient to accommodate all required parking, setbacks, landscaping, loading, trash enclosures and access requirements.
2. Minimum Lot Width. Not established.
3. Minimum Lot Depth. Not established.

4. Maximum Lot Coverage. 25%.

B. Yard Requirement.

1. Front Yard. Each lot or building site shall have a front yard of at least twenty five (25) feet in depth, except where one or both adjoining zones are residential, in which case the required yard shall be increased to equal the average of the required front yards of the adjoining zones.

2. Side Yard. There shall be no side yard requirement except where a O-S zone adjoins a street or a residential zone, in which case there shall be a side yard of not less than ten (10) feet on the side or sides adjoining said street or residential zones. In the case of a reversed corner lot, the side yard adjoining the street shall be not less than the required front yard of the adjoining key lot to the rear.

3. Rear Yard. There shall be no rear yard requirement except where the O-S zone adjoins a residential zone, in which case there shall be a rear yard of not less than ten (10) feet adjoining that residential zone. This shall not apply where there exists a public alley separating the two zones.

4. Permitted Encroachments in Required Yards.

a. The yards required in subsections 1—3 of this section may be used as part of an automobile parking area, provided however that a minimum three-foot wide screen planting strip shall be maintained adjacent to the planned highway right-of-way line.

b. Swimming pools provided as an accessory use may encroach into the rear two-thirds of the required front yard.

C. Height Limits.

1. The maximum height of all buildings shall be two stories or thirty (30) feet, whichever is less.

F. Parking Spaces.

1. Off-street parking and loading facilities shall be provided in accordance with the provisions of Section 17.54.010.

Chapter 17.36 SPECIFIC PLAN DISTRICT

17.36.010 Intent and purpose.

The purpose of this district includes the following:

A. To encourage the planned development of parcels and to permit comprehensive site planning and building design;

B. To provide a more flexible regulatory procedure by which the basic public purpose of the ~~c~~City's general plan and the ~~c~~City's zoning code may be accomplished;

C. To encourage creative approaches to the use of land through variation in siting of buildings and the appropriate mixing of several land uses, activities, and dwelling types;

D. To enhance the appearance and living environment of the community through encouragement of creative approaches to the use of land and the design of facilities;

E. To promote and create public and private open space as an integral part of land development design;

F. To reduce, when appropriate, the amounts of public and private improvements normally required by developments;

G. To maximize choice in types of environments available in the city; and

H. To encourage private development of older areas of the city and for the enhancement and preservation of property with unique features, such as property having historical significance, unusual topography, and landscape features.

(Prior code § 058.01)

17.36.020 General requirements for a specific plan proposal.

A. Property that is held in single or multiple ownerships may be considered for a specific plan. The city, property owner or his or her representative may initiate the specific plan proposal. Components of the specific plan shall include the submittal of a development plan and text. Land development within the specific plan area shall be initiated and completed by the applicant or his or her agents, whichever the case may be. Unless otherwise provided in the approval of the specific plan, the applicant may divide and transfer units within the specific plan area, provided the total density permitted by the specific plan is not exceeded. The applicant or his or her agent shall complete, use, and maintain the development in strict accordance with the specific plan and subsequent conditions of approval as required. To be in addition to; in concert with etc.

B. All provisions of this district are supplemental to the city's subdivision ordinance. Any site plans and/or maps contemplated for the specific plan area or for portions thereof may be processed concurrently with the specific plan as specified under this chapter.

(Prior code § 058.02)

17.36.030 General provisions and standards for a specific plan district.

The following provisions shall apply in this specific plan district, together with all other applicable provisions of the city's zoning and subdivision ordinances. Where conflict in a regulation occurs, the regulations specified in this district or in an approved specific plan shall supersede and apply:

A. Specific plan zones may be established pursuant to the regulations and requirements specified in the specific plan district ordinance codified in this appendix to the Municipal Code. It is the intent of the individual specific plan zones to provide innovative development plan design and development standards in which development standards may vary between specific plan zones.

B. The specific plan shall consist of a development plan and text material and is recognized as a guide to the developers and designers of land use plans for the property. The development standards are, in effect, performance standards, the ramifications of which become manifest when a site plan has been drawn.

C. Specific plan zones may be established on parcels of land which are suitable for and of sufficient size to be planned and developed in a manner consistent with the purposes of this district. Such suitability and scope shall be reviewed and approved by the ~~planning commission~~Planning Commission and shall be in accordance with the general plan.

D. The purpose of this district may be accomplished only upon satisfactory demonstration by the applicant that the specific plan is in conformance with the intent of the city's general plan and any element thereof, and in accordance with other applicable plans and policies adopted by the city.

E. Specific plans may combine several land uses on the development plan. Mixed uses may include any combination of residential, commercial, industrial, open space and agricultural uses, and may occur among or within buildings as long as the uses are compatible with each other and with existing and potential uses surrounding the specific plan zone.

F. Standards for building coverage, light and air orientation, building height, sign placement and design, yard requirements, open spaces, off-street parking, and screening for specific plan uses and other specified standards shall be governed by the development standards set forth in the specific plan and subsequent documents.

G. The provision of public and private open space, as an integral part of land development planning and design, is set forth as a purpose of this specific plan district. The specific plan shall contain criteria providing for open space and performance standards for the improvement and maintenance of required open space.

H. All electrical and telephone facilities, fire alarm conduits, street light wiring, cable television, and other wiring, conduits or facilities shall, where feasible, be placed underground. Electric and telephone facilities shall be installed in accordance with standard specifications of the serving utilities.

I. Standards for private and public improvements shall be governed by the specific plan and may vary from adopted city standards.

(Prior code § 058.03)

17.36.040 Definitions.

For the purpose of this chapter, the following words and phrases shall have the meaning indicated:

"Applicant" means the party filing the application for and requesting a specific plan zone designation for particular parcels) of land. The applicant may be the city, a property owner or a group of property owners or their designated representative for the particular parcel(s) of land for which the specified plan zone is requested.

"Building permit" means a permit issued by the city that allows the building of a structure, according to the specified conditions of the permit, where located on the approved grading plan.

"Conceptual" means a working combination of land uses and development intensities designed as a mandatory component of the draft specific plan.

"Criteria" means the actual means employed to review and judge the effectiveness of the specific plan.

"Dedicated" means land, improvements, or both, dedicated by the landowner or developer to a public or quasi-public agency thereby releasing certain obligations from the ~~land owner~~landowner or developer.

"Development plan" means a mandatory requirement of the specific plan identifying areas on a map proposed for various land uses, backbone circulation systems, public use areas, open space areas, major landscape features and other general items as required by the city.

"Development standards" means a set of customized standards devised for the purpose of guiding and controlling future development on the property to ensure compliance with the proposed character of design described in the specific plan. They may be developed for a particular project or reference existing zoning districts.

"Draft specific plan" means a preliminary compilation of specific plan components, including conceptual plans of the development plan and an outline of the text material, the purpose of which is to expose the development concept and to solicit city responses and comments on the development concept.

"Environmental studies" includes various requirements of the California Environmental Quality Act.

"Final specific plan" means a final representation of the proposed development for a specific plan area that includes the information required by the city. The final specific plan, as approved by the ~~planning commission~~Planning Commission and ~~city council~~City Council, shall be considered an official zoning document for parcel(s) with approved specific plan (SP) zoning as placed on the official zoning map.

"Grading permit" means a permit issued by the city that allows grading to occur, according to the specified conditions of the permit, on the terrain of the specific plan area.

"Performance standards" means the development standards provided by the specific plan area to be enforced as performance standards when detailed site plans and subdivision maps are prepared. Project design is to be evaluated by the measure of performance described by the development standards.

"Private open space" means open-space lands identified in the specific plan that are recognized as being for the private use, enjoyment, or primary benefit of a limited group of people, generally restricted to the residents and their guests of the specific plan area.

"Public open space" means open-space lands identified in the specific plan that are recognized as being for the use, enjoyment, or primary benefit to the general public.

"Reservation (reserved)" means the setting aside of land for a specific purpose as required in the specific plan.

"Site plan" means a detailed development plan illustrating the precise locations and dimensions of parcels, buildings, circulation systems, public uses, urban design elements and other precise development elements as required by the city, the specific plan district or, as necessary, to illustrate site plan concepts.

"Specific plan" means the legal document consisting of a development plan and text material that describes the character and building intensity of proposed development standards to guide developers and designers of the property.

"Specific plan designation" means a special-purpose specific plan area that is designated in the C~~c~~ity's general plan. The development intensity policy is designated on the general plan. All areas that have a specific plan designation in the city's general plan must be developed with an approved specific plan and must have specific (SP) plan zoning.

"Specific plan district" means that district of the Coachella Zoning Ordinance permitting the establishment of specific plan zones.

"Specific plan zones" means an official zone established for specific parcel(s) of land for which particular intensities of land uses or combination of land uses are proposed and guided by a specific plan document. A

designation of (SP) is placed on the city's official zoning map upon approval, by ordinance, of specific plan zoning for parcel(s) of land.

"Subsequent reviews" means reviews of discretionary actions, as required to complete the development process concurrent with or subsequent to specific plan and specific plan (SP) zone approval.

"Text material" means a mandatory requirement of the specific plan describing, in written form, the character of the proposed development standards.

(Prior code § 058.04)

17.36.050 Application procedure.

The application procedure allows the applicant to receive conditional specific plan (SP) zoning prior to final specific plan approval. (See Exhibit "A", Specific Plan Process, found on file in the office of the city clerk). The application for specific plan (SP) zoning shall be made on a form supplied by and submitted to the planning staff for review. It shall be the responsibility of the planning staff to contact interested departments and all agency personnel regarding necessary meetings with the applicant.

(Prior code § 058.05)

17.36.060 Conditional specific ~~(SP)~~ plan (SP) zoning procedure.

The purpose of selecting the process for conditional specific plan (SP) zoning is to allow the applicant to receive an (SP) zoning designation for properties prior to preparing and submitting specific land documents.

A. Subsequent to acceptance of any application for conditional specific plan (SP) zoning by the planning staff, the city shall conduct the necessary public hearings as provided in Chapters 17.70—17.82 of this title.

B. At such time as conditional specific plan (SP) is approved, the ~~planning commission~~Planning Commission shall determine the residential, commercial, or industrial development intensity policy, as provided in Section 17.36.070 of this chapter and it shall be placed on the city's official zoning map. This zoning designation will remain conditional until a final specific plan is approved for the subject parcel(s).

C. The applicant shall submit a draft specific plan to the planning staff for review and comment. The draft specific plan shall consist of conceptual plan for the development plan and a general outline describing the content of the text material, as provided in Section 17.36.080 of this chapter.

D. The applicant shall submit a final specific plan to the planning staff for processing to the ~~planning commission~~Planning Commission for review and comment. The final specific plan shall consist of the information contained in the draft specific plan and additional information, as provided in Section 17.36.090 of this chapter.

E. The city shall notice said specific plan and conduct necessary public hearings as provided in Chapters 17.70—17.82 of this code. Upon approval of the final specific plan, the specific plan (SP) zoning designation will be implemented thereby removing the conditional status.

(Prior code § 058.06)

17.36.070 Residential, commercial, or industrial development intensity policy.

A. The residential, commercial, or industrial development intensity policy shall be established for each specific plan zone concurrent with the approval of specific plan (SP) zoning or other applicable zoning district(s). The planning commission shall determine the allowable development intensity for specific plan zones and shall designate said density on the official zoning map of the city and/or as described in the text of the zoning code.

B. Development intensity for specific plan zones shall be determined by one of two processes described as follows:

1. Development intensity for specific plan zones may be governed by the land use category designated in the city's general plan, or in other city plans and policies that may be in the process of preparation.

2. Development intensity for specific plan areas shall generally be evaluated with reference to other similar specific plan developments or evaluation procedures within the city, or in the case where other similar developments do not exist, with reference to other similar developments in comparable jurisdictions.

(Prior code § 058.07)

17.36.080 Draft specific plan.

The draft specific plan shall describe the intensity of land uses proposed and their interrelationship, and shall not be construed to endorse the precise location of uses, configuration of parcels or engineering feasibility. The draft specific plan shall be submitted to the planning staff, and shall include the following information:

A. A preliminary plan of the development plan for the entire specific plan area delineated on one or more maps showing:

1. Project land uses, densities, existing and proposed major streets, public use areas (schools, parks, fire stations, etc.) and open space and major landscape features.

2. General plan, regional and sub-regional or community plan land use designations.

3. Slope analysis, utilizing categories provided by the planning staff. Included in the slope analysis is the number of acres in each slope category;

B. A general outline of the text material describing the general objectives/concept; a tabulation of the land area to be devoted to various uses, including open spaces, a calculation of the overall density and the average densities per net residential acre of the various residential areas; and a summary of development standards for commercial or industrial uses when those uses are proposed. The text material shall include development standards to be implemented as performance standards for the specific plan area:

1. A statement proposing the method of maintaining common open areas and facilities.

2. A description of the proposed grading program.

3. Identification of proposed future ownership and maintenance of streets, driveways, sidewalks, pedestrian ways, and open space areas.

4. A discussion of the project as it relates to each of the general plan elements, including land use, circulation, open space safety, noise, housing; conservation and community design. If a community plan is adopted or pending that includes the project site, the relationship of the project with the growth management plan should be discussed.

C. After ~~planning commission~~Planning Commission review, the planning staff shall furnish the applicant with written comments regarding, the review conference(s), including appropriate recommendations to inform and assist the applicant prior to preparing the final specific plan.

(Prior code § 058.08)

17.36.090 Final specific plan.

The final specific plan shall consist of the information contained in the draft specific plan and other additional as determined by the planning staff, ~~planning commission~~Planning Commission, ~~city council~~City Council or redevelopment agency. This additional information shall include all or a portion of the following:

A. Survey of the property, showing existing features including trees, structures, streets, easements, utility lines, land uses, existing zoning, and existing ownerships;

B. Topographic map showing area of major grading;

C. Proposed standards for height, open space, building intensity and public improvements;

D. Copies of legal documents required for dedication or reservation of public or private open space, or for the creation of homeowner's associations for open space maintenance.

(Prior code § 058.09)

17.36.100 Criteria for reviewing specific plans.

Before recommending approval, the ~~planning commission~~Planning Commission and ~~city council~~City Council shall find that the proposed development conforms to the following criteria:

A. The location and design of the proposed development shall be consistent with the goals and policies of the city's general plan and with any other applicable plan or policies adopted by the city, or in the process of being prepared and adopted.

B. The proposed location shall allow the development to be well-integrated with or adequately buffered from its surroundings, whichever may be the case.

C. All vehicular traffic generated by the development, either in phased increments or at full build-out, is to be accommodated safely and without causing undue congestion upon adjoining streets.

D. The final specific plan shall identify a methodology(s) to allow land uses to be adequately serviced by existing or proposed public facilities and services. In appropriate circumstances, and as provided elsewhere by this code, the city may require that suitable areas be reserved for schools, parks, and pedestrian ways; or public open spaces shall be dedicated or reserved by private covenant for the common use of residents, establishments, or operations in the development.

E. The overall design element of the specific plan will produce an attractive, efficient, and stable development.

F. In accordance with the requirements of the California Environmental Quality Act (CEQA), impacts have been reduced to a level of non-significance, or in the case where impacts remain, a statement of overriding considerations must be adopted to justify the merits of project implementation.

(Prior code § 058.10)

17.36.110 Approval by ordinance.

Approval of the final specific plan and/or establishment of (SP) specific plan zoning may be by resolution or by ordinance. Approval of zoning to the specific plan zone shall include, but not be limited to, the following stipulations:

A. Unless otherwise specified in the final specific plan, the regulations provided in the city zoning code shall apply. Approval of the specific plan shall not be interpreted as waiving compliance with other provisions of this code, except in those areas where the specific plan expressly regulates a use.

B. The approved final specific plan shall be filed in the office of the city clerk and in the office of the planning staff.

C. No building shall be constructed, maintained, or used other than for the purpose specified in the approved final specific plan, as filed, nor prior to the approval of a site plan as required in this chapter.

(Prior code § 058.11)

17.36.120 Specific plan approval, denial, and modifications.

A. The ~~planning commission~~Planning Commission may recommend to the ~~city council~~City Council approval or denial of the specific plan~~,~~ or may recommend approval subject to specified modifications and conditions.

B. The ~~city council~~City Council may approve, approve with modifications or conditions, or deny the final specific plan; provided, that in overruling a ~~planning commission~~Planning Commission recommendation for denial, the ~~city council~~City Council shall make the finding listed in Section 17.36.100 of this chapter.

(Prior code § 058.12)

17.36.130 Concurrent actions.

The ~~planning commission~~Planning Commission and the ~~city council~~City Council may act upon a subdivision map and site plan for all portions of the final specific plan concurrently with an approval action on the final specific plan.

(Prior code § 058.13)

17.36.140 Site plan and subdivision map review.

A. The purpose of a site plan is to provide the city with a detailed development plan that utilizes the development standards defined in the specific plan. The following criteria shall be applied to all portions of the specific plan requiring site plan review:

1. A topographic map or sufficient detail to show all cuts and fills, precise drainage and flood-control proposals, and boundary data;

2. Detailed site plan, showing lot or site dimensions; traffic and pedestrian circulation; location, widths, grades and types of improvements proposed for all streets, parking areas, driveways, walkways, trails, utilities and other public improvements; building height, location, size and proposed use; yards and space between buildings and distances from property lines and rights-of-way~~s~~, walls, fences to include location, height and materials; location, size and height of all signs; and loading areas;

3. Building plans and elevations (typical);

4. A landscape, staking and irrigation plan;

5. A tentative subdivision map shall be submitted, if applicable, showing precise divisions of the land for sale or lease of individual property, if any, as provided in the State Map Act and the city's subdivision ordinance;

6. Location and dimensions of public or quasi-public areas, including, but not limited to, schools, parks, playgrounds, and parking areas. The area of required open space and parks shall be based on this code in effect at the time of tentative map filing;

7. A statement setting forth a program for installation and continued maintenance of parking areas; location and general design of lighting, courts, public and private grounds, landscaping, streets, utilities, parks, playgrounds or public or quasi-public community buildings and facilities.

B. Within forty-five (45) days following acceptance of the application for site plan approval, and after all environmental certifications have been obtained, the ~~planning commission~~Planning Commission may approve, conditionally approve, or disapprove the proposed site plan, and shall notify the applicant of its action.

C. An appeal of the ~~planning commission~~Planning Commission action may be made to the ~~city council~~City Council by the applicant in accordance with the appeal procedure of this district.

(Prior code § 058.14)

17.36.150 Site plan modifications.

Modifications shall be processed as a site plan amendment and shall be subject to all site plan procedures.

(Prior code § 058.15)

17.36.160 Dedication—Maintenance of open space.

A. The ~~planning commission~~Planning Commission or ~~city council~~City Council, as the appropriate responsible reviewing body, may, as an approval, require that suitable areas for parks be dedicated or in-lieu fees be paid as determined for the entire specific plan area, and for schools and other public use facilities land be reserved for public use or be reserved for the owners and residents in the development by deed restrictions. Whenever group or common open space is provided, whether required or not, the ~~planning commission~~Planning Commission or ~~city council~~City Council shall, as a condition of approval upon review, require that some provision be made for perpetual maintenance of such open space. The form of any instrument used to assure open space maintenance shall be approved by the city attorney and planning staff as to form and content. Agreements and covenants running with the land shall include provisions for charges to be levied for carrying out the specified functions and administrative expenses of such perpetual maintenance. The city shall be a party in interest in any such development and may, by mandatory injunction or other appropriate actions, enforce the provisions of this district.

B. To assure that open space shall be available for the specific plan zone, public sites, and transfer of development rights within the specific plan area in exchange for open spaces shall be dedicated in advance of development (prior to issuance of the first building permit).

(Prior code § 058.16)

17.36.170 Tentative and final subdivision map.

A. A master subdivision map or parcel map, the purpose of which is to subdivide large parcels, may be prepared and submitted for approval to the city prior to individual site plan and tentative map approval. A grading permit based on all or a portion of this master subdivision map or parcel map may be issued after approval of such master subdivision map or parcel map.

B. A tentative subdivision map or parcel map, submitted in combination with or after approval of the site plan, shall not be approved for recordation by the ~~city council~~City Council until after the specific plan (SP) zoning and an approved final specific plan have become effective.

C. No building permit shall be issued until a final subdivision map or parcel map, if required, has been prepared for the site plan or any approved state thereof, in compliance with the State Map Act and city's subdivision ordinance.

(Prior code § 058.17)

17.36.180 Site plan and tentative subdivision map appeal.

The applicant may appeal the action of the ~~planning commission~~Planning Commission in writing to the ~~city council~~City Council. Such appeal shall be filed in triplicate with the planning staff within ten (10) days after the decision. The planning staff shall forward the triplicate copy of the appeal to the city clerk and ~~planning commission~~Planning Commission. The ~~city council~~City Council shall consider the appeal at a regular meeting within thirty (30) calendar days following the receipt by the clerk of the triplicate copy, or within such time as the council shall continue the matter. The ~~city council~~City Council shall review the site plan and shall recommend approval, approval with conditions or disapproval.

(Prior code § 058.18)

Chapter 17.38 PUD PLANNED UNIT DEVELOPMENTS

17.38.010 Intent and purpose.

The purpose of this chapter is to provide for attractive, planned, residential districts in accordance with the general plan; to provide a means of achieving greater quality, variety and flexibility in residential development on relatively large areas of land; to encourage more imaginative and innovative design of projects; to promote more desirable living environments that would not be possible through the strict application of zoning standards; to assist in the development of old or blighted neighborhoods by providing incentives for higher quality multiple residential housing and project design; to require a more efficient use of open space, separation of pedestrian and vehicular traffic and increased project amenities; to insure that such projects will be assets to their surrounding neighborhoods, and safeguards will be required through the conditional use procedure. The overall plan shall provide equivalent or higher standards of development, operation, light, air, safety, convenience, and aesthetics, than if developed under the underlying zone.

(Prior code § 060.01)

17.38.020 Procedure and regulations.

A. Procedure. An application for a planned development project or ~~mobile home~~mobilehome project shall submit a request for change of zone to allow a "PUD" overlay zone on base district zone, pursuant to Chapter 17.82.

B. Land Use Regulations. All planned development projects shall comply with the land use and density regulations of the base district, except as may be modified by the PUD overlay zone regulations, subject to compliance with the general plan.

C. Development Standards. All planned development projects shall comply with the applicable development standards of the base district and other sections of the municipal code, except that an applicant for a PUD project may utilize flexible development standards in order to meet the policy directives of the general plan.

D. Conditional Use Permit. A conditional use permit must be obtained by the applicant as a part of the PUD overlay zone and related entitlements in order to vest modified land use regulations, utilize flexible standards of the PUD overlay zone and vest the design guidelines for the planned development.

(Ord. No. 1075, § 7, 6-10-15)

Editor's note(s)—Ord. No. 1075, § 7, adopted June 10, 2015, amended § 17.38.020 in its entirety to read as herein set out. Former § 17.38.020, pertained to uses, and derived from prior code, § 060.02; and Ord. No. 1026, § 7, adopted Jan. 12, 2011.

17.38.030 Design guidelines.

A. Design Guidelines. All planned developments shall submit a comprehensive set of design guidelines for the project as part of the conditional use permit required under Section 17.38.020(D), that include the following items.

1. Circulation and Streets Plan. The design guidelines shall incorporate a street network plan showing street and pedestrian connectivity for future neighborhoods of the planned development. This shall include the typical roadway diagrams proposed for neighborhood streets and shall incorporate the use a landscaped parkway with street trees separating the sidewalk from the street curb line. Any

deviations, for private streets, from the city~~'~~s public street improvement requirements shall be included in the circulation and streets plan.

2. Open Space Plan. A plan for the major common open space elements of the community shall be included in the design guidelines of the project. This shall include conceptual plans for park amenities, recreational facilities, and gathering spots for the future residents.

3. Building Massing Plan. A colored site plan showing the typical building massing and relationship of buildings to streets and pedestrian paths and open space features for the various neighborhoods within the planned development shall be included as part of the design guidelines.

4. Architectural Theming. Detailed architectural and/or artist renderings of allowable building types, architectural themes, and typical front yard landscaping shall be provided for all planned developments. Conceptual design guidelines in text describing the architectural theming and exterior building materials, window treatments, and garage door designs, and landscaping plant palettes, must accompany the planned development submittal.

5. Signs. A comprehensive sign program shall be included as a part of all planned developments.

B. Change in Product Size. Refer to Section 16.32.170 of the Coachella Municipal Code for proposed changes in product sizes within single-family residential tracts in which a previously approved product was constructed.

(Ord. No. 1075, § 8, 6-10-15)

Editor~~'~~s note(s)—Ord. No. 1075, § 8, adopted June 10, 2015, amended § 17.38.030 in its entirety to read as herein set out. Former § 17.38.030, pertained to property development standards, and derived from prior code, § 060.03; and Ord. No. 1021, § 5, adopted July 28, 2010.

17.38.040 ~~Mobile home~~Mobilehome parks.

A. Intent and Purpose. These regulations are intended to provide for the development of ~~mobile home~~mobilehome parks within the city, consistent with the general plan. These provisions are further intended to create standards of development consistent with those in other residential areas of the community.

B. Review Procedure. A ~~mobile home~~mobilehome park community may be established in the RM base district zone through a planned development overlay zone, subject to approval of the conditional use permit and design guidelines required under Sections 17.38.020 and 17.38.030, and subject to compliance with the regulations contained herein.

C. Permitted Uses. The following uses are permitted in any ~~mobile home~~mobilehome park:

1. Mobilehomes, trailers, trailer coaches, campers, camp cars;

2. Recreational buildings, structures, and uses intended to serve only the residents of the ~~mobile home~~mobilehome park; and

3. Accessory buildings normally appurtenant to the conduct of a ~~mobile home~~mobilehome park, including buildings and structures required by law.

D. Lot Requirements for ~~Mobile home~~Mobilehome Parks.

1. Minimum Lot Size. Five acres.

2. Density Permitted. One ~~mobile home~~mobilehome for each four thousand five hundred (4,500) square feet of gross lot area.

3. Lot width and depth shall be determined by the ~~planning commission~~Planning Commission or ~~city council~~City Council when the conditional use permit is considered.

E. Yard Requirements for ~~Mobile home~~Mobilehome Parks.

1. Front Yard. Each park shall have a front yard of at least twenty-five (25) feet in depth.

2. Side Yard. Each park shall have side yards of at least fifteen (15) feet in depth.

3. Rear Yard. Each park shall have a rear yard of at least fifteen (15) feet in depth.

F. Requirements for Individual ~~Mobile home~~Mobilehome Sites Within a ~~Mobile home~~Mobilehome Park.

1. Minimum individual site size shall be three thousand (3,000) square feet.

2. Each individual ~~mobile home~~mobilehome site shall have a minimum width of thirty-five (35) feet.

3. Each ~~mobile home~~mobilehome shall be set back at least five feet from the edge of any interior site roadway.

G. Height Limits. Height limits shall be those in the zone in which a ~~mobile home~~mobilehome park is authorized.

H. Distance Between Buildings and ~~Mobile home~~Mobilehomes.

1. There shall be a minimum average distance between ~~mobile home~~mobilehomes of twenty (20) feet; except that where placed end to end, the distance may be reduced by ten (10) feet.

2. There shall be a minimum distance between ~~mobile home~~mobilehomes and accessory buildings of fifteen (15) feet.

3. There shall be a minimum distance between accessory buildings of ten (10) feet.

I. Usable Open Space.

1. A common recreational-leisure area shall be provided for each ~~mobile home~~mobilehome park. Such recreational-leisure area shall be for the purpose of providing usable open space for the residents of the ~~mobile home~~mobilehome park~~,~~ and shall not be for the use of the general public.

2. The size of such recreational-leisure area shall be equal to at least four hundred (400) square feet for each ~~mobile home~~mobilehome site. Cabanas, swimming pools, decks, game areas, and similar uses may be included in such an area.

(Prior code § 060.04)

(Ord. No. 1075, § 8, 6-10-15)

17.38.050 Nonresidential uses.

The ~~planning commission~~Planning Commission shall approve the appropriate number, location, area requirements, access, parking, identification, and operating conditions for all institutional, recreational, commercial and health facilities in the planned unit development.

(Prior code § 060.05)

17.38.060 Special conditions and procedures.

In addition to the following special conditions and procedures for planned unit development, the ~~planning commission~~Planning Commission may impose such other conditions as it deems necessary or desirable in carrying out the general purpose and intent of this section.

A. A conditional use permit obtained through procedures contained in this chapter and in Sections 17.74.010 through 17.74.050 of this title is required for any planned unit development.

B. Tract or Parcel Maps. A tentative tract or parcel map is required to be submitted to the planning director subsequent to approval of the application~~,~~ but may be filed with the application for zone change and conditional use. However, if the property is located in a hillside area, the tentative tract or parcel map shall be filed concurrently with the application.

No building permit shall be issued for any building within a planned unit development, except for sales models, recreational buildings, or community facilities, unless a final tract or parcel map has first been recorded for the property on which the building or buildings are located.

C. Project Site Plans.

1. A preliminary project site plan is required to be filed with the application for planned unit development. Contour intervals shall be indicated for property in hillside areas. The site plan required by Section 17.62.010 shall, in addition to other requirements, indicate compliance with the provisions of this chapter.

2. Landscape Plans and List. A plan for landscaping all common area, including plant lists and sprinkler system, shall be approved by the planning director.

3. Phasing Plans. A progress plan delineating the various development phases, if more than one, and specifying a reasonable time allocation for each phase, shall be submitted, and made a condition of approval by the ~~planning commission~~Planning Commission. No phase component shall have a residential density that exceeds by twenty (20) percent the proposed residential density of the entire planned unit development. The total area of common open space provided in each phase shall, at a minimum, be in the same proportion as in the entire development.

4. Highway Access. Each planned unit development shall be located on and have direct access to a major or secondary arterial or a collector street.

5. Utilities. All utility lines necessary to serve the development shall be installed underground.

6. Vehicular Access. The approved site plan shall indicate all vehicular access. In order to encourage inward orientation, increased living amenities, and variety and flexibility of parking areas, direct access to all dwelling units is not required. However, the planning director shall determine the property access system.

7. Specific Plan. The project plans for a planned unit development may be adopted as a specific plan amendment to the general plan.

D. Condominium Common Areas. Except for property dedicated to the C~~c~~ity for inclusion within a public park, school site or park maintenance district, every owner of a dwelling unit or lot shall own as an appurtenance to such dwelling unit or lot, either an undivided interest in the common areas and facilities of the entire project or of the tract in which the ownership is located; or a share in the corporation, or voting membership in an association owning the common areas and facilities of the entire project or of the tract in which the ownership is located.

1. Management Agreement for Control and Maintenance of Common Areas. No lot or dwelling unit in the development shall be sold until a corporation, association, property owner's group or similar entity has been formed with the right to assess all the properties which are jointly owned

with interests in the common areas and facilities in the entire development or in the tract which is a part of the entire development to meet the expenses of such entity, and with authority to control, and the duty to maintain, all of said mutually available features of the development or tract portion thereof. Such entity shall operate under recorded conditions, covenants and restrictions which shall include compulsory membership of all owners of lots and/or dwelling units, and flexibility of assessments to meet changing costs of maintenance, repairs, and services. The developer shall submit evidence of compliance with the requirement to the planning director. This condition shall not apply to land dedicated to the city and included in a park maintenance district or dedication to the city for other public purposes.

2. Maintenance. The right to maintain the buildings and use the property for a residential planned unit development as indicated on the approved revised site plan shall continue in effect only so long as all of the mutually available features, such as recreational areas, community buildings, and landscaping, as well as the general appearance of the premises and buildings are all well maintained.

3. Covenants.

   a. The provisions of subsections (C)(1) and (C)(2) of this section shall be included in the conditions, covenants, and restrictions applying to the property, which are recorded in the office of the county recorder, and copies of said provisions shall be furnished to the individual purchasers of units in the development.

   b. The provisions of subsections (C)(1) and (C)(2) of this section shall also be in each of the preliminary and final drafts of the conditions, covenants, and restrictions submitted to the real estate commissioner.

E. Separate Lots. No portion of land within a residential planned unit development shall be divided in ownership unless it is first recorded as a separate lot on a recorded final tract or parcel map.

F. Sale of Lots or Units. No dwelling unit or lot shall be sold or encumbered separately from an interest in the common areas and facilities in the development which shall be appurtenant to such dwelling unit or lot. No lot shall be sold or transferred in ownership from the other lots in the total development, unless all approved community buildings, structures, and recreational facilities for the total development, or approved phase thereof, have been completed, or completion is assured, to the satisfaction of the planning director.

G. Nonconformities. All nonconformities existing prior to development of the project must be eliminated or alleviated to the satisfaction of the ~~planning commission~~Planning Commission.

(Prior code § 060.06)

No change to the following chapters.

Chapter 17.40 TEMPORARY CLASSIFICATION FOR ASSESSMENT IMPROVEMENTS

Chapter 17.42 T TEMPORARY CLASSIFICATION ZONE

Chapter 17.44 SUPPLEMENTAL CLASSIFICATION GEOLOGICAL HAZARD ZONE

Chapter 17.46 IP INDUSTRIAL PARK OVERLAY ZONE[1]

Chapter 17.47 RC RETAIL CANNABIS OVERLAY ZONE[2]

Chapter 17.48 SPECIAL USES

Chapter 17.49 SHO SENIOR HOUSING OVERLAY ZONE

Chapter 17.50 SEXUALLY ORIENTED BUSINESSES

Chapter 17.52 MOBILEHOME PARKS

Chapter 17.54 OFF-STREET PARKING AND LOADING

Chapter 17.56 SIGNS

Chapter 17.58 HOME OCCUPATIONS

[1]Editor's note(s)—Ord. No. 1140 , § 2(Exh. A), adopted July 10, 2019, amended Ch. 17.46 in its entirety to read as herein set out. Former Ch. 17.46, §§ 17.46.010—17.46.040, pertained to similar subject matter and derived from Ord. No. 1103, § 1, adopted April 26, 2017; and Ord. No. 1108, § 2, adopted July 12, 2017.

[2]Editor's note(s)—Ord. No. 1140 , § 2(Exh. A), adopted July 10, 2019, amended Ch. 17.47 in its entirety to read as herein set out. Former Ch. 17.47, §§ 17.47.010—17.47.070, pertained to similar subject matter and derived from Ord. No. 1115, § 2, adopted Feb. 14, 2018.

Chapter 17.60 DEVELOPMENT STANDARDS

17.60.010 Property development standards.

A. Intent and Purpose. The following general development standards are set forth in order to assure that property in the various zones of the city will be developed in a uniform and orderly manner which will promote the public health, safety, comfort, convenience, and general welfare. These development requirements shall be in addition to the property development standards set forth in each zone. In addition, the design standards established for single family residential development in Chapter 17.19 (Supplemental Standards for Single-Family Residential Development shall apply.

B. Responsibility for Measurements. In measuring lot dimensions and other requirements, it shall be the responsibility of the property owner or his or her authorized agent to provide accurate dimensions and calculations. The submission of inaccurate dimensions or calculations which result in a lot or structure not complying with the requirements set forth in this chapter shall constitute a violation of this chapter, and any permits or approvals granted thereunder shall be void.

C. Lot Widths. Lot widths in residential zones shall vary according to the size of the lot, and shall be determined ~~as provided in the following table~~per the zone-specific standards in Chapters 17.10 - 17.18 and Chapters 17.22 - 17.35).~~:~~

~~**Minimum Lot Width Requirements in Residential Zones**~~

~~Lot Size in Square Feet~~	~~Interior Lot~~	~~Corner Lot~~
~~6,000 to 6,999~~	~~60 feet~~	~~Not permitted~~
~~7,000 to 7,999~~	~~65 feet~~	~~70 feet~~
~~8,000 to 8,999~~	~~70 feet~~	~~75 feet~~
~~9,000 to 9,999~~	~~80 feet~~	~~85 feet~~
~~10,000 & above~~	~~85 feet~~	~~85 feet~~

D. Yards.

1. Encroachments. Where yards are required in this chapter, they shall not be less in depth or width than the minimum dimensions specified in any part, and they shall be at every point open and unobstructed from the ground to the sky, except as follows:

   a. Outside stairways, porches, or landing places, if unroofed and unenclosed, may extend into a required side yard for a distance of not to exceed three feet or into the required rear yard a distance not to exceed five feet.

   b. Awnings, cornice trims, eaves, decks, railings, stoops, and landings, and similar architectural features may encroach two feet into a required front, side, or rear yard.

2. Through Lot Regulations. On through lots either separating such lot from a public thoroughfare may be designated as the front lot line. In such cases the minimum rear yard shall be the average of the yards required on lots next adjoining.

3. Fences, Walls in Yards. Fences or walls not exceeding six feet in height may occupy any portion of a side or rear yard. In a residential single-family zone, where any such fence or wall projects beyond the front yard line or setback toward the front property line it shall not be more than six feet in height if it

is of wrought iron, or other such material; provided that such material does not obscure the view to the front lawn through the fence.

a. Walls and low silhouette plants such as hedges, and other flora along front yard property lines must be approved by city staff and shall not be more than thirty (30) inches in height.

b. Fences and walls shall not extend beyond the property line.

c. There shall be no visual obstructions which would interfere with intersection visibility from a corner setback area. In the corner property radius area any fence shall not be more than six feet in height provided it does not cause visual obstruction. In the corner property radius area, visual obstructions are hereby defined as any wall, obstacle mature landscaping or thing allowed, installed, set out or maintained which obscures intersection visibility.

d. Notwithstanding the above provisions, existing walls and fences shall be permitted to remain unless and until the property owner applies for a building permit to reconstruct, remodel or otherwise perform any construction activity upon the property; at such time any walls or fences shall be brought into compliance with subsections (D)(3)(a) through (c) of this section, as a condition of obtaining such building permit.

e. In residential districts the use of razor, chain-link, or barbed wire is prohibited. Precision concrete block shall not be used unless exterior surfaces visible from the outside of the property are covered by stucco, paint, or texture coating as approved by the community development director.

f. Maintenance. All walls and fences shall be continuously maintained in good repair. The property owner shall be provided thirty (30) days after receiving notice from the city to repair a wall or fence. The building official may grant an extension for the repair of the wall or fence.

4. Landscaping.

a. Except where otherwise provided, required yards and setback areas shall be landscaped with lawn, trees, shrubs, or other plant materials and shall be permanently maintained in a neat and orderly manner as a condition to use. Decorative rock may be used for landscaping in a manner incidental and accessory to the required lawn, trees, shrubs, or other plant materials. Fountains, ponds, sculpture, planters, walkways, flagpoles for display of national, state, city or company ensigns only, light standards, and decorative screen-type walls, forty-two (42) inches or less in height, where an integral part of a landscaping scheme comprised primarily of plant materials are permitted. Entrance and exit drives and walks may be provided into parking areas. Said drives shall not exceed thirty (30) feet in width for each curb opening.

b. Where walls are required between nonresidential and residential zones, no landscaping zones, no landscaping shall be required.

c. Additional standards as established in zone-specific standards (Chapters 17.10 - 17.18 and Chapters 17.22 to 17.35) and Chapter 17.19 (Supplemental Standards for Single-Family Residential) also apply.

5. Measurement. The depth of all required yards which abut a street or highway shall be measured from the street or planned highway right-of-way line, as specified in Section 17.66.010 of this title.

E. Distance Between Buildings. Encroachment into required distances between buildings are permitted as specified for encroachments into yards in subsection D of this section.

F. Accessory Structures. The following regulations shall apply to accessory structures in residential zones:

1. Accessory structures detached from the main dwelling, may not occupy a required front yard, side yard, or corner side yard, except as provided herein.

2. An accessory structure may occupy a required rear yard provided it is at least five feet from any interior property line, and a minimum of ten (10) feet from any street property line.

3. An accessory structure may be a maximum of fifteen (15) feet in height and no more than one story in height, or as provided by the specific zone standards.

4. An accessory structure in the rear yard is limited to a maximum size of four hundred (400) square feet or thirty (30) percent of the size of the main dwelling, whichever is greater. Interior partitions are not allowed within accessory structures. Kitchens and full bathrooms are not allowed inside of any accessory structure~~, except as allowed in Section 17.16.020.C. for secondary housing units~~.

5. Except for side loaded garages, the wall planes or sides of an accessory structure must be a minimum of ten (10) feet from the sides or wall planes of any other structure, measured at right angles from the wall plane or sides of the accessory structure. The corner of an accessory structure may be no closer than five feet from the corner of any other structure, provided the wall planes or sides of both structures comply with the distance requirements specified in this subsection.

6. Accessory structures on a site may not cover more than fifty (50) percent of the required rear yard setback area.

7. Pools and spas may encroach into any required side or rear yard provided they are at least five feet from any property line. Pools and spas may not occupy a required front yard.

8. Mechanical and pool equipment may not occupy a required front yard.

9. Mechanical and pool equipment may occupy a required side yard or corner side yard provided a minimum setback of three feet is provided from any property line.

10. Mechanical and pool equipment may occupy a required rear yard provided a minimum setback of twelve (12) inches is provided from any property line and provided a minimum distance of three feet is provided from any other structure.

11. On lots under seven thousand two hundred (7,200) square feet, an attached patio cover may encroach into a required rear yard provided a minimum setback of ten (10) feet is provided. On lots under six thousand five hundred (6,500) square feet, an attached patio cover may encroach into a required side yard or corner side yard provided a minimum setback of five feet is provided.

12. One freestanding arbor or trellis, up to twelve (12) feet in height and open on all sides, may encroach into a required front yard, provided no more than five percent of the required yard area is covered with the arbor or trellis.

13. Carports may be allowed in a required rear yard of any single family residential site provided they are accessible through an approved driveway that is at least eleven (11) feet clear in width. All vehicles parked in a carport must be architecturally screened from view to the street, and located behind an opaque metal gate at least six feet in height.

14. A detached garage or carport must be a minimum of twenty (20) feet from any street property line if front loading. Side-loaded garages may be twelve (12) feet from the street line. Carports must provide a minimum of ten (10) feet from any corner street line.

15. An attached carport accessed from the corner street must be at least fifteen (15) feet from the rear property line.

G. Trailers Outside Camps. It shall be unlawful for any person to keep or maintain, or to permit to be placed, kept or maintained, any trailer coach being presently used or being intended for present use for human habitation upon any lot, piece or parcel of land within the city, except in a trailer camp or when all of the following regulations and conditions have been complied with:

1. Such trailer coach shall be kept or maintained at the rear of a private residential building, other than an apartment house or hotel.
2. Such trailer coach shall not be placed closer than ten (10) feet to any building or closer than five feet to any property line other than a public street or alley line.
3. Such trailer coach shall be used only for sleeping quarters, and none of the sanitary and cooking facilities in such trailer coach shall be used.
4. Such trailer coach shall not be kept or maintained for sleeping purposes as permitted herein for more than three successive nights in any successive ninety (90) days.

H. Accessory Dwelling Units.

1. Purpose. The purpose of this section is to allow and regulate accessory dwelling units (ADUs) and junior accessory dwelling units (JADUs) in compliance with California Government Code sections 65852.2 and 65852.22. Notwithstanding any conflicting regulations in this title, the regulations in this subsection shall supersede and be applicable to the new construction of ADUs and JADUs, and the conversion of existing structures for said purpose, in the city's residential and agricultural zones.
2. Effect of Conforming. An ADU or JADU that conforms to the standards in this section will not be:
    a. Deemed to be inconsistent with the city's general plan and zoning designation for the lot on which the ADU or JADU is located.
    b. Deemed to exceed the allowable density for the lot on which the ADU or JADU is located.
    c. Considered in the application of any local ordinance, policy, or program to limit residential growth.
    d. Required to correct a nonconforming zoning condition, as defined in subsection (3)(g) below.
3. Definitions. As used in this section, terms are defined as follows:
    a. "Accessory dwelling unit" or "ADU" means an attached or a detached residential dwelling unit that provides complete independent living facilities for one or more persons and is located on a lot with a proposed or existing primary residence. An accessory dwelling unit also includes the following:
        1) An efficiency unit, as defined by Section 17958.1 of the California Health and Safety Code; and
        2) A manufactured home, as defined by Section 18007 of the California Health and Safety Code.
    b. "Accessory structure" means a structure that is accessory and incidental to a dwelling located on the same lot.
    c. "Complete independent living facilities" means permanent provisions for living, sleeping, eating, cooking, and sanitation on the same parcel as the single-family or multifamily dwelling is or will be situated.
    d. "Efficiency kitchen" means a kitchen that includes each of the following:
        1) A cooking facility with appliances.
        2) A food preparation counter or counters that total a minimum of fifteen (15) square feet in area.
        3) Food storage cabinets that total a minimum of thirty (30) square feet of shelf space.
    e. "Junior accessory dwelling unit" or "JADU" means a residential unit that

1) is no more than five hundred (500) square feet in size,

2) is contained entirely within an existing or proposed single-family structure,

3) includes its own separate sanitation facilities or shares sanitation facilities with the existing or proposed single-family structure, and

4) includes an efficiency kitchen, as defined in subsection (3)(d) above.

f. "Living area" means the interior habitable area of a dwelling unit, including basements and attics, but does not include a garage or any accessory structure.

g. "Nonconforming zoning condition" means a physical improvement on a property that does not conform with current zoning standards.

h. "Passageway" means a pathway that is unobstructed clear to the sky and extends from a street to one entrance of the ADU or JADU.

i. "Proposed dwelling" means a dwelling that is the subject of a permit application and that meets the requirements for permitting.

j. "Public transit" means a location, including, but not limited to, a bus stop or train station, where the public may access buses, trains, subways, and other forms of transportation that charge set fares, run on fixed routes, and are available to the public.

k. "Tandem parking" means that two or more automobiles are parked on a driveway or in any other location on a lot, lined up behind one another.

4. Approvals. The following approvals apply to ADUs and JADUs under this section:

a. Building-permit Only. If an ADU or JADU complies with each of the general requirements in subsection (e) below, it is allowed with only a building permit in the following scenarios:

1) Converted on Single-family Lot: Only one ADU or JADU on a lot with a proposed or existing single-family dwelling on it, where the ADU or JADU:

(i) Is either: within the space of a proposed single-family dwelling; within the existing space of an existing single-family dwelling; or within the existing space of an accessory structure, plus up to one hundred fifty (150) additional square feet if the expansion is limited to accommodating ingress and egress.

(ii) Has exterior access that is independent of that for the single-family dwelling.

(iii) Has side and rear setbacks sufficient for fire and safety, as dictated by applicable building and fire codes.

2) Limited Detached on Single-family Lot: One detached, new-construction ADU on a lot with a proposed or existing single-family dwelling (in addition to any JADU that might otherwise be established on the lot under subsection (4)(a)(1) above, if the detached ADU satisfies the following limitations:

(i) The side- and rear-yard setbacks are at least four-feet.

(ii) The total floor area is eight hundred (800) square feet or smaller.

(iii) The peak height above grade is sixteen (16) feet or less.

3) Converted on Multifamily Lot: Multiple ADUs within portions of existing multifamily dwelling structures that are not used as livable space, including but not limited to storage rooms, boiler rooms, passageways, attics, basements, or garages, if each converted ADU complies with state building standards for dwellings. At least one converted ADU is allowed

within an existing multifamily dwelling, and up to twenty-five (25) percent of the existing multifamily dwelling units may each have a converted ADU under this paragraph.

4) Limited Detached on Multifamily Lot: No more than two detached ADUs on a lot that has an existing multifamily dwelling if each detached ADU satisfies the following limitations:

(i) The side- and rear-yard setbacks are at least four-feet.

(ii) The total floor area is eight hundred (800) square feet or smaller.

b. ADU Permit.

1) Except as allowed under subsection (d)(1) above, no ADU may be created without a building permit and an ADU permit in compliance with the standards set forth in subsections (e) and (f) below.

2) The city may charge a fee to reimburse it for costs incurred in processing ADU permits, including the costs of adopting or amending the city's ADU ordinance. The ADU-permit processing fee is determined by the planning director and approved by the city council by resolution.

c. Process and Timing.

1) An ADU permit is considered and approved ministerially, without discretionary review or a hearing.

2) The city must act on an application to create an ADU or JADU within sixty (60) days from the date that the city receives a completed application, unless either:

(i) The applicant requests a delay, in which case the 60-day time period is tolled for the period of the requested delay, or

(ii) In the case of a JADU and the application to create a junior accessory dwelling unit is submitted with a permit application to create a new single-family dwelling on the lot, the city may delay acting on the permit application for the JADU until the city acts on the permit application to create the new single-family dwelling, but the application to create the JADU will still be considered ministerially without discretionary review or a hearing.

5. General ADU and JADU Requirements. The following requirements apply to all ADUs and JADUs that are approved under subsections (4)(a) or (4)(b) above:

a. Zoning.

1) An ADU or JADU subject only to a building permit under subsection (4)(a) above may be created on a lot in a residential or mixed-use zone.

2) An ADU or JADU subject to an ADU permit under subsection (4)(b) may be created on a lot that is zoned to allow single-family dwelling residential use or multifamily dwelling residential use.

b. Fire Sprinklers. Fire sprinklers are required in an ADU if sprinklers are required in the primary residence.

c. Rental Term. No ADU or JADU may be rented for a term that is shorter than 30 days.

d. No Separate Conveyance. An ADU or JADU may be rented, but no ADU or JADU may be sold or otherwise conveyed separately from the lot and the primary dwelling (in the case of a single-family lot) or from the lot and all of the dwellings (in the case of a multifamily lot).

e. Septic System. If the ADU or JADU will connect to an onsite water-treatment system, the owner must include with the application a percolation test completed within the last five years or, if the percolation test has been recertified, within the last ten (10) years.

f. Owner Occupancy.

1) All ADUs created before January 1, 2020 are subject to the owner-occupancy requirement that was in place when the ADU was created.

2) An ADU that is created after that date but before January 1, 2025, is not subject to any owner-occupancy requirement.

3) All ADUs that are created on or after January 1, 2025 are subject to an owner-occupancy requirement. A natural person with legal or equitable title to the property must reside on the property as the person's legal domicile and permanent residence.

4) All JADUs are subject to an owner-occupancy requirement. A natural person with legal or equitable title to the property must reside on the property, in either the primary dwelling or JADU, as the person's legal domicile and permanent residence. However, the owner-occupancy requirement of this paragraph does not apply if the property is entirely owned by another governmental agency, land trust, or housing organization.

g. Deed Restriction. Prior to issuance of a building permit for an ADU or JADU, a deed restriction must be recorded against the title of the property in the county recorder's office and a copy filed with the planning director. The deed restriction must run with the land and bind all future owners. The form of the deed restriction will be provided by the city and must provide that:

1) The ADU or JADU may not be sold separately from the primary dwelling.

2) The ADU or JADU is restricted to the approved size and to other attributes allowed by this section.

3) The deed restriction runs with the land and may be enforced against future property owners.

4) The deed restriction may be removed if the owner eliminates the ADU or JADU, as evidenced by, for example, removal of the kitchen facilities. To remove the deed restriction, an owner may make a written request of the director, providing evidence that the ADU or JADU has in fact been eliminated. The director may then determine whether the evidence supports the claim that the ADU or JADU has been eliminated. Appeal may be taken from the director's determination consistent with other provisions of this code. If the ADU or JADU is not entirely physically removed, but is only eliminated by virtue of having a necessary component of an ADU or JADU removed, the remaining structure and improvements must otherwise comply with applicable provisions of this code.

5) The deed restriction is enforceable by the director or his or her designee for the benefit of the city. Failure of the property owner to comply with the deed restriction may result in legal action against the property owner, and the city is authorized to obtain any remedy available to it at law or equity, including, but not limited to, obtaining an injunction enjoining the use of the ADU or JADU in violation of the recorded restrictions or abatement of the illegal unit.

6. Specific ADU Requirements. The following requirements apply only to ADUs that require an ADU permit under subsection (4)(b) above.

a. Maximum Size.

1) The maximum size of a detached or attached ADU subject to this subsection (6) is eight hundred fifty (850) square feet for a studio or one-bedroom unit and one thousand (1,000) square feet for a unit with two bedrooms. No more than two bedrooms are allowed.

2) An attached ADU that is created on a lot with an existing primary dwelling is further limited to fifty (50) percent of the floor area of the existing primary dwelling.

3) Application of other development standards in this subsection (6), such as FAR or lot coverage, might further limit the size of the ADU, but no application of FAR, lot coverage, or open-space requirements may require the ADU to be less than eight hundred (800) square feet.

b. Floor Area Ratio (FAR). No ADU subject to this subsection (6) may cause the total FAR of the lot to exceed forty-five (45) percent, subject to subsection (6)(a)(3).

c. Lot Coverage. No ADU subject to this subsection (6) may cause the total lot coverage of the lot to exceed fifty (50) percent, subject to subsection (6)(a)(3).

d. Minimum Open Space. No ADU subject to this subsection (6) may cause the total percentage of open space of the lot to fall below fifty (50) percent, subject to subsection (6)(a)(3) above.

e. Height.

1) A single-story attached or detached ADU may not exceed sixteen (16) feet in height above grade, measured to the peak of the structure.

2) A second story or two-story attached ADU may not exceed the height of the primary dwelling.

3) A detached ADU may not exceed one story.

f. Passageway. No passageway, as defined by subsection (c)(8) above, is required for an ADU.

g. Parking.

1) Generally. One off-street parking space is required for each ADU. The parking space may be provided in setback areas or as tandem parking, as defined in subsection (3)(k) above. The parking space may be provided in setback areas or as tandem parking, as defined in subsection (3)(k) above.

2) Exceptions. No parking under subsection (6)(g)(1) is required in the following situations:

(i) The ADU is located within one-half mile walking distance of public transit, as defined in subsection (3)(j) above.

(ii) The ADU is located within an architecturally and historically significant historic district.

(iii) The ADU is part of the proposed or existing primary residence or an accessory structure under subsection (4)(a)(1) above.

(iv) When on-street parking permits are required but not offered to the occupant of the ADU.

(v) When there is an established car share vehicle stop located within one block of the ADU.

3) No Replacement. When a garage, carport, or covered parking structure is demolished in conjunction with the construction of an ADU or converted to an ADU, those off-street parking spaces are not required to be replaced.

h. Architectural Requirements.

1) Exterior building materials and colors of the exterior walls, roof, and windows and doors shall match the appearance and architectural design of those of the primary dwelling.

2) The roof slope must match that of the dominant roof slope of the primary dwelling. The dominant roof slope is the slope shared by the largest portion of the roof.

3) The exterior lighting must be limited to down-lights or as otherwise required by the building or fire code.

4) The ADU must have an independent exterior entrance, apart from that of the primary dwelling. The ADU entrance must be located on the side or rear building façade, not facing a public-right-of-way.

5) The interior horizontal dimensions of an ADU must be at least ten (10) feet wide in every direction, with a minimum interior wall height of seven feet.

6) Windows and doors of the ADU may not have a direct line of sight to an adjoining residential property. Fencing, landscaping, or privacy glass may be used to provide screening and prevent a direct line of sight.

i. Landscape Requirements.

1) Evergreen landscape screening must be planted and maintained between the ADU and adjacent parcels as follows:

a) At least one 15-gallon size plant shall be provided for every five linear feet of exterior wall. Alternatively, at least one 24-inch box size plant shall be provided for every ten (10) linear feet of exterior wall.

b) For a ground-level ADU, plant specimens must be at least six feet tall when installed. As an alternative, for a ground level ADU, a solid fence of at least six feet in height may be installed.

c) For a second-story ADU, plant specimens must be at least twelve (12) feet tall when installed.

2) All landscaping must be desert-friendly and water-efficient plantings and irrigation systems.

7. Fees.

a. Impact Fees.

1) No impact fee is required for an ADU that is less than seven hundred fifty (750) square feet in size.

2) Any impact fee that is required for an ADU that is seven hundred fifty (750) square feet or larger in size must be charged proportionately in relation to the square footage of the primary dwelling unit. (e.g., the floor area of the primary dwelling, divided by the floor area of the ADU, times the typical fee amount charged for a new dwelling.) "Impact fee" here does not include any connection fee or capacity charge for water or sewer service.

b. Utility Fees.

1) Converted ADUs and JADUs on a single-family lot, created under subsection (4)(a)(1) above, are not required to have a new or separate utility connection directly between the ADU or JADU and the utility. Nor is a connection fee or capacity charge required unless the ADO or JADU is constructed with a new single-family home.

8. Nonconforming ADUs and Discretionary Approval. Any proposed ADU or JADU that does not conform to the objective standards set forth in subsections (1) through (7)(b) of this section may be allowed by the city with a conditional use permit, in accordance with Chapter 17.74 of this title.

(Ord. 984 § 1, 2007; prior code § 070.07)

(Ord. No. 1075, §§ 10, 11, 6-10-15; Ord. No. 1150 , Exh. A, 12-11-19)

NOTICE OF PUBLIC HEARING

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

www.rcaluc.org

A PUBLIC HEARING has been scheduled before the Riverside County Airport Land Use Commission (ALUC) to consider the applications described below.

Any person may submit written comments to the ALUC before the hearing or may appear and be heard in support of or opposition to the project at the time of hearing. **Information on how to participate in the hearing will be available on the ALUC website at www.rcaluc.org.** The ALUC holds hearings for local discretionary permits within the Airport Influence Area, reviewing for aeronautical safety, noise and obstructions. ALUC reviews a proposed plan or project solely to determine whether it is consistent with the applicable Airport Land Use Compatibility Plan. For more information please contact **ALUC Planner Paul Rull at (951) 955-6893**.

The City of Coachella Planning Department should be contacted on non-ALUC issues. For more information, please contact City of Coachella Planner Gabriel Perez at (760) 398-3102.

The proposed project application may be viewed by a prescheduled appointment and on the ALUC website www.rcaluc.org. Written comments may be submitted at the Riverside County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, California 92501, Monday through Friday from 8:00 a.m. to 3:30 p.m., or by e-mail to prull@rivco.org. Individuals with disabilities requiring reasonable modifications or accommodations, please contact Barbara Santos at (951) 955-5132.

PLACE OF HEARING: **Riverside County Administration Center**
4080 Lemon Street, 1st Floor Board Chambers
Riverside California

DATE OF HEARING: **July 13, 2023**

TIME OF HEARING: **9:30 A.M.**

CASE DESCRIPTION:

ZAP1076TH23 – City of Coachella (Representative: Gabriel Perez) - City of Coachella Case Nos. GPA 23-02 (General Plan Amendment), ZOA 22-03 (Zoning Ordinance Amendment), CZ 23-01 (Change of Zone).A City-initiated proposal for a city-wide Zoning Consistency Update which will: 1) prepare new or revised zones to implement the 2035 General Plan; 2) consolidate and incorporate the zones in the Pueblo Viejo Strategy Implementation Plan into the Zoning Code; 3) update the Official Citywide Zoning Map; 4) provide environmental clearance for the above changes to the Zoning Code and General Plan; and 5) Update the General Plan Land Use Map for consistency with the Zoning Code and address clean up (Airport Compatibility Zones C, D, and E of the Jacqueline Cochran Regional Airport Influence Area).

RIVERSIDE COUNTY
AIRPORT LAND USE COMMISSION

APPLICATION FOR MAJOR LAND USE ACTION REVIEW

ALUC STAFF ONLY

ALUC Case Number: ZAP1091BD23 Date Submitted: 4/18/23

AIA: Bermuda Dunes Zone: E Public Hearing ☐ Staff Review ☑

Applicant

Applicant Full Name: Omar Hussein

Applicant Address: 69-930 Hwy 111, Ste 203 Rancho Mirage, CA 92270

Phone: (214) 923-3246 **Email:** omar@beaconrealtyadvisors.com

Representative/ Property Owner Contact Information

Representative: Luis Gomez (goUrban Development) **Email:** lagomez@gourbandev.com

Phone: (562) 895-3392

Address: 1 World Trade Center, 8th Floor, Long Beach CA 90831

Property Owner: AABC Beacon Jefferson Square, LLC, a North Carolina limited liability company **Email:** omar@beaconrealtyadvisors.com

Phone: (214) 923-3246

Address: 69-930 Hwy 111, Ste 203 Rancho Mirage, CA 92270

Local Jurisdiction Agency

Agency Name: City of La Quinta Phone: (760) 341-4800

Staff Contact: Nicole Criste **Email:** consultingplanner@laquintaca.gov

Address: 78495 Calle Tampico, La Quinta, CA 92253

Local Agency Case No.: Master Project # 2023-0001, SP2022-0004,TTM2022-0003,SDP22022-0015

Project Location

Street Address: N/A Gross Parcel Size.: 5.1 Acres

Assessor's Parcel No.: 604-521-013, 604-521-014

Solar

Is the project proposing solar Panels? Yes ☑ No ☐ If yes, please provide solar glare study. (only if in Zone C or higher)

Data

Site Elevation:(above mean sea level): 59 ft

Height of Building or structures: 45' 4"

What type of drainage basins are being proposed and the square footage: 2 above-ground retention basins (8,100 SF + 14,400 SF) and 1 underground retention basin (4,800 SF)

Notice

A. NOTICE: Failure of an applicant to submit complete or adequate information pursuant to Sections 65940 to 65948 inclusive of the California Government Code, MAY constitute grounds for disapproval of actions, regulations, or permits.

B. REVIEW TIME: Estimated time for "staff level review" is approximately 30 days from date of submittal. Estimated time for "commission level review" is approximately 45 days from date of a complete application submittal to the next available commission hearing meeting.

C. SUBMISSION PACKAGE:

Please submit all application items DIGITALLY via USB or CD:

- Completed ALUC Application Form
- Plans Package: site plans, floor plans, building elevations, grading plans, subdivision maps
- Exhibits of change of zone, general plan amendment, specific plan amendment
- Project description of existing and proposed use

Additionally, please provide:

- ALUC fee payment (Checks made out to Riverside County ALUC)
- Gummed address labels of all surrounding property owners within a 300-foot radius of project site. (Only required if the project is scheduled for a public hearing).

Riverside County Airport Land Use Commission, County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, CA 92501, Phone: 951-955-5132 Fax: 951-955-5177 Website: www.rcaluc.org

RIVERSIDE COUNTY
AIRPORT LAND USE COMMISSION

STAFF REPORT

AGENDA ITEM:	3.4
HEARING DATE:	July 13, 2023
CASE NUMBER:	ZAP1075TH23 – Thermal Ranch, LLC (Representative: Terra Nova Planning & Research)
APPROVING JURISDICTION:	County of Riverside
JURISDICTION CASE NO:	GPA230001 (General Plan Amendment), SP00401 (Specific Plan), CZ2300003 (Change of Zone), TTM38578 (Tentative Tract Map), TTM38531 (Tentative Tract Map), PPA230035 (Plot Plan), PPA230038 (Plot Plan),
LAND USE PLAN:	2005 Jacqueline Cochran Regional Airport Land Use Compatibility Plan (last amended in 2006)
Airport Influence Area:	Jacqueline Cochran Regional Airport
Land Use Policy:	Airport Compatibility Zones D, E
Noise Levels:	Below 55 CNEL from aircraft at this location

MAJOR ISSUES: The proposed project is inconsistent with the following airport land use compatibility criteria:

- **The project's proposed residential density for the Estate Lots in Planning Area 2 of 0.6 dwelling units per acre is inconsistent with Zone D residential density criteria of either below 0.2 dwelling units per acre or above 5.0 dwelling units per acre.**

- **The project's proposed non-residential single-acre intensity for the Equestrian Center VIP Barn in Planning Area 1 of 1,749 people is inconsistent with Zone D maximum single acre intensity criterion of 300 people.**

The applicant is requesting that the Commission choose to consider the normally incompatible density and intensity compatible pursuant to Countywide Policy 3.3.6 if the combination of the following special findings is determined to represent "other extraordinary factors or circumstances".

RECOMMENDATION: Staff recommends that the Commission find the proposed General Plan Amendment, Specific Plan, and Change of Zone CONSISTENT with the 2005 Jacqueline Cochran Regional Airport Land Use Compatibility Plan as amended in 2006, and also find the proposed Tentative Tract Maps and Plot Plans CONSISTENT, pursuant to Policy 3.3.6 of the Countywide Policies and the adoption of special findings, and subject to the conditions

included herein.

PROJECT DESCRIPTION: A proposal to establish the Thermal Ranch Specific Plan on 622.56 acres, which includes 223.1 acres of Equestrian Center, 194.3 acres of Estate Residential, 69.5 acres of Medium Density Residential, 41.1 acres of High Density Residential, 54.4 acres of Hotel/Resort, 21.4 acres of Commercial Retail, proposing overall a total maximum of 1,362 dwelling units, 320 RV spaces, and 285,000 square feet of commercial building area. The applicant also proposes amending the site's General Plan land use designation from Agriculture to Specific Plan, and change the site's zoning from Heavy Agriculture, 10 acre minimum (A-2-10) and Controlled Development Areas (W-2) to Specific Plan, and to create the zoning ordinance of the Specific Plan. The applicant also proposes to divide the site into 10 parcels (TTM38531), as well as divide the site into 542 lots, including 1 lot for the Equestrian Center, 2 lots for Horse Park Workforce Housing, 2 lots for commercial purposes, 271 lots for single-family detached, and 191 lots for single-family attached, and 75 private open space lots (TTM38578). The applicant also proposes to establish a Horse Park Workforce housing on 41.3 acres which includes 500 units and 301 RV parking stalls (PP230005), as well as establish an Equestrian Center on 223.2 acres which includes 615,689 square feet of building area which includes a Grand VIP Barn, 8 Private Barn buildings, 21 Large Barn buildings, 2 Retail buildings, 5 Retail Barn buildings, and 1 Office building, and non-building areas include grass field, riding, and holding areas.

PROJECT LOCATION: The site is located southerly of 62nd Avenue, westerly of Tyler Street, northerly of 64th Avenue, and easterly of Harrison Street, approximately 6,530 feet southwesterly of the southerly terminus of Runway 17-35 at Jacqueline Cochran Regional Airport.

BACKGROUND:

Residential Density: Pursuant to the Jacqueline Cochran Regional Airport Land Use Compatibility Plan (JCRA ALUCP), the project is located within Zones D (615.53 acres) and E (7.03 acres), where Zone D restricts residential density to either below 0.2 dwelling units per acre or above 5.0 dwelling units per acre (Zone E does not restrict density).

The project proposes, as part of this application submittal, three residential developments in Planning Areas 2, 3 and 4, and one that does not propose any development at this time in Planning Area 5 Resort Condominiums:

- Planning Area 2 comprises of 194.3 acres and proposes 110 single-family residential detached Estate Lots units, resulting in a density of 0.6 dwelling units per acre, which is inconsistent with Zone D residential density criteria of either below 0.2 dwelling units per acre or above 5.0 dwelling units per acre.

  The applicant is requesting that the Commission choose to consider the normally incompatible density compatible pursuant to Countywide Policy 3.3.6 based on extraordinary factors or circumstances (see below section Countywide Policy 3.3.6).

- Planning Area 3 comprises of 69.5 acres and proposes 162 single-family residential detached units and 191 single family attached units totaling 353 units, resulting in a density of 5.1 dwelling units per acre, which is consistent with Zone D residential density criteria of either below 0.2 dwelling units per acre or above 5.0 dwelling units per acre.

- Planning Area 4A comprises of 18.4 acres and proposes 500 Workforce Housing Cottage units, resulting in a density of 27.2 dwelling units per acre, which is consistent with Zone D residential density criteria of either below 0.2 dwelling units per acre or above 5.0 dwelling units per acre.

- Planning Area 4B comprises of 23.0 acres and proposes 301 RV Workforce Stall units, resulting in a density of 13.1 dwelling units per acre, which is consistent with Zone D residential density criteria of either below 0.2 dwelling units per acre or above 5.0 dwelling units per acre.

- Planning Area 5A (no development application submitted at this time) comprises of 42.2 acres and proposes 312 Resort Condominium units, resulting in a density of 7.4 dwelling units per acre, which is consistent with Zone D residential density criteria of either below 0.2 dwelling units per acre or above 5.0 dwelling units per acre.

Non-Residential Average-Acre Intensity: Pursuant to the Jacqueline Cochran Regional Airport Land Use Compatibility Plan, the project is located within Zones D (615.53 acres) and E (7.03 acres), where Zone D restricts non-residential intensity to 100 people per acre (Zone E does not restrict intensity).

Pursuant to Appendix C, Table C-1, of the Riverside County Airport Land Use Compatibility Plan, the following rates were used to calculate the occupancy for the proposed buildings:

- Grand VIP barn assembly/dining area – 1 person per 15 square feet,
- Private barns – 1 person per 300 square feet,
- Retail barns – 1 person per 60 square feet,
- Office – 1 person per 200 square feet, and
- Retail – 1 person per 60 square feet.

The project proposes, as part of this application submittal, one non-residential development in Planning Area 1 for an Equestrian Center on 223.1 acres (No development is proposed at this time for Planning Area 5B [Hotel], Planning Area 5C [Commercial Village South – Retail and Restaurants], and Planning Area 6 [Commercial Village North – Retail, Market, Restaurant]. Any future developments occurring within these planning areas will require ALUC review), which includes: a 65,395 square foot VIP Barn, 8 private barns totaling 51,776 square feet, 8 private barns totaling 48,368 square feet, 21 large barns totaling 446,040 square feet, 5 retail barns totaling 3,000 square feet, 2 retail buildings totaling 8,000 square feet, and a 6,885 square foot office building accommodating 5,370 people, resulting in an average intensity of 24 people per acre, which is consistent with Compatibility Zone D average intensity criterion of 100 people per acre.

A second method for determining total occupancy involves multiplying the number of parking spaces provided or required (whichever is greater) by average vehicle occupancy (assumed to be 1.5 persons per vehicle in the absence of more precise data). Based on the number of parking spaces provided of 1,990, the total occupancy would be 2,985 people resulting in an average intensity of 13 people per acre, which is consistent with the Zone D average intensity criterion of 100 people per acre.

Non-Residential Single-Acre Intensity: Pursuant to the Jacqueline Cochran Regional Airport Land Use Compatibility Plan, the project is located within Zones D (615.53 acres) and E (7.03 acres), where Zone D restricts single-acre intensity to a maximum 300 people (Zone E does not restrict intensity).

Based on the site plan provided and the occupancies as previously noted for Planning Area 1 Equestrian Center, the maximum single-acre area is located at the VIP Barn (Jumpers side) and includes 5,709 square feet lobby area, 2,900 square feet kitchen area, 15,759 square feet great hall dining area, 3,769 square feet second floor dining area, and 56 outdoor seats (1 person per seat) accommodating 1,749 people, which is inconsistent with Compatibility Zone D maximum single acre criterion of 300 people.

The applicant is requesting that the Commission choose to consider the normally incompatible intensity compatible pursuant to Countywide Policy 3.3.6 based on extraordinary factors or circumstances (see below section Countywide Policy 3.3.6).

Prohibited and Discouraged Uses: The project does not propose any uses prohibited or discouraged in Zones D and E (highly noise-sensitive outdoor non-residential uses, and hazards to flight).

Noise: The JCRA ALUCP depicts the site as being located below the 55 CNEL contour range from aircraft noise. Therefore, no special measures to mitigate aircraft-generated noise are required.

Part 77: The elevation of Runway 17-35 at its southerly terminus is approximately -137.5 feet mean sea level (MSL). At a distance of approximately 6,530 feet from the runway to the project site, Federal Aviation Administration (FAA) review would be required for any structures with top of roof exceeding -72.2 feet mean sea level (MSL). The site elevation is approximately -140 feet MSL, and the maximum building height is 65 feet, resulting in a top point elevation of -75 feet MSL. Therefore, review of buildings by the FAA Obstruction Evaluation Service (FAA OES) was not required. However, due to the scope and size of the project, along with being very close to the FAA threshold, the applicant has submitted Form 7460-1 and the FAA OES has assigned Aeronautical Study Nos. 2023-AWP-9100-OE, 2023-AWP-9101-OE, 2023-AWP-9096-OE, and 2023-AWP-9098-OE to this project.

Determinations of No Hazard to Air Navigation letters were issued by the FAA OES on June 12, 2023, and it was determined that the buildings would not result in an impact to air navigation. The FAA OES conditions have been incorporated into the ALUC's conditions.

Open Area: Pursuant to the JCRA ALUCP, the project site is located within Compatibility Zones D and E, which requires projects greater than 10 acres to designate 10% for Zone D of the project area as ALUC qualifying open area that could potentially serve as emergency landing areas (Zone E does not require open area).

Based on the project size (615.53 acres) located within Compatibility Zone D, the project is required to provide a minimum 61.55 acres of open area consistent with ALUC open area criteria. The applicant has provided a total of 176 acres of open area, mainly within the outdoor riding areas, as well as the drive aisles and parking areas. These areas are conditioned to maintain a minimum shape of 75 feet in width and 300 feet in length, and shall be kept obstacle and obstruction free per

ALUC open area definition (no objects greater than four feet in height with a diameter of four inches or greater).

Hazards to Flight: Land use practices that attract or sustain hazardous wildlife populations on or near airports significantly increase the potential of Bird Aircraft Strike Hazards (BASH). The FAA strongly recommends that storm water management systems located within 5,000 or 10,000 feet of the Airport Operations Area, depending on the type of aircraft, be designed and operated so as not to create above-ground standing water. To facilitate the control of hazardous wildlife, the FAA recommends the use of steep-sided, rip-rap lined, narrow, linearly shaped water detention basins. All vegetation in and around detention basins that provide food or cover for hazardous wildlife should be eliminated. (FAA Advisory Circular 5200-33C). The project is located 6,530 feet from the runway, and therefore would be subject to the above requirement.

The project proposes a total of 51.20 acres of retention basin area, and pursuant to the study "Wildlife Hazard Management at Riverside County Airports: Background and Policy", October 2018, by Mead & Hunt, "Airports, Wildlife and Stormwater Management", such basins are permissible in Zones D and E when basins remain less than 30 feet in length or width, and vegetation is selected careful so as not to provide food, shelter, nesting, roosting, or water for wildlife. The project has been conditioned to be consistent with the basin criteria (as well as providing 48-hour draw down of the basin).

The applicant has also commissioned a Wildlife Hazard Site Visit and Wildlife Hazard Management Plan for the project prepared by Russell P. DeFusco of BASH Incorporated (March 2023). The study evaluated the potential of wildlife hazards from the project resulting in a hazard to flight. Surveys of the project site were conducted in July 2022 to determine habitat features as well as bird and other wildlife presence. The study identifies a moderate risk of bird strikes to aircraft operating at Jacqueline Cochran Regional Airport, recognizing that there are a large number of a diverse mix of species that annually migrate through the region and over winter on the Salton Sea and in surrounding areas. Some of these birds will be attracted to any water feature in the project, as well as likely being attracted to the equestrian facilities and other developments associated with the project. The study recommends implementing a Wildlife Hazard Management Plan including engineering design, landscaping, passive, and active deterrent measures, that will reduce the potential risks of aircraft bird strikes. With the implementation of the Wildlife Hazard Management Plan, the study concludes that the project wildlife hazard impacts would be negligible, and that the project should be highly successful in mitigating any potential issue at the site.

General Plan Amendment/Specific Plan/Change of Zone: The applicant proposes amending the site's General Plan land use designation from Agriculture to Specific Plan, and change the site's zoning from Heavy Agriculture, 10 acre minimum (A-2-10) and Controlled Development Areas (W-2) to Specific Plan, and to create the zoning ordinance of the Specific Plan.

The applicant also proposes to establish the Thermal Ranch Specific Plan on 622.56 acres, which includes 223.1 acres of Equestrian Center, 194.3 acres of Estate Residential, 69.5 acres of Medium Density Residential, 41.1 acres of High Density Residential, 54.4 acres of Hotel/Resort, 21.4 acres of Commercial Retail, proposing overall a total maximum of 1,362 dwelling units, 320 RV spaces, and 285,000 square feet of commercial building area.

Planning Area 2 is identified as Estate Neighborhood on large lots with a proposed land use

designation of Low Density Residential (0.5 to 2.0 dwelling units per acre). The project proposes 110 single-family residential detached Estate Lot units on 194.3 acres, resulting in a density of 0.6 dwelling units per acre. Although the project's density is consistent with the proposed Low Density Residential designation, it is inconsistent with the Compatibility Zone D residential density criteria of either below 0.2 dwelling units per acre or above 5.0 dwelling units per acre. The applicant is requesting that the Commission choose to consider the normally incompatible density compatible pursuant to Countywide Policy 3.3.6 based on extraordinary factors or circumstances (see below section Countywide Policy 3.3.6). Lastly, the specific plan document contains regulatory language requiring that projects shall be consistent with the JCRA ALUCP criteria.

With the Commission's adoption of special findings per countywide policy 3.3.6, and the specific plan language requiring projects to be consistent with the JCRA ALUCP criteria, the proposed amendments would be consistent with the Compatibility Plan.

Countywide Policy 3.3.6: While the project does not strictly comply with the Compatibility Zone D density and intensity criteria, the Commission may choose to consider whether to find the normally incompatible density and intensity compatible pursuant to Countywide Policy 3.3.6 if the combination of the following facts is determined to represent "other extraordinary factors or circumstances" based on the following findings:

- The project proposes a total of 176 acres of qualified ALUC open area almost tripling the required amount of 61.55 acres. The excess open area can be used to significantly offset the safety and risk factor created by the project's inconsistent density of the Estate lots and inconsistent single acre intensity of the Equestrian Center VIP Barn, and provide for a large contiguous area for emergency landings. Lastly, the proposed VIP Barn will have 2.00 acres of open horse arena to the north and 1.49 acres of open arena to the south, providing significant open area in the event of an emergency and thus reducing the per acreage occupancy of this combined area.

- The project was reviewed and analyzed by the FAA OES and it was determined that the proposed buildings would not result in an impact to air navigation;

- The project is located outside the 55 CNEL noise contour for the airport, and will not expose residents or the public to excessive noise levels for the ultimate buildout of the airport. As shown in Table 2B on page 2-23 of the ALUCP, residential uses are considered "clearly acceptable" outside of the 55 dB CNEL contour;

- The approved and partially developed Kohl Ranch Specific Plan project, located between the project site and the airport, includes several planning areas with low-to-medium density residential development (2-5 du/acre) which also fall between the "low" and "high" density options specified for Zone D. These residential densities, along with the rest of the Kohl Ranch master planned community will serve as a substantial buffer between the airport and the Thermal Ranch project;

- Zone D is assigned to the airport's primary traffic pattern areas that are not adjacent to runways and fall outside of the extended approach and departure zones. These areas are considered to have a moderate risk of noise impact and a low risk of safety impacts;

- The ALUCP provides both a high and low residential density option in Zone D because "noise concerns can be minimized either by limiting the number of dwelling units in affected areas or by allowing high-density development which tends to have comparably high ambient noise levels" (see Table 3A on p. 3-3 of the ALUCP). Development densities in PA-2 will be low and will thereby limit the number of residents in this area exposed to aircraft noise or from future vehicular traffic noise on adjoining Avenue 62;

- The proposed project will transfer a significant number of people from the existing Desert International Horse Park which is located approximately 2,700 feet from the northwesterly end of runway 12-30 located in Zones B1, C, and D. The project site is over 6,500 feet away from the runway and is located in Zones D and E. The transfer of occupancy from the existing horse park to the proposed project site will help reduce the safety and risk factor at the airport.

- The applicant has provided an occupancy methodology based on the number of seats for the VIP Barn (1 person per seat). The study indicates a total occupancy of 576 people for the entire building, with a single-acre intensity of the western half of the building of 281 people, and a single-acre intensity of the eastern half of the building of 295 people, which would both be consistent with Zone D maximum single acre intensity criterion of 300 people.

- The horse show season in Coachella Valley begins in November and ends in April. During the off-season, between April through September, the proposed equestrian center activity will consist of limited stabling, training, and off-season maintenance, resulting in very low occupancies. The equestrian facility will only experience peak occupancies about 50% of the year.

- The applicant has provided some occupancy data from the existing Desert International Horse Park facility for comparison purposes, which is entirely ticket based (1 ticket equals 1 person). According to the data from the horse equestrian season of 2022/2023, a range of 80 to 768 VIP tickets were sold per week, with an estimated maximum of 538 ticket holders present in the actual VIP barn at any given time. If we extrapolated the 538 tickets to the proposed project VIP barn, which is located on approximately 2.00 acres, the maximum ticket sales for each single acre would accommodate approximately 269 tickets/people, which would be consistent with Zone D single acre intensity maximum criteria of 300 people.

- Traffic data was collected and analyzed from the existing Desert International Horse Park facility between February 13 through February 19, 2023, in order to determine its occupancy. The highest occupancy occurred on Sunday February 23, 2023, where there were 3,456 vehicle trips to the site, and a total of 4,900 people throughout the day which is lower than the total occupancy calculated for the proposed project using the building method of 5,370 people.

CONDITIONS:

1. Any outdoor lighting installed shall be hooded or shielded to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.

2. The following uses shall be prohibited:

(a) Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.

(b) Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.

(c) Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses include landscaping utilizing water features, aquaculture, outdoor production of cereal grains, sunflower, and row crops, composting operations, wastewater management facilities, artificial marshes, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, and incinerators.)

(d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.

(e) Any use which results in a hazard to flight, including physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations.

3. The attached “Notice of Airport in Vicinity” shall be provided to all prospective purchasers and occupants of the property and be recorded as a deed notice.

4. Any proposed stormwater basins or facilities shall be designed and maintained to provide for a maximum 48-hour detention period following the design storm, and remain totally dry between rainfalls. Vegetation in and around the basins that would provide food or cover for birds would be incompatible with airport operations and shall not be utilized in project landscaping. Trees shall be spaced so as to prevent large expanses of contiguous canopy, when mature. Landscaping in and around the basin(s) shall not include trees or shrubs that produce seeds, fruits, or berries.

   Landscaping in the stormwater basin, if not rip-rap, should be in accordance with the guidance provided in ALUC “LANDSCAPING NEAR AIRPORTS” brochure, and the “AIRPORTS, WILDLIFE AND STORMWATER MANAGEMENT” brochure available at RCALUC.ORG which list acceptable plants from Riverside County Landscaping Guide or other alternative landscaping as may be recommended by a qualified wildlife hazard biologist.

   A notice sign, in a form similar to that attached hereto, shall be permanently affixed to the stormwater basin with the following language: “There is an airport nearby. This stormwater basin is designed to hold stormwater for only 48 hours and not attract birds. Proper maintenance is necessary to avoid bird strikes”. The sign will also include the name, telephone number or other contact information of the person or entity responsible to monitor

the stormwater basin.

The project shall also be consistent with the findings and recommended mitigations of the Wildlife Hazard Site Visit and Wildlife Hazard Management Plan (prepared by Russell P. DeFusco March 2023).

5. This project has been evaluated as consisting of 223.1 acres of Equestrian Center, 194.3 acres of Estate Residential, 69.5 acres of Medium Density Residential, 41.1 acres of High Density Residential, 54.4 acres of Hotel/Resort, 21.4 acres of Commercial Retail, proposing overall a total maximum of 1,362 dwelling units, 320 RV spaces, and 285,000 square feet of commercial building area, and specifically for the Equestrian Center, including a 65,395 square foot VIP Barn, 8 private barns totaling 51,776 square feet, 8 private barns totaling 48,368 square feet, 21 large barns totaling 446,040 square feet, 5 retail barns totaling 3,000 square feet, 2 retail buildings totaling 8,000 square feet, and a 6,885 square foot office building accommodating 5,370 people, resulting in an average intensity of 24 people per acre, which is consistent with Compatibility Zone D average intensity criterion of 100 people per acre. Any increase in building area, change in use to any use, or modification of the tentative parcel map lot lines and areas will require an amended review to evaluate consistency with the ALUCP compatibility criteria.

6. At least 61.55 acres of ALUC-eligible open areas (at least 75 feet in width and 300 feet in length), as depicted on the open space exhibit shall be kept obstacle and obstruction free per ALUC open area definition (no objects greater than four feet in height with a diameter of four inches or greater).

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NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances [can vary from person to person. You may wish to consider what airport annoyances], if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. Business & Professions Code Section 11010 (b)(13)(A)

NOTICE

THERE IS AN AIRPORT NEARBY.

THIS STORM WATER BASIN IS DESIGNED TO HOLD STORM WATER FOR ONLY 48 HOURS AND NOT TO ATTRACT BIRDS

PROPER MAINTENANCE IS NECESSARY TO AVOID BIRD STRIKES

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION ALUC

IF THIS BASIN IS OVERGROWN, PLEASE CONTACT:

Name: _____ Phone: _____

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2023-AWP-9101-OE

Issued Date: 06/12/2023

Jeremy Smith
Thermal Ranch, LLC
19312 Canyon Drive
Villa Park, CA 92861

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Multi-purpose Building Thermal Ranch Mixed-Use Development
Location:	Thermal, CA
Latitude:	33-35-02.79N NAD 83
Longitude:	116-10-53.20W
Heights:	-137 feet site elevation (SE) 65 feet above ground level (AGL) -72 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

The structure considered under this study lies in proximity to an airport and occupants may be subjected to noise from aircraft operating to and from the airport.

This determination expires on 12/12/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

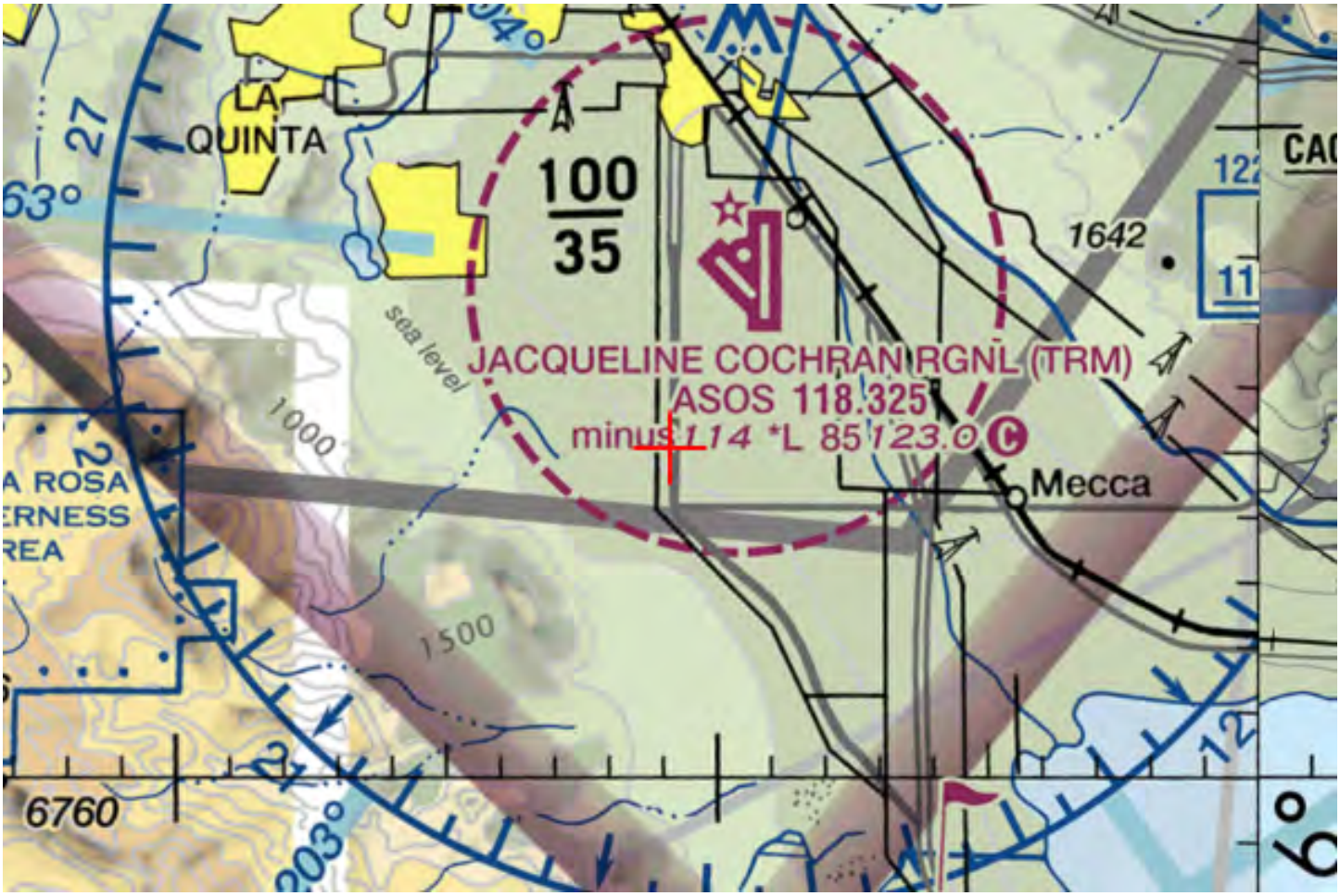
If we can be of further assistance, please contact our office at (847) 294-7575, or vivian.vilaro@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2023-AWP-9101-OE.

Signature Control No: 587873783-589976155 (DNE)
Vivian Vilaro
Specialist

Attachment(s)
Map(s)

TOPO Map for ASN 2023-AWP-9101-OE

Sectional Map for ASN 2023-AWP-9101-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2023-AWP-9100-OE

Issued Date: 06/12/2023

Jeremy Smith
Thermal Ranch, LLC
19312 Canyon Drive
Villa Park, CA 92861

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Multi-purpose Building Thermal Ranch Mixed-Use Development
Location:	Thermal, CA
Latitude:	33-35-02.95N NAD 83
Longitude:	116-09-52.35W
Heights:	-153 feet site elevation (SE) 65 feet above ground level (AGL) -88 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

The structure considered under this study lies in proximity to an airport and occupants may be subjected to noise from aircraft operating to and from the airport.

This determination expires on 12/12/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

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This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

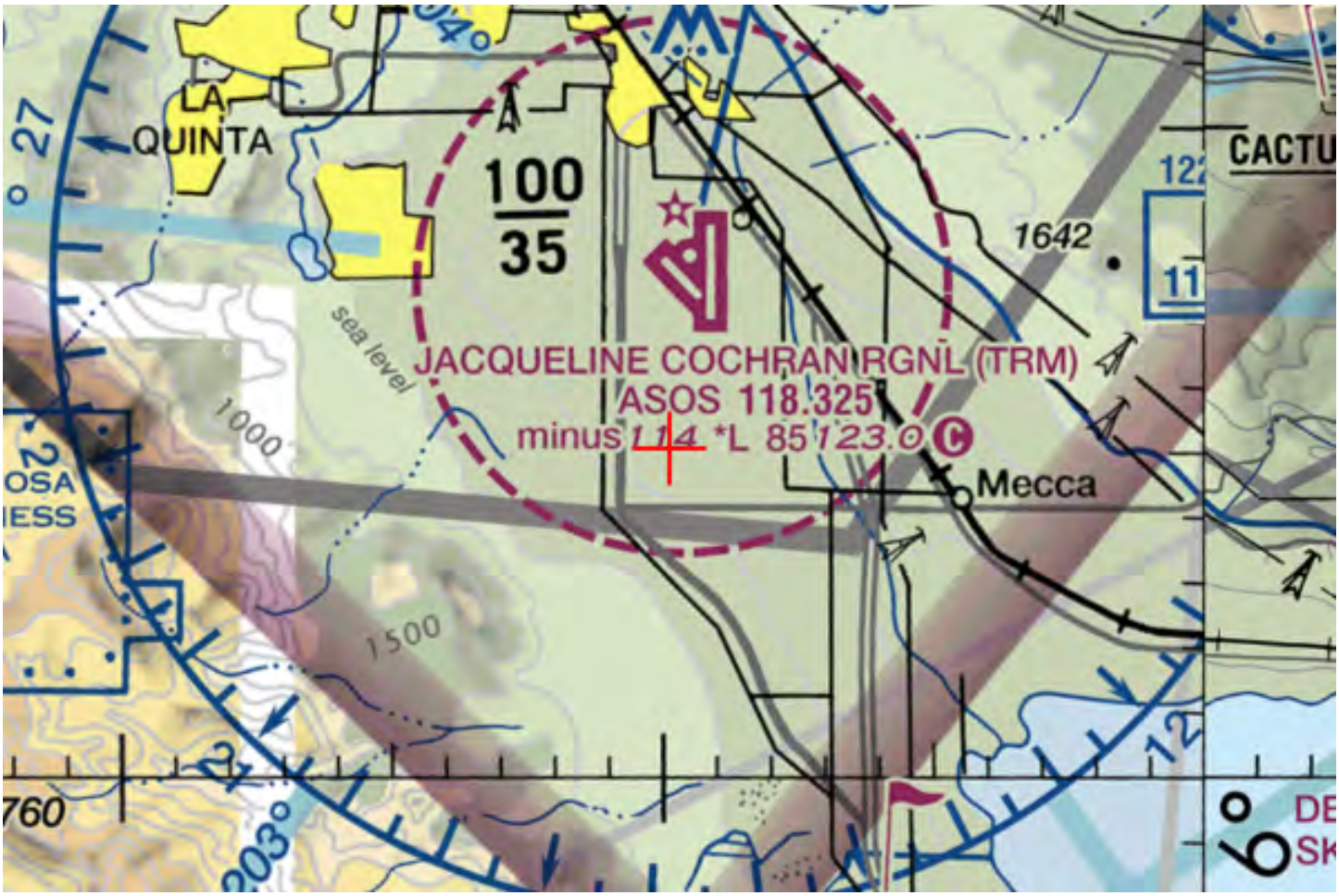
If we can be of further assistance, please contact our office at (847) 294-7575, or vivian.vilaro@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2023-AWP-9100-OE.

Signature Control No: 587872200-589976156 (DNE)
Vivian Vilaro
Specialist

Attachment(s)
Map(s)

TOPO Map for ASN 2023-AWP-9100-OE

Sectional Map for ASN 2023-AWP-9100-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2023-AWP-9096-OE

Issued Date: 06/12/2023

Jeremy Smith
Thermal Ranch, LLC
19312 Canyon Drive
Villa Park, CA 92861

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Multi-purpose Building Thermal Ranch Mixed-Use Development
Location:	Thermal, CA
Latitude:	33-35-53.57N NAD 83
Longitude:	116-10-51.61W
Heights:	-130 feet site elevation (SE) 65 feet above ground level (AGL) -65 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

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_____ At least 10 days prior to start of construction (7460-2, Part 1)
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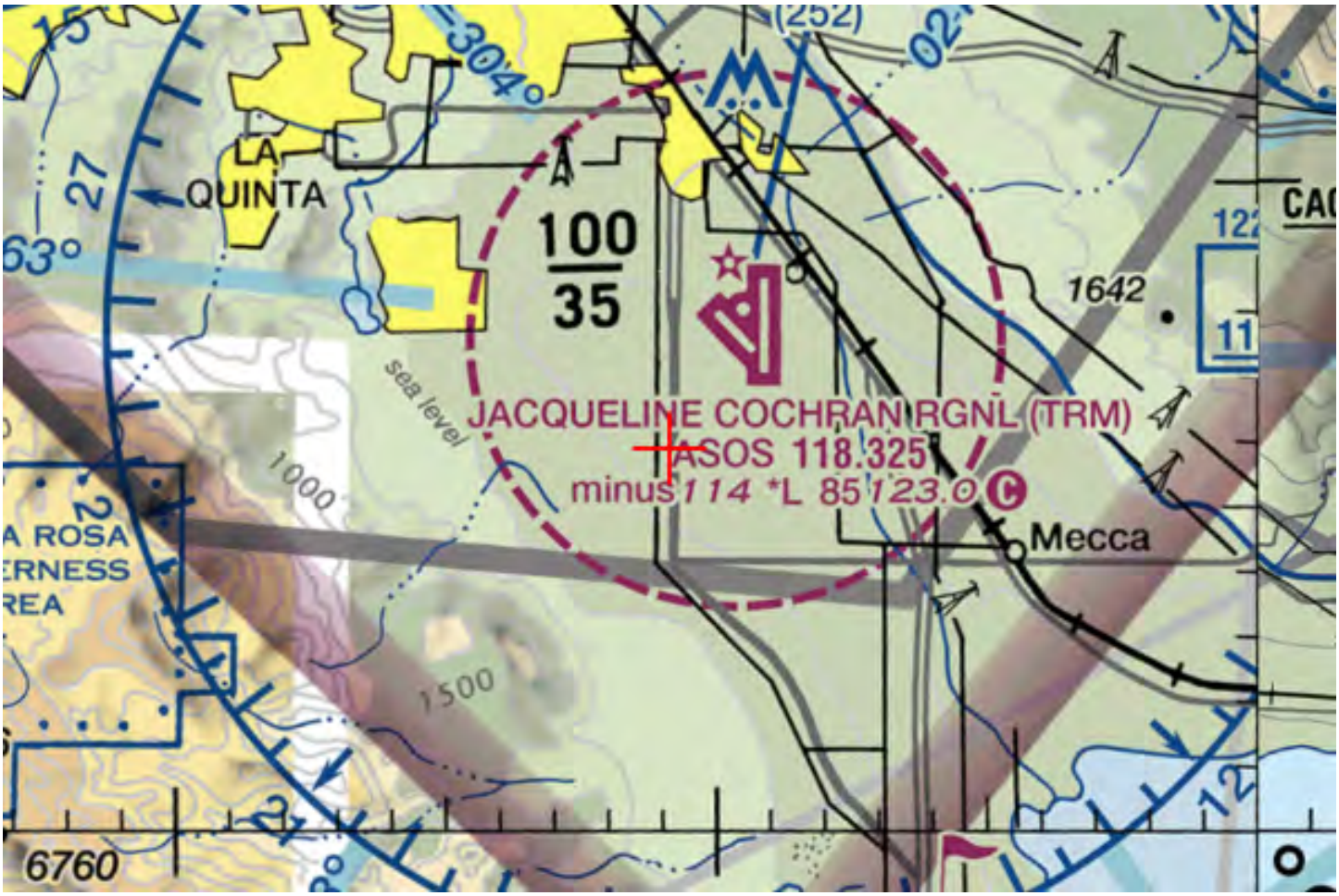
If we can be of further assistance, please contact our office at (847) 294-7575, or vivian.vilaro@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2023-AWP-9096-OE.

Signature Control No: 587869731-589976157 (DNE)
Vivian Vilaro
Specialist

Attachment(s)
Map(s)

TOPO Map for ASN 2023-AWP-9096-OE

Sectional Map for ASN 2023-AWP-9096-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2023-AWP-9098-OE

Issued Date: 06/12/2023

Jeremy Smith
Thermal Ranch, LLC
19312 Canyon Drive
Villa Park, CA 92861

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Multi-purpose Building Thermal Ranch Mix-Use Development
Location:	Thermal, CA
Latitude:	33-35-54.41N NAD 83
Longitude:	116-09-50.63W
Heights:	-142 feet site elevation (SE) 65 feet above ground level (AGL) -77 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

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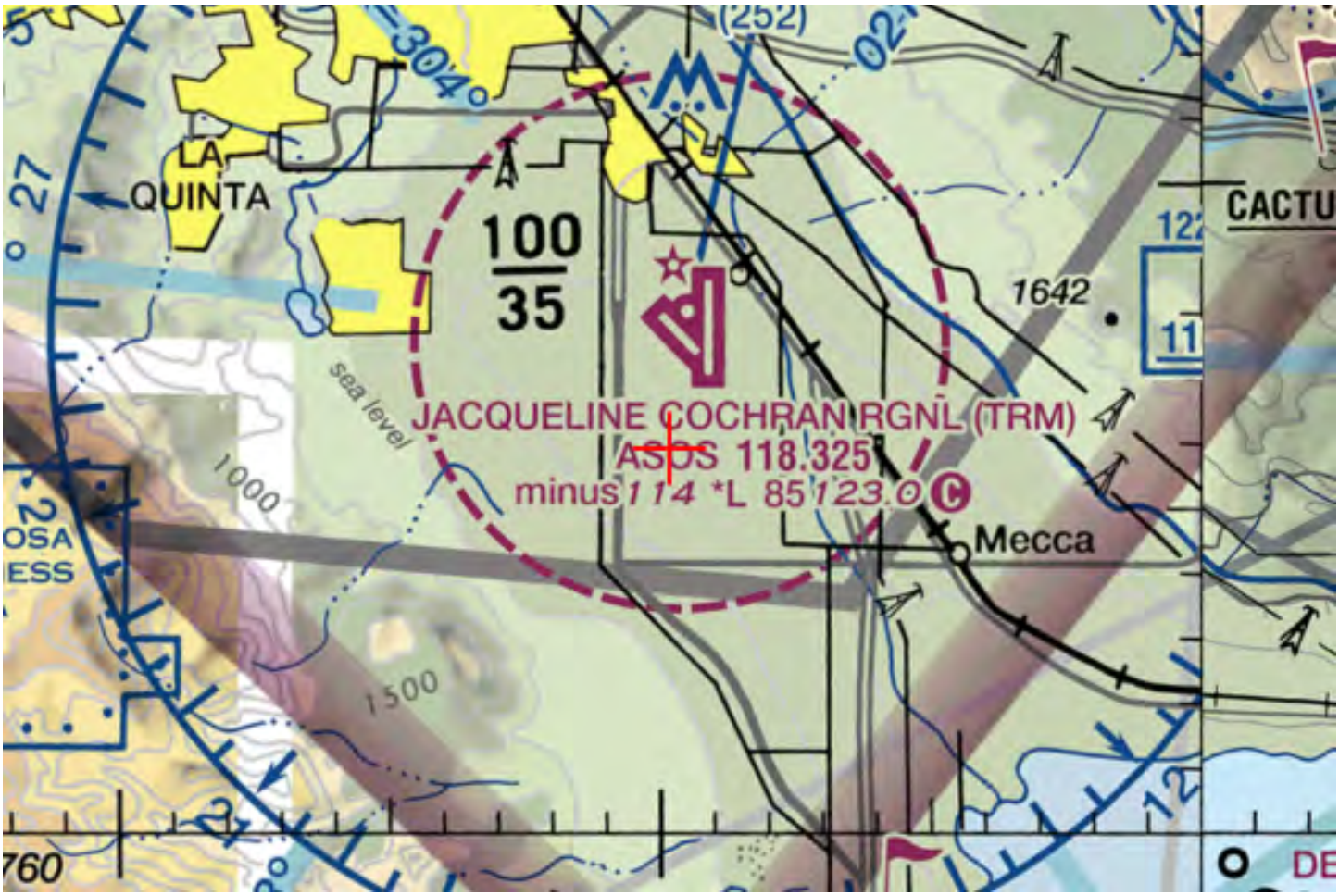
If we can be of further assistance, please contact our office at (847) 294-7575, or vivian.vilaro@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2023-AWP-9098-OE.

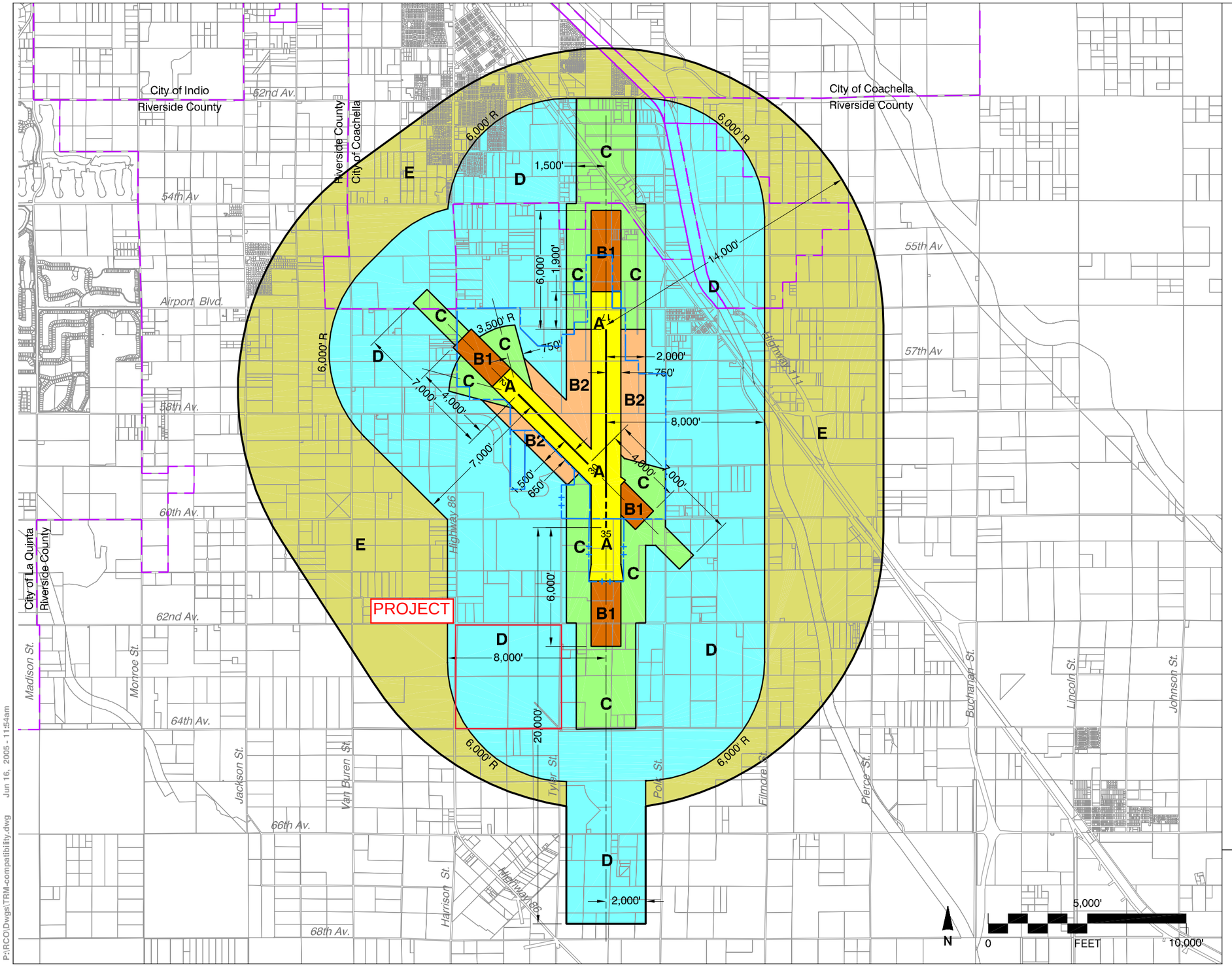
Signature Control No: 587870897-589976158 (DNE)
Vivian Vilaro
Specialist

Attachment(s)
Map(s)

TOPO Map for ASN 2023-AWP-9098-OE

Sectional Map for ASN 2023-AWP-9098-OE





Legend

Compatibility Zones

- Airport Influence Area Boundary
- Zone A
- Zone B1
- Zone B2
- Zone C
- Zone D
- Zone E

Boundary Lines

- Airport Property Line - Existing
- Airport Property Line - Planned
- City Limits

Note

Except for southern extension, Airport Influence Area boundary measured from a point 200 feet beyond runway ends in accordance with FAA airspace protection criteria (FAR Part 77). All other dimensions measured from runway ends and centerlines.

See Chapter 2, Table 2A for compatibility criteria associated with this map.

Riverside County
Airport Land Use Commission

Riverside County
Airport Land Use Compatibility Plan
Policy Document

(Adopted June 2005)

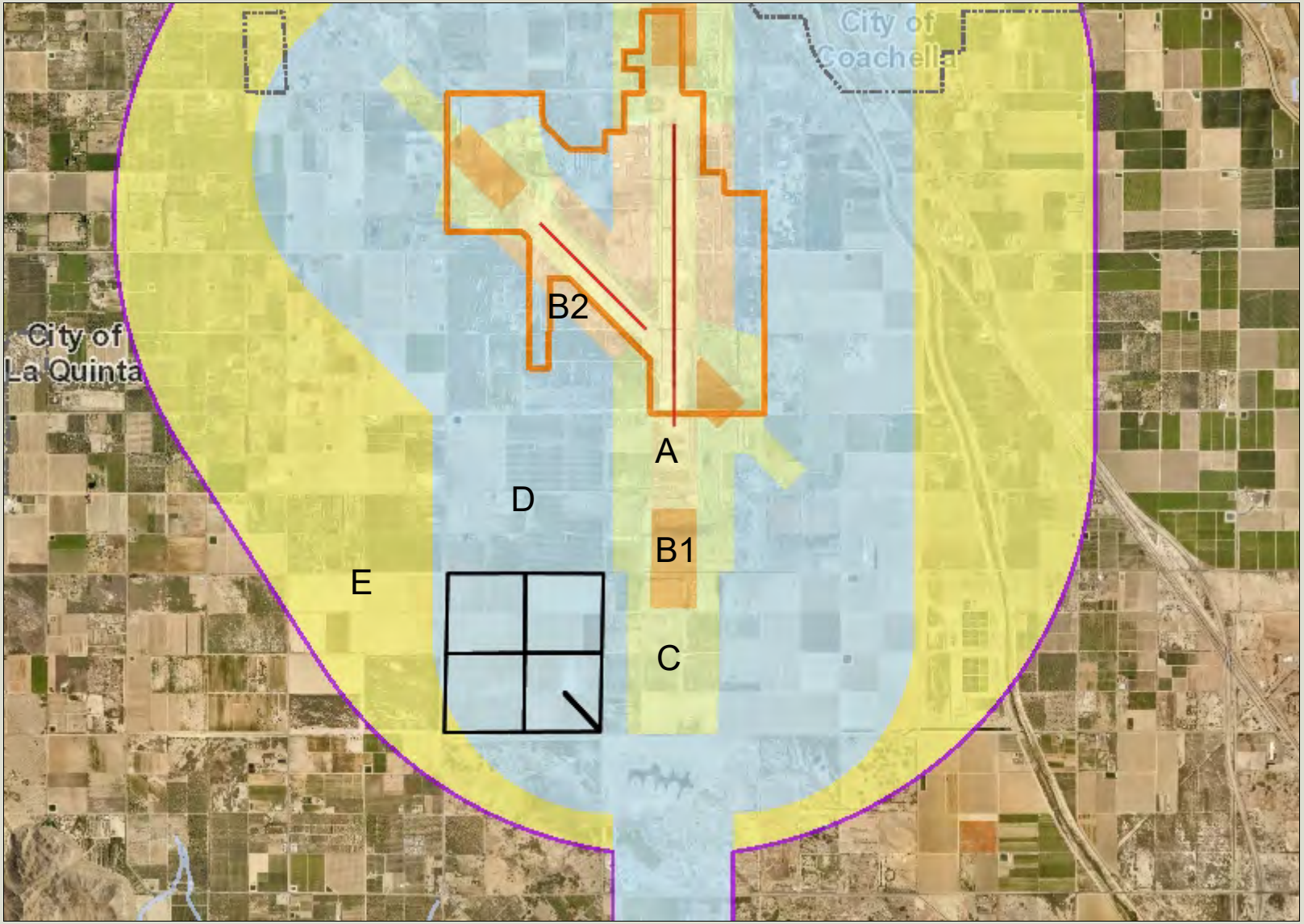
Map JC-1

Compatibility Map

Jacquelline Cochran Regional Airport

P:\RCO\Dwgs\TRM-compatibility.dwg Jun 16, 2005 - 11:54am

Map My County Map



Legend

- Runways
- Airports
- Airport Influence Areas
- Airport Compatibility Zones
  - OTHER COMPATIBILITY ZONE
  - A
  - A-EXC1
  - B1
  - B1-APZ I
  - B1-APZ I-EXC1
  - B1-APZ II
  - B1-APZ II-EXC1
  - B1-EXC1
  - B2
  - B2-EXC1
  - C
  - C1
  - C1-EXC1
  - C1-EXC3
  - C1-EXC4
  - C1-HIGHT
  - C2
  - C2-EXC1
  - C2-EXC2
  - C2-EXC3
  - C2-EXC5
  - C2-EXC6

RCIT

0 6,157 12,314 Feet

IMPORTANT Maps and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of Riverside makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.

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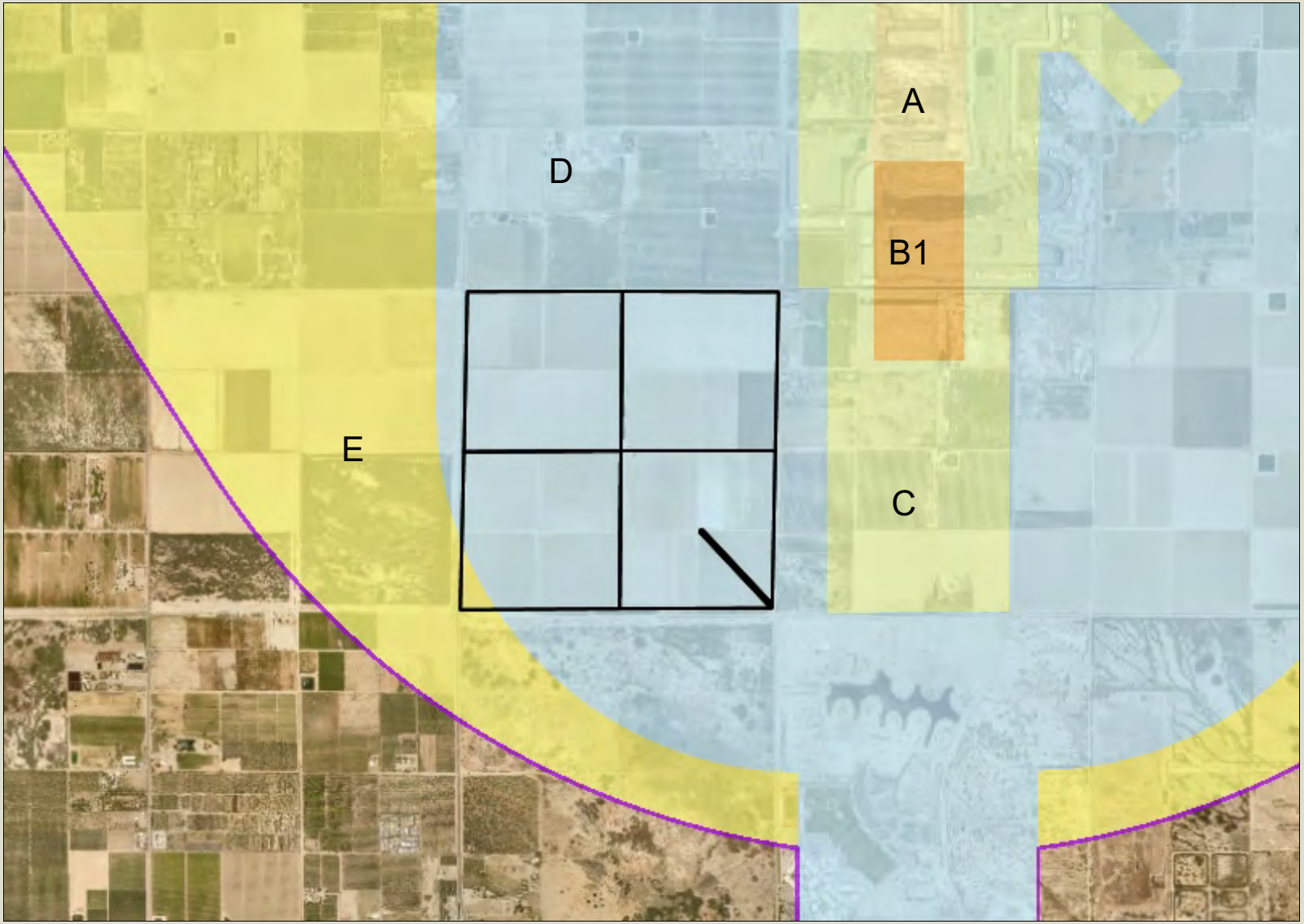

Legend

- Runways
- Airports
- Airport Influence Areas
- Airport Compatibility Zones
  - OTHER COMPATIBILITY ZONE
  - A
  - A-EXC1
  - B1
  - B1-APZ I
  - B1-APZ I-EXC1
  - B1-APZ II
  - B1-APZ II-EXC1
  - B1-EXC1
  - B2
  - B2-EXC1
  - C
  - C1
  - C1-EXC1
  - C1-EXC3
  - C1-EXC4
  - C1-HIGHT
  - C2
  - C2-EXC1
  - C2-EXC2
  - C2-EXC3
  - C2-EXC5
  - C2-EXC6

RCIT

0 3,079 6,157 Feet

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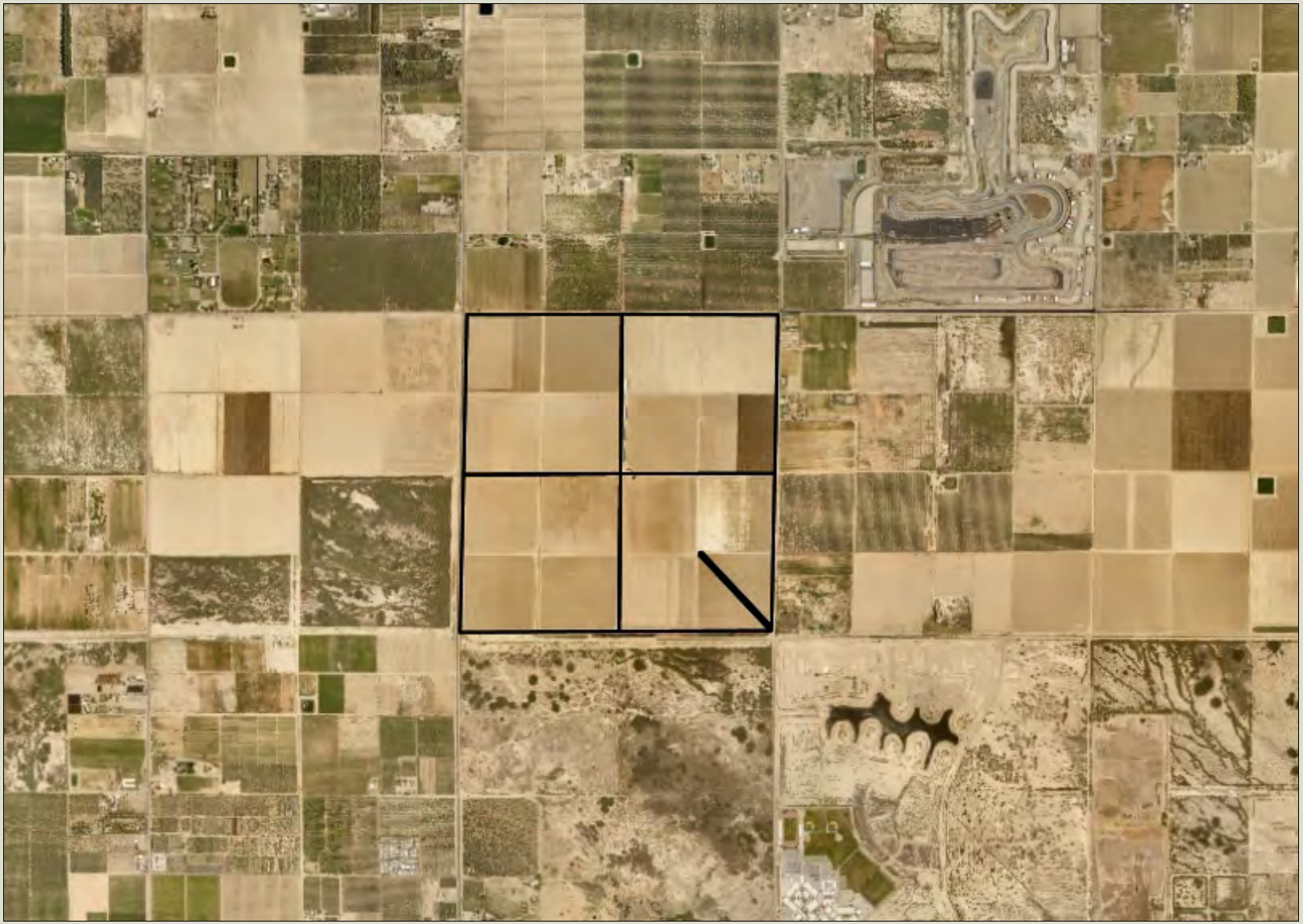
Notes

Map My County Map



Legend

- Blueline Streams
- City Areas
- World Street Map

Notes

0 3,079 6,157 Feet

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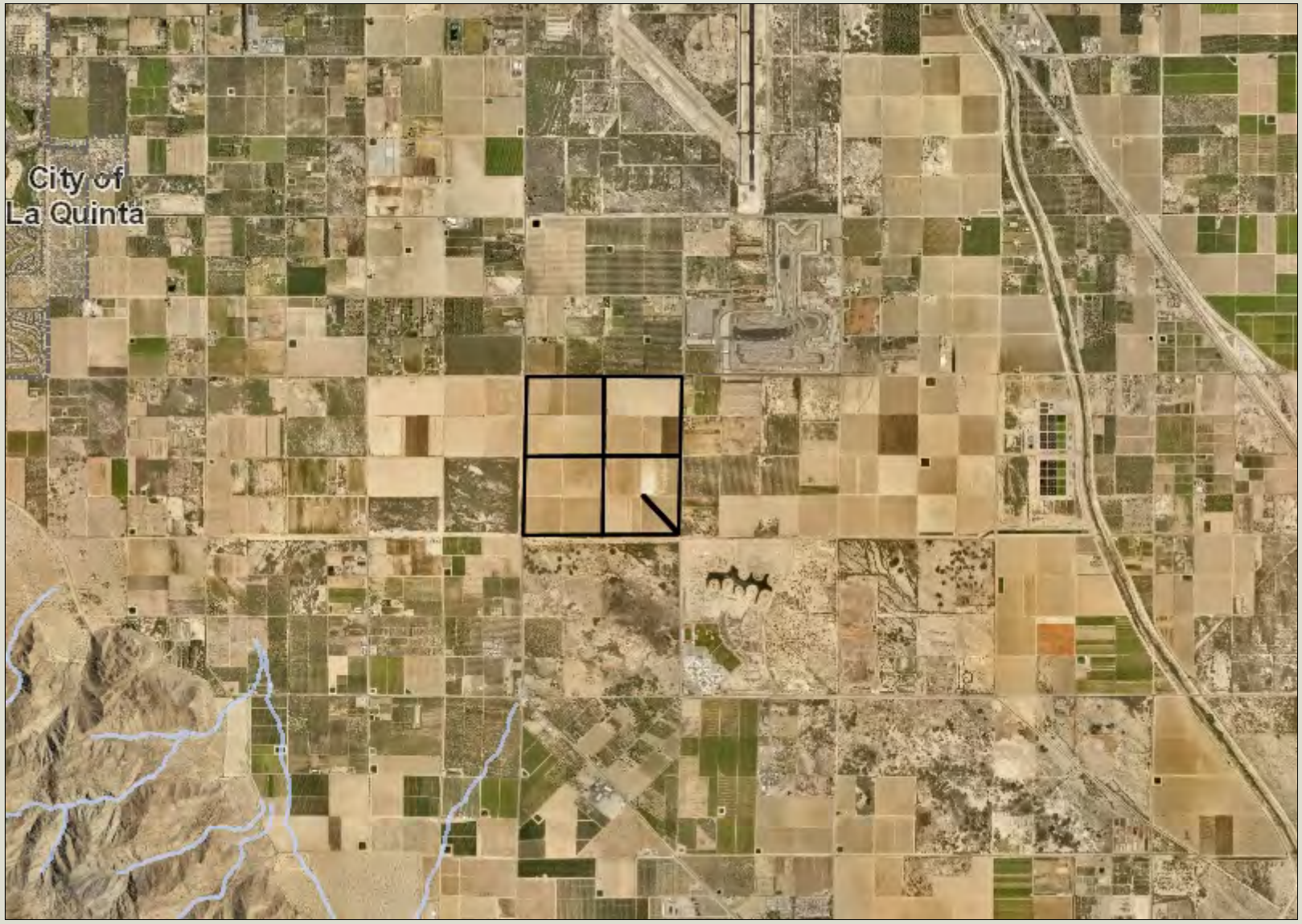
Map My County Map



Legend

- Blueline Streams
- City Areas
- World Street Map

0 6,157 12,314 Feet

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Notes

Map My County Map

Legend

- Blueline Streams
- City Areas
- World Street Map

0 3,079 6,157 Feet

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Notes

Map My County Map

Legend

- County Centerline Names
- County Centerlines
- Blueline Streams
- City Areas
- World Street Map

0 1,539 3,079 Feet

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Notes

TECHNICAL MEMORANDUM

DATE: **June 21, 2023**

TO: **Riverside County Airport Land Use Commission**

FROM: **John D. Criste, AICP**

RE: **Thermal Ranch Specific Plan Site Occupancy Density – No. 3**

This memo is a follow up to our earlier memoranda on the compatibility of the proposed project with the airport land use compatibility plan for the Jacqueline Cochran Regional Airport.

VIP Barn Limited Access

With the 2022-23 season now in the record books, Jeremy Smith (applicant) has conducted an analysis of the ticket sales at the existing VIP Barn, which is the prototype for the new facility at Thermal Ranch. It is important to note that the tables are sold as tickets; that is, the number of tickets sold, represents all the people that were allowed to use the VIP Barn that week. You cannot enter the VIP Barn without the request ticket and wrist band. There is no cashier or "transaction" once the tickets are purchased.

Also as previously noted, the picnic style tables on both sides are purchased by competitors for the competition week and have signs on each (typically, "The Brown Family" and the like). Here riders, grooms and family can get drinks or dine at any time and throughout the day. Following is a summary of these data.

- The VIP barn for the proposed equestrian center is modeled on the comparable VIP space at the existing equestrian facility. According to data from the 2022/2023 show season, a range of 80 to 768 VIP tickets were sold per week.
- Based on the VIP space's function as a communal lounge and dining area, it is reasonable to conservatively assume that no more than 70% of ticket holders would be present in the barn at any given time. As such, it can be determined that no more than 538 ticket holders should be expected to be present in the existing VIP Barn at any given time.
- Assuming comparable attendance in the VIP Barn for the proposed equestrian center, and given that the proposed VIP Barn analysis area encompasses at least two acres, then based on the week with maximum ticket sales in 2022/2023, there would be a maximum occupancy of 269 ticket holders per acre in the VIP barn.

VIP Barn Design

While the Thermal Ranch VIP Barn is modeled in size and capacity on the existing facility, it does include two separate hunter and jumper "clubs" that are not a part of the current facility. It is important to again note that the club users must be weekly VIP Barn ticket holders. Therefore, while the clubs provide additional space, they do not increase the number of users in the VIP Barn.

Also noted by ALUC staff is square footage associated with the two grand entries. This is not space that would increase the occupancy level of the VIP Barn. Rather, as shown on the above photo of a portion of the existing VIP Barn, these areas are also for displays. So, these spaces are for entry and pass-through but are not gathering or drinking or dining space and generate no new occupancy in and of themselves.

VIP Barn Location and Surroundings

As we discussed, other circumstances of the VIP Barn include its location within the equestrian center. To the immediate north will be a competition arena that is 250' X 350' or 2.00 acres. To the immediate south of the VIP Barn will be another event arena that is 200' X 325' or 1.49 acres. The VIP Barn provides immediate access to these open areas in both directions through large sliders, thereby expanding the "escape terrain" available in the event of an emergency. Half of these arena spaces combined total 1.75± acres. With the VIP Barn area itself, the area of consideration can be interpreted to be 3.29 acres, thereby further reducing the per acreage occupancy in this area.

Use Reduction at Existing Facility

As the applicant has explained, the Desert International Horse Show will relocate to the Thermal Ranch project. A "Class B" equestrian event center is expected to continue at the existing HITS site at Airport Boulevard and Harrison Street. However, the level of activity and attendance is expected to be substantially less than the current facility. I am not sure the applicant can quantify the reduction at this time but has indicated it will be meaningful.

Equestrian Center Trip Data

Traffic data collected at the existing equestrian facility provides some additional insight into the number of vehicles and attendees of all sorts at the facility. The highest weekday/mid-week volume occurred on Thursday, February 16th when 1,739 vehicles were counted over a 24-hr period at the horse park entrance. The total daily entering volume was 884 and the total daily exiting volume was 855 vehicles. The weekday/mid-week morning peak hour occurred between 8:00 and 9:00 AM (102 entering and 79 exiting vehicles). The evening peak hour occurred between 4:00 and 5:00 PM (40 entering and 157 exiting vehicles). The total number of guests (owners, riders, grooms, spectators) was estimated to be 2,500 guests for weekday/mid-week conditions, with the highest attendance occurring on the weekend at 4,900 guests.

Requested Specific Plan Revisions

The applicant and the design team have indicated that they will provide you with a version of the SP doc that incorporates the materials you requested. This may not be accomplished until next week.

Summary

As you know, the Thermal Ranch Specific Plan and especially the equestrian center is a unique mix of land uses. The design of the center and the use of its facilities are unique and warrant consideration of design, use distribution and limitations on occupancy. Once understood, the risks and hazards identified for analysis in ALUC guidance can be seen in the proper light.

Your ability and willingness to assess project impacts based on its unique qualities; your constructive input is greatly appreciated.

We will be working on a PowerPoint presentation for the Commission hearing and will get that to you at least the day before the hearing. In the meantime, if you have any questions or would like to discuss anything, please do not hesitate to contact me.

All the best!

JC/kc

Cc:
Jeremy Smith
Martin Magana
James Vaughn

ATTACHMENT A
DESERT INTERNATIONAL HORSE PARK DRIVEWAY COUNTS AND DERIVED WEEKDAY, MID-WEEK VEHICLE TRIP RATES (FEBRUARY 13TH - 19TH, 2023)

TABLE 1: SUMMARY OF DAILY ENTERING/EXITING VEHICLES AND ATTENDANCE

Count Date	Daily Trips In & Out	Guests[1]
Monday (February 13, 2023)	1,789	2,500
Tuesday (February 14, 2023)	1,295	1,800
Wednesday (February 15, 2023)	1,370	1,900
Thursday [2] (February 16, 2023)	1,739	2,500
Friday (February 17, 2023)	2,873	4,100
Saturday (February 18, 2023)	3,255	4,600
Sunday (February 19, 2023)	3,456	4,900

[1] Guests includes owners, riders, grooms, and spectators.
[2] Peak mid-week activity

TABLE 2: DERIVATION OF HORSE PARK TRIP GENERATION RATES - WEEKDAY, MID-WEEK

	AM Peak Hour			PM Peak Hour			
	In	Out	Total	In	Out	Total	Daily
Passenger Cars	93	72	165	37	155	192	1,650
RVs	2	3	5	0	0	0	11
Truck w/Trailer	6	1	7	3	2	5	57
Other Trucks	1	3	4	0	0	0	21
Total	102	79	181	40	157	197	1,739
Rate / Guest	*0.041*	*0.032*	*0.073*	*0.016*	*0.063*	*0.079*	*0.696*

TABLE 3: DERIVATION OF HORSE PARK TRIP GENERATION RATES - WEEKEND

	Saturday Morning Peak Hour			Sunday Afternoon Peak Hour			Daily	
	In	Out	Total	In	Out	Total	Saturday	Sunday
Passenger Cars	204	26	230	39	257	296	3,148	3,247
RVs	1	1	2	0	1	1	8	3
Truck w/Trailer	3	1	4	5	20	25	70	196
Other Trucks	5	1	6	0	0	0	29	10
Total	213	29	242	44	278	322	3,255	3,456
Rate / Guest	*0.046*	*0.006*	*0.052*	*0.009*	*0.057*	*0.066*	*0.708*	*0.705*

F:\UXRjobs_14100-14500\14492\Excel\[14492 - Scope.xlsx]Att A - TG_Rates_v2

City:	County of Riverside
Location:	Desert Int'l Horse Park Dwy
Date:	Monday, February 13, 2023
Count Type:	Driveway Count

	Entering				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
0:00	0	0	0	0	0
0:15	0	0	0	0	0
0:30	0	0	0	0	0
0:45	0	0	0	0	0
1:00	0	0	0	0	0
1:15	0	0	0	0	0
1:30	0	0	0	0	0
1:45	0	0	0	0	0
2:00	0	0	0	0	0
2:15	0	0	0	0	0
2:30	0	0	0	0	0
2:45	0	0	0	0	0
3:00	0	0	0	0	0
3:15	0	0	0	0	0
3:30	0	0	0	0	0
3:45	0	0	0	0	0
4:00	0	0	0	0	0
4:15	0	0	0	0	0
4:30	0	0	0	0	0
4:45	0	0	0	0	0
5:00	0	0	0	0	0
5:15	0	0	0	0	0
5:30	0	0	0	0	0
5:45	0	0	0	0	0
6:00	0	0	0	0	0
6:15	8	0	0	0	8
6:30	9	0	0	0	9
6:45	25	0	1	0	26
7:00	17	0	0	1	18
7:15	6	0	1	0	7
7:30	17	0	0	0	17
7:45	16	0	1	0	17
8:00	5	0	1	1	7
8:15	12	0	3	0	15
8:30	14	0	0	1	15
8:45	10	0	2	1	13
9:00	17	0	2	0	19
9:15	14	0	0	0	14
9:30	9	0	1	1	11
9:45	12	0	1	0	13
10:00	13	0	2	0	15
10:15	5	0	2	0	7
10:30	12	0	1	1	14
10:45	11	0	2	0	13
11:00	8	1	1	0	10
11:15	9	1	0	0	10
11:30	6	0	1	1	8
11:45	9	0	0	0	9

	Exiting				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
0:00	0	0	0	0	0
0:15	0	0	0	0	0
0:30	0	0	0	0	0
0:45	0	0	0	0	0
1:00	0	0	0	0	0
1:15	0	0	0	0	0
1:30	0	0	0	0	0
1:45	0	0	0	0	0
2:00	0	0	0	0	0
2:15	0	0	0	0	0
2:30	0	0	0	0	0
2:45	0	0	0	0	0
3:00	0	0	0	0	0
3:15	0	0	0	0	0
3:30	0	0	0	0	0
3:45	0	0	0	0	0
4:00	0	0	0	0	0
4:15	0	0	0	0	0
4:30	0	0	0	0	0
4:45	0	0	0	0	0
5:00	0	0	0	0	0
5:15	0	0	0	0	0
5:30	0	0	0	0	0
5:45	0	0	0	0	0
6:00	0	0	0	0	0
6:15	2	0	6	0	8
6:30	1	0	3	0	4
6:45	3	0	1	1	5
7:00	5	0	1	0	6
7:15	3	0	2	0	5
7:30	3	0	0	1	4
7:45	6	0	0	1	7
8:00	12	1	3	1	17
8:15	8	0	2	0	10
8:30	12	0	3	0	15
8:45	9	0	2	2	13
9:00	12	0	2	0	14
9:15	7	0	2	1	10
9:30	12	0	2	0	14
9:45	8	0	2	0	10
10:00	11	0	2	0	13
10:15	19	0	4	0	23
10:30	13	0	2	0	15
10:45	25	0	4	1	30
11:00	24	0	2	0	26
11:15	32	0	3	0	35
11:30	22	0	2	0	24
11:45	23	0	0	0	23

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City:	County of Riverside
Location:	Desert Int'l Horse Park Dwy
Date:	Monday, February 13, 2023
Count Type:	Driveway Count

	Entering				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
12:00	17	0	2	0	19
12:15	14	0	0	0	14
12:30	20	0	2	0	22
12:45	14	2	1	0	17
13:00	7	4	1	0	12
13:15	13	0	0	0	13
13:30	14	1	0	0	15
13:45	10	0	1	0	11
14:00	12	0	2	0	14
14:15	14	0	2	0	16
14:30	18	0	3	0	21
14:45	12	0	0	0	12
15:00	9	0	1	0	10
15:15	11	0	0	0	11
15:30	13	0	0	0	13
15:45	7	0	1	0	8
16:00	11	0	0	0	11
16:15	4	0	0	0	4
16:30	4	0	0	0	4
16:45	6	0	0	0	6
17:00	11	1	0	0	12
17:15	12	0	0	1	13
17:30	13	0	0	0	13
17:45	10	0	0	0	10
18:00	12	0	0	0	12
18:15	11	0	0	0	11
18:30	9	0	0	0	9
18:45	7	0	0	0	7
19:00	7	0	0	0	7
19:15	17	0	0	0	17
19:30	12	0	1	0	13
19:45	10	0	0	0	10
20:00	21	0	0	0	21
20:15	2	0	0	0	2
20:30	9	0	0	0	9
20:45	6	0	0	0	6
21:00	12	0	0	0	12
21:15	3	0	0	0	3
21:30	9	0	0	0	9
21:45	4	0	0	0	4
22:00	2	0	0	0	2
22:15	5	0	0	0	5
22:30	1	0	0	0	1
22:45	2	0	0	0	2
23:00	1	0	0	0	1
23:15	2	0	0	0	2
23:30	0	0	0	0	0
23:45	1	0	0	0	1
TOTAL	**705**	**10**	**39**	**8**	**762**

	Exiting				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
12:00	20	0	1	0	21
12:15	20	0	2	1	23
12:30	12	0	1	0	13
12:45	22	0	2	0	24
13:00	26	0	1	0	27
13:15	29	1	0	0	30
13:30	16	0	2	0	18
13:45	17	0	0	0	17
14:00	13	0	2	0	15
14:15	17	0	1	0	18
14:30	13	0	0	0	13
14:45	14	1	3	0	18
15:00	12	0	2	0	14
15:15	10	0	1	0	11
15:30	22	0	0	0	22
15:45	12	0	0	0	12
16:00	20	0	0	1	21
16:15	21	0	1	0	22
16:30	24	0	2	0	26
16:45	15	0	0	0	15
17:00	36	1	0	0	37
17:15	21	0	0	1	22
17:30	32	0	0	0	32
17:45	33	0	0	0	33
18:00	13	0	0	0	13
18:15	25	0	0	0	25
18:30	14	0	0	0	14
18:45	15	0	0	0	15
19:00	16	0	0	0	16
19:15	11	0	0	0	11
19:30	7	0	0	0	7
19:45	12	1	0	0	13
20:00	15	0	0	0	15
20:15	6	0	0	0	6
20:30	9	0	0	0	9
20:45	10	0	0	0	10
21:00	7	0	1	0	8
21:15	8	0	0	0	8
21:30	5	0	0	0	5
21:45	7	0	0	0	7
22:00	4	0	0	0	4
22:15	0	0	0	0	0
22:30	3	0	0	0	3
22:45	1	0	0	0	1
23:00	1	0	0	0	1
23:15	0	0	0	0	0
23:30	1	0	0	0	1
23:45	0	0	0	0	0
	939	**5**	**72**	**11**	**1027**

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City:	County of Riverside
Location:	Desert Int'l Horse Park Dwy
Date:	Tuesday, February 14, 2023
Count Type:	Driveway Count

	Entering				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
0:00	0	0	0	0	0
0:15	0	0	0	0	0
0:30	0	0	0	0	0
0:45	0	0	0	0	0
1:00	0	0	0	0	0
1:15	0	0	0	0	0
1:30	0	0	0	0	0
1:45	0	0	0	0	0
2:00	1	0	0	0	1
2:15	0	0	0	0	0
2:30	0	0	0	0	0
2:45	0	0	0	0	0
3:00	1	0	0	0	1
3:15	0	0	0	0	0
3:30	0	0	0	0	0
3:45	0	0	0	0	0
4:00	0	0	0	0	0
4:15	0	0	0	0	0
4:30	1	0	0	0	1
4:45	1	0	0	0	1
5:00	1	0	0	0	1
5:15	5	0	0	0	5
5:30	4	0	0	0	4
5:45	19	0	0	0	19
6:00	20	0	0	0	20
6:15	19	0	0	0	19
6:30	18	0	0	0	18
6:45	31	0	0	0	31
7:00	12	0	0	0	12
7:15	11	0	2	0	13
7:30	18	0	1	0	19
7:45	22	0	0	0	22
8:00	11	0	1	0	12
8:15	17	0	0	0	17
8:30	13	0	1	0	14
8:45	19	0	1	2	22
9:00	10	1	1	0	12
9:15	2	0	2	0	4
9:30	8	0	2	0	10
9:45	8	0	1	0	9
10:00	5	0	0	0	5
10:15	10	0	0	0	10
10:30	6	0	2	0	8
10:45	6	0	2	0	8
11:00	8	0	0	0	8
11:15	5	0	0	0	5
11:30	6	0	0	0	6
11:45	11	0	3	0	14

	Exiting				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
0:00	0	0	0	0	0
0:15	0	0	0	0	0
0:30	0	0	0	0	0
0:45	0	0	0	0	0
1:00	1	0	0	0	1
1:15	0	0	0	0	0
1:30	0	0	0	0	0
1:45	0	0	0	0	0
2:00	0	0	0	0	0
2:15	0	0	0	0	0
2:30	0	0	0	0	0
2:45	0	0	0	0	0
3:00	0	0	0	0	0
3:15	0	0	0	0	0
3:30	0	0	0	0	0
3:45	0	0	0	0	0
4:00	0	0	0	0	0
4:15	0	0	0	0	0
4:30	1	0	0	0	1
4:45	0	0	0	0	0
5:00	1	0	0	0	1
5:15	0	0	0	0	0
5:30	3	0	0	0	3
5:45	8	0	0	0	8
6:00	6	0	0	0	6
6:15	3	0	0	0	3
6:30	3	0	0	0	3
6:45	2	0	0	0	2
7:00	6	0	0	0	6
7:15	8	0	0	0	8
7:30	9	0	0	1	10
7:45	3	0	0	0	3
8:00	1	0	0	0	1
8:15	11	0	0	0	11
8:30	14	0	1	0	15
8:45	11	0	1	0	12
9:00	10	0	2	0	12
9:15	4	0	0	0	4
9:30	6	0	0	0	6
9:45	12	0	1	0	13
10:00	11	0	1	0	12
10:15	12	0	1	0	13
10:30	10	0	2	0	12
10:45	12	0	1	1	14
11:00	17	0	2	0	19
11:15	12	0	0	0	12
11:30	22	0	1	0	23
11:45	25	0	1	0	26

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City:	County of Riverside
Location:	Desert Int'l Horse Park Dwy
Date:	Tuesday, February 14, 2023
Count Type:	Driveway Count

	Entering				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
12:00	5	0	0	0	5
12:15	5	0	0	0	5
12:30	1	0	0	0	1
12:45	1	0	0	0	1
13:00	1	0	0	0	1
13:15	5	0	0	0	5
13:30	2	0	0	0	2
13:45	4	0	0	0	4
14:00	3	0	0	0	3
14:15	4	0	0	0	4
14:30	5	0	0	0	5
14:45	7	0	0	0	7
15:00	3	0	0	0	3
15:15	8	0	0	0	8
15:30	5	0	0	0	5
15:45	10	0	0	0	10
16:00	11	0	0	0	11
16:15	2	0	0	0	2
16:30	17	0	0	0	17
16:45	14	0	1	1	16
17:00	9	0	0	0	9
17:15	8	0	0	0	8
17:30	8	0	0	0	8
17:45	8	0	0	0	8
18:00	7	0	0	0	7
18:15	5	0	0	0	5
18:30	12	0	0	0	12
18:45	7	0	0	0	7
19:00	10	0	0	0	10
19:15	8	0	0	0	8
19:30	13	0	0	0	13
19:45	8	0	0	0	8
20:00	9	0	0	0	9
20:15	8	0	0	0	8
20:30	10	0	0	0	10
20:45	2	0	0	0	2
21:00	4	0	0	0	4
21:15	4	0	0	0	4
21:30	0	0	0	0	0
21:45	1	0	0	0	1
22:00	0	0	0	0	0
22:15	0	0	1	0	1
22:30	3	0	0	0	3
22:45	0	0	0	0	0
23:00	0	0	0	0	0
23:15	0	0	0	0	0
23:30	0	0	0	0	0
23:45	0	0	0	0	0
TOTAL	**586**	**1**	**21**	**3**	**611**

	Exiting				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
12:00	23	0	0	0	23
12:15	14	0	2	0	16
12:30	3	0	1	0	4
12:45	1	0	0	0	1
13:00	2	0	0	0	2
13:15	10	0	0	0	10
13:30	6	0	1	0	7
13:45	7	0	0	0	7
14:00	12	0	1	0	13
14:15	14	0	0	0	14
14:30	9	0	0	0	9
14:45	7	0	0	0	7
15:00	9	0	0	0	9
15:15	13	0	0	0	13
15:30	15	0	0	0	15
15:45	21	0	0	0	21
16:00	14	0	0	0	14
16:15	8	0	0	0	8
16:30	27	0	0	0	27
16:45	24	0	1	0	25
17:00	19	0	0	0	19
17:15	12	0	0	0	12
17:30	20	0	0	2	22
17:45	18	0	0	0	18
18:00	14	0	0	0	14
18:15	20	0	0	0	20
18:30	9	0	0	0	9
18:45	7	1	0	0	8
19:00	9	0	0	0	9
19:15	6	0	0	0	6
19:30	2	0	0	0	2
19:45	6	0	0	0	6
20:00	5	0	0	0	5
20:15	16	0	0	0	16
20:30	4	0	0	0	4
20:45	3	0	0	0	3
21:00	1	0	0	0	1
21:15	0	0	0	0	0
21:30	0	0	0	0	0
21:45	0	0	0	0	0
22:00	0	0	0	0	0
22:15	1	0	0	0	1
22:30	0	0	0	0	0
22:45	1	0	0	0	1
23:00	1	0	0	0	1
23:15	0	0	0	0	0
23:30	0	0	0	0	0
23:45	1	0	0	1	2
	658	**1**	**20**	**5**	**684**

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City:	County of Riverside
Location:	Desert Int'l Horse Park Dwy
Date:	Wednesday, February 15, 2023
Count Type:	Driveway Count

	Entering				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
0:00	1	0	0	1	2
0:15	0	0	0	0	0
0:30	0	0	0	0	0
0:45	0	0	0	0	0
1:00	0	0	0	0	0
1:15	0	0	0	0	0
1:30	0	0	0	0	0
1:45	0	0	0	0	0
2:00	0	0	0	0	0
2:15	0	0	0	0	0
2:30	0	0	0	0	0
2:45	0	0	0	0	0
3:00	0	0	0	0	0
3:15	0	0	0	0	0
3:30	2	0	0	0	2
3:45	5	0	0	0	5
4:00	0	0	0	0	0
4:15	0	0	0	0	0
4:30	0	0	0	0	0
4:45	4	0	0	0	4
5:00	9	0	0	0	9
5:15	18	0	0	0	18
5:30	9	0	0	0	9
5:45	14	0	0	0	14
6:00	15	0	0	0	15
6:15	34	0	0	0	34
6:30	16	0	0	1	17
6:45	26	0	0	1	27
7:00	16	0	0	0	16
7:15	22	0	2	0	24
7:30	20	0	4	0	24
7:45	27	0	0	0	27
8:00	14	0	1	0	15
8:15	10	0	1	0	11
8:30	12	0	1	0	13
8:45	15	0	0	0	15
9:00	9	0	0	0	9
9:15	1	0	1	0	2
9:30	12	0	2	1	15
9:45	18	0	3	0	21
10:00	13	0	1	0	14
10:15	7	0	1	0	8
10:30	5	0	0	0	5
10:45	23	0	0	0	23
11:00	9	0	2	0	11
11:15	10	0	2	0	12
11:30	7	0	0	0	7
11:45	9	0	0	0	9

	Exiting				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
0:00	4	0	0	0	4
0:15	0	0	0	0	0
0:30	0	0	0	0	0
0:45	0	0	0	0	0
1:00	0	0	0	0	0
1:15	0	0	0	0	0
1:30	0	0	0	0	0
1:45	0	0	0	0	0
2:00	0	0	0	0	0
2:15	0	0	0	0	0
2:30	0	0	0	0	0
2:45	0	0	0	0	0
3:00	0	0	0	0	0
3:15	0	0	0	0	0
3:30	0	0	0	0	0
3:45	1	0	0	0	1
4:00	0	0	0	0	0
4:15	0	0	0	0	0
4:30	0	0	0	0	0
4:45	1	0	0	0	1
5:00	0	0	0	0	0
5:15	5	0	0	0	5
5:30	1	0	0	0	1
5:45	7	0	0	0	7
6:00	2	0	0	0	2
6:15	7	0	0	0	7
6:30	1	0	0	0	1
6:45	4	0	0	1	5
7:00	5	0	0	0	5
7:15	9	0	0	1	10
7:30	13	0	0	0	13
7:45	0	0	0	0	0
8:00	6	0	1	0	7
8:15	7	0	0	0	7
8:30	6	1	1	0	8
8:45	7	0	1	0	8
9:00	4	0	0	1	5
9:15	12	0	0	0	12
9:30	6	0	0	0	6
9:45	4	0	3	0	7
10:00	5	0	0	0	5
10:15	17	0	1	0	18
10:30	6	0	1	0	7
10:45	10	0	0	0	10
11:00	9	0	2	0	11
11:15	12	0	3	0	15
11:30	10	0	0	0	10
11:45	11	0	0	0	11

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City:	County of Riverside
Location:	Desert Int'l Horse Park Dwy
Date:	Wednesday, February 15, 2023
Count Type:	Driveway Count

	Entering				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
12:00	8	0	2	0	10
12:15	6	0	0	0	6
12:30	5	0	0	0	5
12:45	10	0	1	0	11
13:00	25	0	1	1	27
13:15	2	0	0	0	2
13:30	7	0	0	0	7
13:45	5	0	1	0	6
14:00	2	2	0	0	4
14:15	4	1	1	0	6
14:30	6	0	0	0	6
14:45	6	0	0	0	6
15:00	5	0	0	0	5
15:15	10	0	0	0	10
15:30	3	0	0	0	3
15:45	6	0	0	0	6
16:00	2	0	1	0	3
16:15	9	0	0	0	9
16:30	8	0	0	0	8
16:45	11	0	0	0	11
17:00	8	0	0	0	8
17:15	7	0	0	0	7
17:30	8	0	0	0	8
17:45	10	0	0	0	10
18:00	9	0	0	0	9
18:15	3	0	0	0	3
18:30	2	0	0	0	2
18:45	2	0	0	0	2
19:00	4	0	0	0	4
19:15	5	0	0	0	5
19:30	6	0	0	0	6
19:45	3	0	0	0	3
20:00	3	0	0	0	3
20:15	5	0	0	0	5
20:30	2	0	0	0	2
20:45	1	0	0	0	1
21:00	0	0	0	0	0
21:15	2	0	0	0	2
21:30	1	0	0	0	1
21:45	2	0	0	0	2
22:00	1	0	0	0	1
22:15	0	0	0	0	0
22:30	0	0	0	0	0
22:45	1	0	0	0	1
23:00	0	0	0	0	0
23:15	1	0	0	0	1
23:30	0	0	0	0	0
23:45	0	0	0	0	0
TOTAL	**638**	**3**	**28**	**5**	**674**

	Exiting				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
12:00	10	0	0	0	10
12:15	3	0	1	0	4
12:30	18	0	0	0	18
12:45	8	0	1	0	9
13:00	27	0	1	0	28
13:15	2	0	0	0	2
13:30	19	1	2	0	22
13:45	18	0	0	0	18
14:00	15	1	2	1	19
14:15	9	2	0	1	12
14:30	24	0	0	0	24
14:45	34	0	1	0	35
15:00	14	0	1	0	15
15:15	20	0	0	0	20
15:30	21	0	0	0	21
15:45	24	0	0	0	24
16:00	24	0	0	0	24
16:15	28	0	0	0	28
16:30	31	0	0	0	31
16:45	22	0	1	0	23
17:00	16	0	0	0	16
17:15	10	0	0	0	10
17:30	5	0	0	2	7
17:45	7	0	0	0	7
18:00	8	0	0	0	8
18:15	9	0	0	0	9
18:30	6	0	0	0	6
18:45	6	1	0	0	7
19:00	3	0	0	0	3
19:15	5	0	0	0	5
19:30	1	0	0	0	1
19:45	2	0	0	0	2
20:00	2	0	0	0	2
20:15	2	0	0	0	2
20:30	3	0	0	0	3
20:45	4	0	0	0	4
21:00	0	0	0	0	0
21:15	1	0	0	0	1
21:30	0	0	0	0	0
21:45	1	0	0	0	1
22:00	1	0	0	0	1
22:15	0	0	0	0	0
22:30	0	0	0	0	0
22:45	0	0	0	0	0
23:00	0	0	0	0	0
23:15	1	0	0	0	1
23:30	1	0	0	0	1
23:45	2	0	0	1	3
	659	**6**	**23**	**8**	**696**

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City:	County of Riverside
Location:	Desert Int'l Horse Park Dwy
Date:	Thursday, February 16, 2023
Count Type:	Driveway Count

	Entering				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
0:00	1	0	0	0	1
0:15	0	0	0	0	0
0:30	1	0	0	0	1
0:45	0	0	0	0	0
1:00	0	0	0	0	0
1:15	0	0	0	0	0
1:30	1	0	0	0	1
1:45	0	0	0	0	0
2:00	0	0	0	0	0
2:15	0	0	0	0	0
2:30	0	0	0	0	0
2:45	0	0	0	0	0
3:00	0	0	0	0	0
3:15	0	0	0	0	0
3:30	0	0	0	0	0
3:45	0	0	0	0	0
4:00	0	0	0	0	0
4:15	0	0	0	0	0
4:30	2	0	0	0	2
4:45	13	0	0	0	13
5:00	17	0	0	0	17
5:15	28	0	0	0	28
5:30	16	0	0	0	16
5:45	19	0	0	0	19
6:00	23	0	0	0	23
6:15	37	0	0	0	37
6:30	37	0	0	1	38
6:45	28	0	0	0	28
7:00	16	0	0	0	16
7:15	28	1	1	1	31
7:30	17	0	1	0	18
7:45	24	0	0	0	24
8:00	22	1	0	0	23
8:15	24	1	1	0	26
8:30	26	1	1	0	28
8:45	25	0	2	0	27
9:00	18	0	2	1	21
9:15	17	0	1	1	19
9:30	21	0	1	0	22
9:45	19	0	2	1	22
10:00	17	0	0	1	18
10:15	15	0	0	0	15
10:30	17	0	3	0	20
10:45	15	0	1	0	16
11:00	16	0	0	0	16
11:15	21	0	1	0	22
11:30	18	0	1	0	19
11:45	14	0	2	0	16

	Exiting				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
0:00	2	0	0	0	2
0:15	1	0	0	0	1
0:30	1	0	0	0	1
0:45	0	0	0	0	0
1:00	0	0	0	0	0
1:15	0	0	0	0	0
1:30	1	0	0	0	1
1:45	0	0	0	0	0
2:00	0	0	0	0	0
2:15	0	0	0	0	0
2:30	0	0	0	0	0
2:45	0	0	0	0	0
3:00	0	0	0	0	0
3:15	0	0	0	0	0
3:30	0	0	0	0	0
3:45	0	0	0	0	0
4:00	3	0	0	0	3
4:15	0	0	0	0	0
4:30	2	0	0	0	2
4:45	0	0	0	0	0
5:00	2	0	0	0	2
5:15	4	0	0	0	4
5:30	0	0	0	0	0
5:45	3	0	0	0	3
6:00	4	0	0	0	4
6:15	9	0	0	0	9
6:30	6	0	0	0	6
6:45	2	0	0	0	2
7:00	9	1	0	0	10
7:15	10	0	0	0	10
7:30	6	1	0	0	7
7:45	9	0	0	0	9
8:00	7	0	0	0	7
8:15	11	0	0	2	13
8:30	26	0	0	0	26
8:45	24	3	1	1	29
9:00	11	0	0	0	11
9:15	14	2	2	0	18
9:30	11	0	1	2	14
9:45	11	0	1	1	13
10:00	14	0	1	2	17
10:15	10	0	0	0	10
10:30	15	0	2	1	18
10:45	16	0	0	0	16
11:00	18	0	1	0	19
11:15	10	0	1	0	11
11:30	10	0	0	0	10
11:45	13	0	1	0	14

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City:	County of Riverside
Location:	Desert Int'l Horse Park Dwy
Date:	Thursday, February 16, 2023
Count Type:	Driveway Count

	Entering				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
12:00	12	0	0	0	12
12:15	12	0	0	0	12
12:30	6	0	0	1	7
12:45	17	0	0	0	17
13:00	12	0	0	0	12
13:15	13	0	0	0	13
13:30	14	0	2	0	16
13:45	11	0	0	0	11
14:00	8	0	1	1	10
14:15	10	0	3	0	13
14:30	16	0	0	0	16
14:45	0	0	0	0	0
15:00	9	0	1	1	11
15:15	8	0	0	0	8
15:30	8	0	0	0	8
15:45	9	0	0	0	9
16:00	14	0	0	0	14
16:15	8	0	2	0	10
16:30	9	0	0	0	9
16:45	6	0	1	0	7
17:00	1	0	0	0	1
17:15	3	0	0	0	3
17:30	2	0	0	0	2
17:45	1	0	0	0	1
18:00	0	0	0	0	0
18:15	0	0	0	0	0
18:30	0	0	0	0	0
18:45	2	0	0	0	2
19:00	2	0	0	0	2
19:15	0	0	0	0	0
19:30	2	0	0	0	2
19:45	1	0	0	0	1
20:00	1	0	0	0	1
20:15	0	0	0	0	0
20:30	2	0	0	0	2
20:45	1	0	0	0	1
21:00	0	0	0	0	0
21:15	0	0	0	0	0
21:30	0	0	0	0	0
21:45	1	0	0	0	1
22:00	1	0	0	0	1
22:15	0	0	0	0	0
22:30	2	0	0	0	2
22:45	0	0	0	0	0
23:00	1	0	0	0	1
23:15	0	0	0	0	0
23:30	3	0	0	0	3
23:45					0
TOTAL	**841**	**4**	**30**	**9**	**884**

	Exiting				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
12:00	19	0	1	0	20
12:15	7	0	1	0	8
12:30	15	0	0	0	15
12:45	20	0	1	1	22
13:00	24	0	1	0	25
13:15	23	0	0	0	23
13:30	16	0	1	0	17
13:45	14	0	0	0	14
14:00	16	0	1	0	17
14:15	20	0	4	0	24
14:30	20	0	0	0	20
14:45	15	0	0	0	15
15:00	13	0	0	1	14
15:15	16	0	2	0	18
15:30	26	0	0	0	26
15:45	22	0	0	1	23
16:00	43	0	1	0	44
16:15	46	0	1	0	47
16:30	39	0	0	0	39
16:45	27	0	0	0	27
17:00	25	0	1	0	26
17:15	15	0	1	0	16
17:30	11	0	0	0	11
17:45	9	0	0	0	9
18:00	0	0	0	0	0
18:15	3	0	0	0	3
18:30	3	0	0	0	3
18:45	2	0	0	0	2
19:00	2	0	0	0	2
19:15	1	0	0	0	1
19:30	0	0	0	0	0
19:45	0	0	0	0	0
20:00	0	0	0	0	0
20:15	0	0	0	0	0
20:30	1	0	0	0	1
20:45	0	0	0	0	0
21:00	0	0	0	0	0
21:15	0	0	0	0	0
21:30	0	0	0	0	0
21:45	0	0	0	0	0
22:00	1	0	0	0	1
22:15	0	0	0	0	0
22:30	0	0	0	0	0
22:45	0	0	0	0	0
23:00	0	0	0	0	0
23:15	0	0	0	0	0
23:30	0	0	0	0	0
23:45	0	0	0	0	0
	809	**7**	**27**	**12**	**855**

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City:	County of Riverside
Location:	Desert Int'l Horse Park Dwy
Date:	Friday, February 17, 2023
Count Type:	Driveway Count

	Entering				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
0:00	1	0	0	0	1
0:15	1	0	0	0	1
0:30	0	0	0	0	0
0:45	2	0	0	0	2
1:00	0	0	0	0	0
1:15	1	0	0	0	1
1:30	0	0	0	0	0
1:45	0	0	0	0	0
2:00	0	0	0	0	0
2:15	1	0	0	0	1
2:30	0	0	0	0	0
2:45	0	0	0	0	0
3:00	0	0	0	0	0
3:15	0	0	0	0	0
3:30	6	0	0	1	7
3:45	4	0	0	0	4
4:00	1	0	0	0	1
4:15	1	0	0	0	1
4:30	1	0	0	0	1
4:45	12	0	0	0	12
5:00	16	0	0	1	17
5:15	18	0	0	0	18
5:30	26	0	0	0	26
5:45	17	0	0	0	17
6:00	14	0	0	0	14
6:15	22	0	0	0	22
6:30	31	0	1	0	32
6:45	26	0	0	0	26
7:00	44	0	0	0	44
7:15	69	0	1	0	70
7:30	50	0	0	2	52
7:45	35	0	0	1	36
8:00	33	0	0	1	34
8:15	30	0	0	0	30
8:30	24	0	0	0	24
8:45	25	0	0	0	25
9:00	20	1	0	2	23
9:15	29	0	2	0	31
9:30	22	0	1	0	23
9:45	31	0	2	0	33
10:00	24	0	2	0	26
10:15	27	0	0	1	28
10:30	25	0	0	1	26
10:45	19	0	3	0	22
11:00	16	0	0	0	16
11:15	14	0	0	1	15
11:30	20	0	0	0	20
11:45	15	0	0	0	15

	Exiting				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
0:00	0	0	0	0	0
0:15	0	0	0	0	0
0:30	0	0	0	0	0
0:45	0	0	0	0	0
1:00	1	0	0	0	1
1:15	0	0	0	0	0
1:30	0	0	0	0	0
1:45	0	0	0	0	0
2:00	0	0	0	0	0
2:15	0	0	0	0	0
2:30	0	0	0	0	0
2:45	1	0	0	0	1
3:00	0	0	0	0	0
3:15	0	0	0	0	0
3:30	1	0	0	0	1
3:45	0	0	0	0	0
4:00	2	0	0	0	2
4:15	1	0	0	0	1
4:30	0	0	0	0	0
4:45	3	0	0	0	3
5:00	0	0	0	0	0
5:15	2	0	0	0	2
5:30	3	0	0	0	3
5:45	3	0	0	0	3
6:00	4	0	0	0	4
6:15	1	0	0	0	1
6:30	1	0	0	0	1
6:45	3	0	0	0	3
7:00	5	0	0	0	5
7:15	7	1	0	0	8
7:30	5	0	0	1	6
7:45	6	0	1	1	8
8:00	3	0	0	0	3
8:15	0	0	0	0	0
8:30	8	0	0	0	8
8:45	12	0	0	1	13
9:00	6	0	0	1	7
9:15	9	0	0	0	9
9:30	7	0	1	2	10
9:45	11	0	0	0	11
10:00	10	0	0	0	10
10:15	12	0	0	0	12
10:30	11	0	0	1	12
10:45	15	0	0	0	15
11:00	18	0	0	0	18
11:15	11	0	0	0	11
11:30	12	0	0	1	13
11:45	14	0	1	0	15

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City:	County of Riverside
Location:	Desert Int'l Horse Park Dwy
Date:	Friday, February 17, 2023
Count Type:	Driveway Count

	Entering				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
12:00	14	0	0	1	15
12:15	22	0	0	1	23
12:30	17	0	1	2	20
12:45	25	0	1	0	26
13:00	14	0	2	0	16
13:15	19	0	1	0	20
13:30	25	0	1	0	26
13:45	18	0	2	1	21
14:00	10	0	0	0	10
14:15	13	0	0	1	14
14:30	16	0	1	0	17
14:45	10	0	0	0	10
15:00	10	0	1	0	11
15:15	22	0	0	1	23
15:30	13	0	0	0	13
15:45	13	0	0	3	16
16:00	10	0	0	0	10
16:15	11	0	0	0	11
16:30	23	0	0	0	23
16:45	15	0	0	0	15
17:00	19	0	0	1	20
17:15	24	0	0	0	24
17:30	29	0	0	0	29
17:45	21	0	0	0	21
18:00	19	0	0	0	19
18:15	23	0	0	1	24
18:30	11	0	0	0	11
18:45	8	0	0	0	8
19:00	5	0	0	0	5
19:15	9	0	0	0	9
19:30	7	0	0	0	7
19:45	12	0	0	0	12
20:00	11	0	0	0	11
20:15	12	0	0	0	12
20:30	8	0	0	0	8
20:45	5	0	0	0	5
21:00	12	0	0	0	12
21:15	5	0	0	0	5
21:30	7	0	0	0	7
21:45	13	0	0	0	13
22:00	1	0	0	0	1
22:15	2	0	0	0	2
22:30	3	0	0	0	3
22:45	3	0	0	0	3
23:00	4	0	0	0	4
23:15	3	0	0	0	3
23:30	2	0	0	0	2
23:45	2	0	0	0	2
TOTAL	**1373**	**1**	**22**	**23**	**1419**

	Exiting				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
12:00	21	0	1	0	22
12:15	22	0	1	1	24
12:30	14	0	2	0	16
12:45	7	0	0	2	9
13:00	23	0	1	0	24
13:15	21	0	0	1	22
13:30	24	0	0	0	24
13:45	30	0	0	0	30
14:00	22	0	3	0	25
14:15	23	0	0	0	23
14:30	25	0	0	0	25
14:45	33	0	0	0	33
15:00	34	0	0	1	35
15:15	33	0	0	0	33
15:30	49	0	1	0	50
15:45	46	0	1	1	48
16:00	50	0	0	0	50
16:15	55	0	1	0	56
16:30	52	0	1	1	54
16:45	42	0	1	1	44
17:00	34	0	0	0	34
17:15	31	0	0	1	32
17:30	29	0	0	0	29
17:45	26	0	0	0	26
18:00	28	0	0	0	28
18:15	22	0	0	0	22
18:30	23	0	0	0	23
18:45	10	0	0	0	10
19:00	24	0	0	0	24
19:15	20	0	0	0	20
19:30	15	0	0	0	15
19:45	15	0	0	0	15
20:00	22	0	0	0	22
20:15	13	0	0	0	13
20:30	44	0	0	0	44
20:45	102	0	0	0	102
21:00	49	0	0	0	49
21:15	18	0	0	0	18
21:30	11	0	0	0	11
21:45	15	0	0	0	15
22:00	16	0	0	0	16
22:15	6	0	0	0	6
22:30	3	0	0	0	3
22:45	4	0	0	0	4
23:00	1	0	0	0	1
23:15	4	0	0	0	4
23:30	1	0	0	0	1
23:45	0	0	0	0	0
	1420	**1**	**16**	**17**	**1454**

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City:	County of Riverside
Location:	Desert Int'l Horse Park Dwy
Date:	Saturday, February 18, 2023
Count Type:	Driveway Count

	Entering				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
0:00	1	0	0	0	1
0:15	1	0	0	0	1
0:30	0	0	0	0	0
0:45	1	0	0	0	1
1:00	0	0	0	0	0
1:15	1	0	0	0	1
1:30	0	0	0	0	0
1:45	0	0	0	0	0
2:00	0	0	0	0	0
2:15	3	0	0	0	3
2:30	1	0	0	0	1
2:45	0	0	0	0	0
3:00	0	0	0	0	0
3:15	1	0	0	0	1
3:30	4	0	0	0	4
3:45	7	0	0	0	7
4:00	0	0	0	0	0
4:15	0	0	0	1	1
4:30	1	0	0	0	1
4:45	11	0	0	1	12
5:00	13	0	2	1	16
5:15	27	0	0	0	27
5:30	18	0	0	0	18
5:45	20	0	0	0	20
6:00	29	0	0	0	29
6:15	29	0	0	0	29
6:30	60	0	0	0	60
6:45	44	0	0	0	44
7:00	48	0	1	0	49
7:15	40	1	2	1	44
7:30	64	0	1	3	68
7:45	52	0	1	0	53
8:00	41	0	0	2	43
8:15	47	1	1	0	49
8:30	43	0	0	0	43
8:45	34	0	0	0	34
9:00	37	0	1	0	38
9:15	35	0	0	1	36
9:30	38	0	2	0	40
9:45	41	0	0	0	41
10:00	25	0	2	0	27
10:15	21	0	0	0	21
10:30	33	0	1	0	34
10:45	36	0	1	1	38
11:00	16	0	0	0	16
11:15	35	0	2	0	37
11:30	22	0	1	1	24
11:45	24	0	1	1	26

	Exiting				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
0:00	0	0	0	0	0
0:15	0	0	0	0	0
0:30	1	0	0	0	1
0:45	0	0	0	0	0
1:00	0	0	0	0	0
1:15	2	0	0	0	2
1:30	0	0	0	0	0
1:45	0	0	0	0	0
2:00	1	0	0	0	1
2:15	0	0	0	0	0
2:30	0	0	0	0	0
2:45	0	0	0	0	0
3:00	0	0	0	0	0
3:15	0	0	0	0	0
3:30	0	0	0	0	0
3:45	0	0	0	0	0
4:00	1	0	0	0	1
4:15	0	0	0	0	0
4:30	2	0	0	0	2
4:45	2	0	0	0	2
5:00	1	0	0	0	1
5:15	3	0	0	0	3
5:30	2	0	0	0	2
5:45	0	0	0	0	0
6:00	6	0	1	0	7
6:15	8	0	1	0	9
6:30	6	0	0	0	6
6:45	7	0	0	0	7
7:00	5	0	0	0	5
7:15	3	0	0	0	3
7:30	7	0	0	0	7
7:45	7	0	1	0	8
8:00	4	0	0	1	5
8:15	8	1	0	0	9
8:30	13	0	0	0	13
8:45	10	0	3	1	14
9:00	13	0	1	0	14
9:15	11	0	2	1	14
9:30	10	0	0	0	10
9:45	10	0	0	0	10
10:00	9	0	1	1	11
10:15	15	0	0	0	15
10:30	21	0	0	0	21
10:45	16	0	1	0	17
11:00	16	0	0	0	16
11:15	18	0	1	0	19
11:30	21	0	0	1	22
11:45	20	0	3	0	23

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City:	County of Riverside
Location:	Desert Int'l Horse Park Dwy
Date:	Saturday, February 18, 2023
Count Type:	Driveway Count

	Entering				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
12:00	28	0	1	1	30
12:15	15	0	0	1	16
12:30	23	0	0	0	23
12:45	22	0	0	1	23
13:00	22	0	0	1	23
13:15	21	0	1	0	22
13:30	19	0	2	0	21
13:45	23	0	1	0	24
14:00	16	1	1	0	18
14:15	20	0	1	0	21
14:30	14	0	0	0	14
14:45	10	0	0	1	11
15:00	13	0	1	0	14
15:15	12	0	0	0	12
15:30	15	0	0	0	15
15:45	10	0	2	0	12
16:00	8	0	0	0	8
16:15	19	1	1	0	21
16:30	4	0	0	0	4
16:45	11	0	0	0	11
17:00	14	0	0	0	14
17:15	20	0	0	1	21
17:30	10	0	1	0	11
17:45	10	0	0	0	10
18:00	14	0	0	0	14
18:15	11	0	0	0	11
18:30	16	0	0	0	16
18:45	9	0	0	0	9
19:00	16	0	1	0	17
19:15	10	0	0	0	10
19:30	8	0	1	0	9
19:45	17	0	0	0	17
20:00	16	0	0	0	16
20:15	15	0	0	0	15
20:30	11	0	0	0	11
20:45	12	0	0	0	12
21:00	11	0	1	0	12
21:15	6	0	0	0	6
21:30	3	0	0	0	3
21:45	5	0	1	0	6
22:00	4	0	0	0	4
22:15	1	0	0	0	1
22:30	2	0	0	0	2
22:45	2	0	0	0	2
23:00	2	0	0	0	2
23:15	3	0	0	0	3
23:30	0	0	0	0	0
23:45	2	0	0	0	2
TOTAL	**1579**	**4**	**35**	**19**	**1637**

	Exiting				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
12:00	28	0	2	0	30
12:15	10	0	0	1	11
12:30	14	0	0	1	15
12:45	27	0	0	0	27
13:00	18	0	1	1	20
13:15	21	0	0	0	21
13:30	28	1	0	0	29
13:45	34	0	0	1	35
14:00	33	0	0	0	33
14:15	32	1	1	0	34
14:30	52	0	1	0	53
14:45	33	0	1	0	34
15:00	34	1	0	0	35
15:15	34	0	0	0	34
15:30	32	0	1	0	33
15:45	32	0	2	0	34
16:00	41	0	5	0	46
16:15	37	0	0	0	37
16:30	43	0	0	0	43
16:45	37	0	0	0	37
17:00	53	0	0	0	53
17:15	40	0	0	0	40
17:30	42	0	0	1	43
17:45	31	0	1	0	32
18:00	38	0	1	0	39
18:15	42	0	0	0	42
18:30	39	0	0	0	39
18:45	19	0	0	0	19
19:00	26	0	1	0	27
19:15	54	0	1	0	55
19:30	76	0	0	0	76
19:45	48	0	0	0	48
20:00	33	0	0	0	33
20:15	19	0	0	0	19
20:30	23	0	1	0	24
20:45	7	0	0	0	7
21:00	20	0	1	0	21
21:15	16	0	0	0	16
21:30	16	0	0	0	16
21:45	10	0	0	0	10
22:00	5	0	0	0	5
22:15	5	0	0	0	5
22:30	0	0	0	0	0
22:45	3	0	0	0	3
23:00	1	0	0	0	1
23:15	0	0	0	0	0
23:30	3	0	0	0	3
23:45	1	0	0	0	1
	1569	**4**	**35**	**10**	**1618**

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City: County of Riverside
Location: Desert Int'l Horse Park Dwy
Date: Sunday, February 19, 2023
Count Type: Driveway Count

	Entering					Exiting				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
0:00	0	0	0	0	0	1	0	0	0	1
0:15	3	0	0	0	3	2	0	0	0	2
0:30	0	0	0	0	0	2	0	0	0	2
0:45	2	0	0	0	2	0	0	0	0	0
1:00	3	0	0	0	3	0	0	0	0	0
1:15	1	0	0	0	1	0	0	0	0	0
1:30	1	0	0	0	1	1	0	0	0	1
1:45	1	0	0	0	1	0	0	0	0	0
2:00	2	0	0	0	2	0	0	0	0	0
2:15	0	0	0	0	0	0	0	0	0	0
2:30	0	0	0	0	0	3	0	0	1	4
2:45	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	1	0	0	0	1
3:15	0	0	0	0	0	1	0	0	0	1
3:30	4	0	0	0	4	1	0	0	0	1
3:45	5	0	0	0	5	1	0	0	0	1
4:00	0	0	0	0	0	1	0	0	0	1
4:15	0	0	0	0	0	1	0	0	0	1
4:30	1	0	0	0	1	1	0	0	0	1
4:45	15	0	0	1	16	3	0	0	0	3
5:00	17	0	0	0	17	0	0	0	0	0
5:15	19	0	0	0	19	0	0	0	0	0
5:30	25	0	0	0	25	2	0	1	0	3
5:45	25	0	0	0	25	2	0	0	0	2
6:00	29	0	0	0	29	6	0	0	0	6
6:15	46	0	0	0	46	3	0	0	0	3
6:30	58	0	1	0	59	1	0	0	0	1
6:45	43	0	0	0	43	5	0	0	0	5
7:00	46	0	0	2	48	1	0	1	2	4
7:15	58	0	1	0	59	3	0	0	0	3
7:30	49	0	3	0	52	8	0	0	0	8
7:45	54	0	1	0	55	5	0	0	1	6
8:00	47	0	1	0	48	11	0	0	0	11
8:15	39	0	2	0	41	8	0	0	0	8
8:30	33	0	1	1	35	13	0	0	0	13
8:45	51	0	1	0	52	5	0	0	0	5
9:00	37	0	1	0	38	12	0	3	0	15
9:15	41	0	2	0	43	16	0	1	0	17
9:30	36	0	0	0	36	10	0	2	0	12
9:45	31	0	1	0	32	11	0	4	0	15
10:00	25	0	0	0	25	21	0	0	0	21
10:15	23	0	1	0	24	14	0	0	0	14
10:30	20	0	3	0	23	17	0	1	0	18
10:45	37	0	1	0	38	20	0	2	0	22
11:00	32	0	4	0	36	28	0	1	0	29
11:15	37	0	3	0	40	20	0	1	0	21
11:30	22	0	4	0	26	25	0	1	0	26
11:45	22	0	2	0	24	20	0	4	0	24

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City:	County of Riverside
Location:	Desert Int'l Horse Park Dwy
Date:	Sunday, February 19, 2023
Count Type:	Driveway Count

	Entering					Exiting				
	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total	Pass Veh	RV's	Truck w/ Trailer	All Other Trucks	Total
12:00	47	0	3	0	50	23	0	1	0	24
12:15	30	0	2	0	32	28	0	3	0	31
12:30	30	0	2	0	32	37	0	3	0	40
12:45	24	0	2	0	26	22	0	4	0	26
13:00	26	0	2	1	29	34	0	4	0	38
13:15	30	0	1	0	31	33	0	3	0	36
13:30	19	1	1	0	21	25	0	5	0	30
13:45	22	0	0	0	22	38	0	4	0	42
14:00	11	0	2	0	13	38	0	1	0	39
14:15	7	0	3	0	10	39	0	5	0	44
14:30	9	0	4	0	13	40	0	4	0	44
14:45	13	0	1	0	14	43	0	3	0	46
15:00	7	0	2	0	9	68	0	3	0	71
15:15	14	0	0	0	14	91	0	4	0	95
15:30	10	0	4	0	14	88	0	7	0	95
15:45	15	0	2	0	17	60	1	5	0	66
16:00	10	0	0	0	10	68	1	8	0	77
16:15	7	0	2	0	9	76	0	4	0	80
16:30	10	0	1	0	11	55	0	5	0	60
16:45	12	0	2	0	14	58	0	3	0	61
17:00	10	0	1	0	11	54	0	5	1	60
17:15	7	0	1	0	8	48	0	5	0	53
17:30	8	0	0	0	8	38	0	2	0	40
17:45	9	0	0	0	9	37	0	1	0	38
18:00	8	0	1	0	9	28	0	0	0	28
18:15	9	0	0	0	9	35	0	1	0	36
18:30	13	0	0	0	13	19	0	1	0	20
18:45	6	0	0	0	6	14	0	0	0	14
19:00	11	0	0	0	11	17	0	1	0	18
19:15	11	0	1	0	12	3	0	0	0	3
19:30	14	0	0	0	14	13	0	0	0	13
19:45	7	0	0	0	7	12	0	0	0	12
20:00	13	0	0	0	13	9	0	1	0	10
20:15	9	0	0	0	9	7	0	0	0	7
20:30	13	0	0	0	13	11	0	0	0	11
20:45	11	0	0	0	11	7	0	0	0	7
21:00	3	0	0	0	3	7	0	0	0	7
21:15	2	0	0	0	2	5	0	0	0	5
21:30	9	0	0	0	9	3	0	0	0	3
21:45	5	0	0	0	5	4	0	0	0	4
22:00	4	0	1	0	5	6	0	0	0	6
22:15	5	0	0	0	5	2	0	0	0	2
22:30	2	0	0	0	2	4	0	0	0	4
22:45	3	0	0	0	3	2	0	0	0	2
23:00	1	0	3	0	4	0	0	0	0	0
23:15	0	0	0	0	0	2	0	0	0	2
23:30	2	0	0	0	2	2	0	0	0	2
23:45	0	0	0	0	0	0	0	1	0	1
TOTAL	**1588**	**1**	**77**	**5**	**1671**	**1659**	**2**	**119**	**5**	**1785**

Counts Unlimited, Inc.
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Corona, CA 92878
(951) 268-6268

Desert Internation Horse Park VIP table Sales by week 2022 ar

	2022	2022	2022	2022	2022
EVENT	Sunshine 1	Sunshine 2	Holiday 1	Holiday 2	Holiday 3
EVENT DATES	NOV 1-6	Nov 7-13	Nov 28- Dec 4	Dec 5-11	Dec 12-18
Number of tables sold	86	96	60	55	37
Total People- Tables X 8	690	768	480	440	296
Maximum usage at any time	70%	70%	70%	70%	70%
Actual Maximum persons	483	538	336	308	207

ıd 2023 season

2023	2023	2023	2023	2023	2023	2023	2023	2023
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	DD 5	Week 7	Week 8
Jan 4 to 8	Jan 11-15	Jan 18-22	Feb 1-5	Feb 8-12	Feb 15-19	Feb 20-26	Mar 1-5	Mar 8-12
30	42	37	57	80	59	10	55	80
240	338	298	460	643	477	80	442	643
70%	70%	70%	70%	70%	70%	70%	70%	70%
168	237	209	322	450	334	56	309	450

2023
Week 9
Mar15-19
66
530
70%
371

TECHNICAL MEMORANDUM

DATE: **June 20, 2023**

TO: **Riverside County Airport Land Use Commission**

FROM: **John D. Criste, AICP**

RE: **Thermal Ranch Specific Plan Site Occupancy Density**

This memo provides an assessment of future occupancy densities anticipated within the future Thermal Ranch community and the development's relationship to the Jacqueline Cochran Regional Airport. The Thermal Ranch site encompasses 619± acres located approximately 1.25 miles southwest of the closest runway of the airport with portions located more than two miles from the nearest runway. This memo reiterates portions of and expands upon our technical memorandum to the ALUC dated April 5, 2023.

The basis of this analysis includes Current Compatibility Plans posted on the Riverside County Airport Land Use Commission (RCALUC) website, which include all components of the Riverside County Airport Land Use Compatibility Plan Policy Document (Adopted October 2004, some components were amended in September 2006).

Thermal Ranch Specific Plan Land Use Action

The attached Project Description provides a detailed description of the proposed project. The Thermal Ranch application incudes a General Plan Amendment, Change of Zoning, Specific Plan of Land Use, two subdivision maps and two development plot plans. Planned uses include a centrally located equestrian center surrounded by residential development on the north, east and south, and retail and resort commercial on the west.

The Thermal Ranch Specific Plan provides a mix of residential neighborhoods including workforce housing, large single-family estate lots including some suitable for keeping horses, single-family attached and detached homes, and resort condominiums. At buildout, the Project will provide up to 1,362 dwelling units ranging in densities from 0.60 to 27.3 units per acre, as well as up to 320 RV spaces.

Safety and Occupancy Density

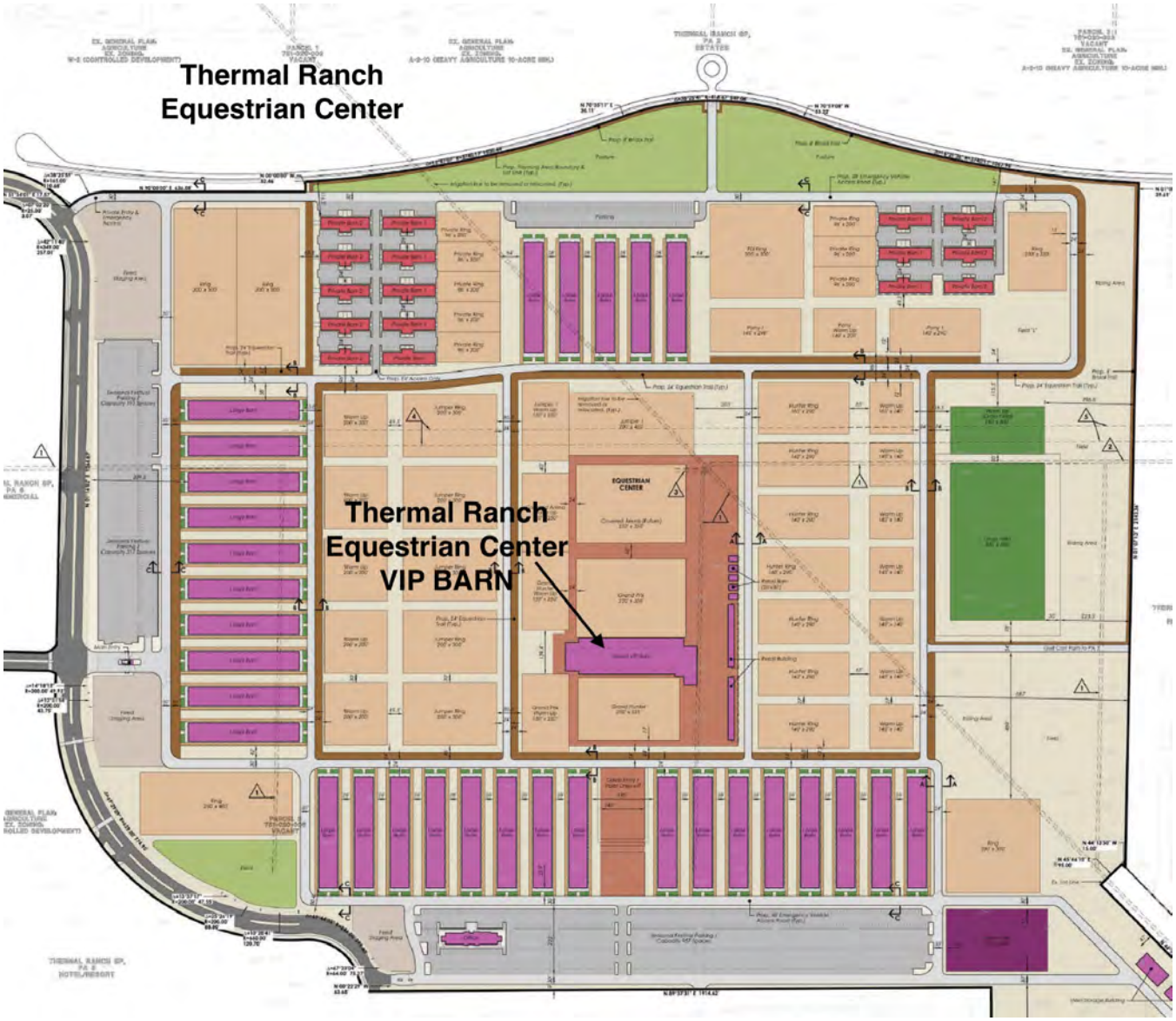
In addition to the evaluations and analyses provided in the Thermal Ranch Technical Memorandum of April 2023, the applicant's design team has further elaborated on the one development area where ALUC concerns appear to remain. Specifically, occupancy levels at the proposed VIP Barn within the equestrian center have been identified for further analysis.

The proposed equestrian center/horse show area (PA-1) will encompass 223± acres in the center of the project. As listed in Appendix D of the ALUC policy document, riding stables are specifically identified as a "generally compatible" use.. Competitions are spread across multiple riding rings and run simultaneously throughout the day. As with the existing International Horse Show, which is owned and operated in part by the Thermal Ranch applicant/developer, the Thermal Ranch equestrian facility will be a seasonal equestrian training and competitive event center but will not include large bleachers or concentrated spectator areas.

The majority of attendees to the competitive riding events to be held at the facility are comprised of riders, trainers, owners and family members. The facility is open to the public but show jumping does not typically draw large groups of spectators. The events are also spread out across many arenas and are held throughout the day and evening. Therefore, there are generally no single large equestrian events that will attract large crowds.

VIP Barn Facilities

The ALUC staff have asked for more information on the planned VIP Barn, which is designed to provide communal, day-long dinning and private facilities for show attendees that purchase weekly access. Appendix D of the ALUC policy document also specifically lists “restaurants and drinking establishments” as generally compatible uses. The exhibit below shows the relationship of the VIP Barn to the rest of the equestrian center facilities.



The attached exhibit provides a layout of the VIP Barn and illustrates the operation of the VIP Barn that is similar to that at the existing facility. The center island is where food service in buffet style is provided, and where a variety of food and drink stations are regularly restocked during the day. The picnic style

tables on both sides are purchased by competitors and have signs on each (typically, “The Brown Family” and the like). Here riders, grooms and family can get drinks or dine at any time and throughout the day.

The VIP Barn acts as a “Great Hall” and access is limited to those who purchase a weekly dining pass. On either side of the Great Hall are competition areas where competitions take place throughout the day. Seating on each side of the VIP Barn, inside and out, can accommodate about 245 people. The VIP Barn features a serving kitchen, upstairs lounge and an observation deck bar. The kitchen will be about 2,900 square feet, inclusive of pantry, walk-in freezers and fridges and the like.

The project architect and the applicant have calculated the occupancy load they expect based on the current horse show operations and their plans for the new VIP Barn space. We have shown on the attached exhibit and table, the maximum occupancy in and adjoining the VIP Barn is easily interpreted as being within (or below) the ALUC occupancy density threshold of 300 persons per acre.

Earlier Analysis
This memorandum is meant to supplement our occupancy density analysis set forth in our Technical Memorandum to the ALUC and dated April 5, 2023. We look forward to discussing this and remaining ALUC matters associated with the proposed Thermal Ranch project.

Thank you!

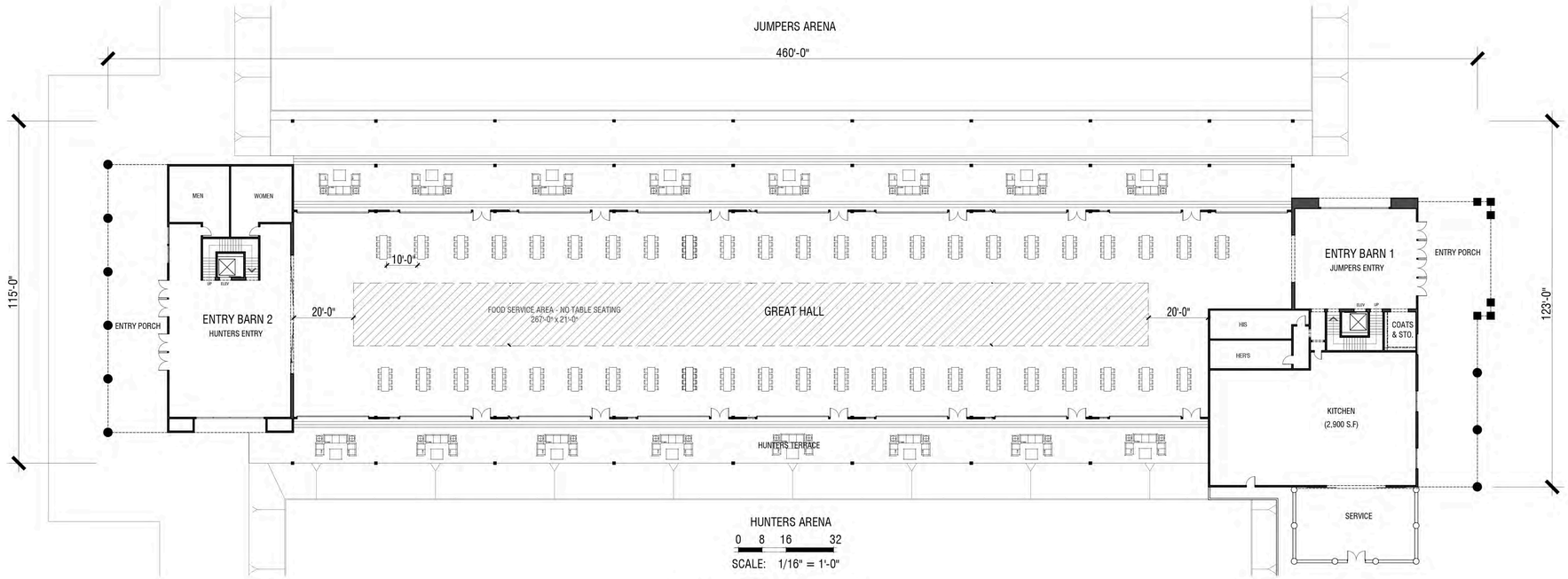
JC/kc
Attachments

Cc:
Jeremy Smith
Martin Magana
James Vaughn

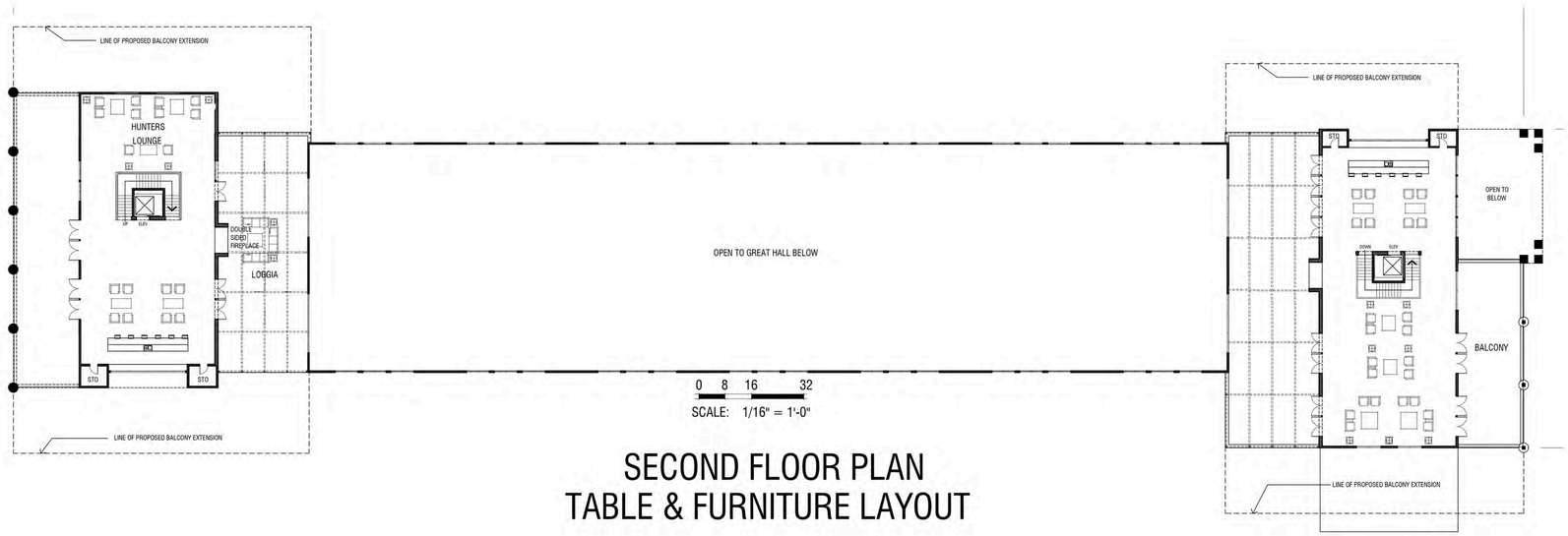
TOTAL VIP BARN			
AREA	QTY	SEATS	TOTAL
Tables	47	8	376
Sofas	16	7	112
Upstairs			63
Kitchen			25
TOTAL			576

WEST HALF			
AREA	QTY	SEATS	TOTAL
Tables	24	8	192
Sofas	8	7	56
Upstairs bar			33
Kitchen			
	TOTAL		281

EAST HALF			
AREA	QTY	SEATS	TOTAL
Tables	23	8	184
Sofas	8	7	56
Upstairs bar			30
Kitchen			25
TOTAL			295



FIRST FLOOR PLAN



SECOND FLOOR PLAN
TABLE & FURNITURE LAYOUT

JUMPERS	ENTRY BARN 1
FIRST LEVEL	5709 SQ. FT.
SECOND LEVEL	3769 SQ. FT.
TOTAL	9478 SQ. FT.
ENTRY PORCH	2089 SQ. FT.
BALCONY	1150 SQ. FT.
LOGGIA	2674 SQ. FT.
SUB- TOTAL	15391 SQ. FT.
HUNTERS	ENTRY BARN 2
FIRST LEVEL	3698 SQ. FT.
SECOND LEVEL	3452 SQ. FT.
TOTAL	7150 SQ. FT.
ENTRY PORCH	1800 SQ. FT.
BALCONY	1800 SQ. FT.
LOGGIA	2003 SQ. FT.
SUB- TOTAL	12753 SQ. FT.
GREAT HALL	
GREAT HALL (ENCLOSED)	22441 SQ. FT.
JUMPERS TERRACE	10199 SQ. FT.
HUNTERS TERRACE	4610 SQ. FT.
SUB- TOTAL	37251 SQ. FT.
BUILDING SUMMARY (A/C)	
ENTRY BARN 1	9478 SQ. FT.
ENTRY BARN 2	7150 SQ. FT.
GREAT HALL	22441 SQ. FT.
SUB- TOTAL	39070 SQ. FT.
BUILDING SUMMARY - OVERALL	
ENTRY BARN 1	15391 SQ. FT.
ENTRY BARN 2	12753 SQ. FT.
GREAT HALL	37251 SQ. FT.
GRAND- TOTAL	65395 SQ. FT.

DESERT EQUESTRIAN HOLDING LLC

GRAND VIP BARN

THERMAL, CALIFORNIA

N

CONCEPTUAL DESIGN

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WHA.
ORANGE COUNTY . LOS ANGELES . BAY AREA

TECHNICAL MEMORANDUM

DATE: **April 5, 2023**

TO: **Riverside County Airport Land Use Commission**

FROM: **John D. Criste, AICP**

RE: **Airport Land Use Compatibility Analysis for the Proposed Thermal Ranch Specific Plan and Associated Applications**

This memo provides an assessment of the land use compatibility of the proposed Thermal Ranch Specific Plan development with the Jacqueline Cochran Regional Airport located to the northeast. As is detailed in the attached Thermal Ranch project description and exhibits, the proposed project encompasses 619± acres located approximately 1.25 miles southwest of the closest runway of the airport with portions located more than two miles from the nearest runway.

The basis of this analysis includes Current Compatibility Plans posted on the Riverside County Airport Land Use Commission (RCALUC) website, which include all components of the Riverside County Airport Land Use Compatibility Plan Policy Document (Adopted October 2004, some components were amended in September 2006). Section/policy numbers and page numbers of this policy document are cited throughout this memo.

Thermal Ranch Specific Plan Land Use Action

The attached Project Description provides a detailed description of the proposed project. The Thermal Ranch application incudes a General Plan Amendment, Change of Zoning, Specific Plan of Land Use, two subdivision maps and two development plot plans. These are being reviewed and processed by the County Planning Department as a group. Uses include a centrally located equestrian center surrounded by residential development on the north, east and south, and retail and resort commercial on the west. Applications include:

- SP 00401
- GPA 230001
- CZ 2300003
- TTM 38578
- TTM 38531
- PPA 230035
- PPA 230038

Applicable ALUC Policies

The Thermal Ranch Project site falls within the Airport Influence Area of the Jacqueline Cochran Regional Airport as shown on the attached Airport Land Use Compatibility Plan. The majority of the Project site is located in Zone D, with a small portion (6.50± acres) in the southwest corner located in Zone E (see attached Exhibit 1). For purposes of analysis, the project is analysed as if entirely located within Zone D, although the site's location at the outer edge of Zone D and inclusive of Zone E is also worthy of consideration.

Policy 1.5.1 (Page 2-5) applies to the Project: As required by state law, the following types of actions shall be referred to the Airport Land Use Commission for determination of consistency with the Commission's Plan prior to their approval by the local jurisdiction:
(a) The adoption or approval of any amendment to a general or specific plan affecting the property within an airport influence area (Public Utilities Code Section 21676(b)).

Chapter 2 Countywide Policies establishes Basic Land Use Compatibility Criteria "for assessing whether a land use plan, ordinance, or development proposal is to be judged compatible with a nearby airport," as set forth in the Basic Compatibility Criteria matrix, Table 2A. "These criteria are to be used in conjunction with the compatibility map and policies for each airport as presented in Chapter 3." (Page 2-13) For Zone D and E, the Basic Compatibility Criteria are as follows:

Table 1. Basic Compatibility Criteria for Zone D and E

Zone	Locations	Maximum Densities/Intensities				Required Open Land[5]	Prohibited Uses	Other Development Conditions
		Residential (du/ac)[1]	Average[2] (people/ac)	Single Acre[3]	With Bonus[4]			
D	Primary Traffic Patterns and Runway Buffer Area	(1) ≤0.2 (avg parcel ≥5.0 ac.) or [6] (2) ≥5.0 (avg parcel ≤0.2 ac.)	100	300	390	10%	Highly noise-sensitive outdoor non-residential uses; Hazards to flight [7]	Airspace review required for objects >70 feet tall; Children's schools, hospitals, nursing homes discouraged; Deed notice required.
E	Other Airport Environs	No Limit	No Limit	No Limit	No Limit	N/A	Hazards to flight	Airspace review required for objects >100 feet tall; Major spectator-oriented sports stadiums, amphitheaters, concert halls discouraged beneath principal flight tracks

Source: Table 2A Basic Compatibility Criteria, Riverside County Airport Land Use Compatibility Plan Policy Document (Adopted October 2004). Relevant information to the Project are extracted herein from Table 2A and notes.

1. Residential development must not contain more than the indicated number of dwelling units (excluding secondary units) per gross acre. Clustering of units is encouraged. See Policy 4.2.5 for limitations on clustering. Gross acreage includes the property at issue plus a share of adjacent roads and any adjacent, permanently dedicated, open lands. Mixed-use development in which residential uses are proposed to be located in conjunction with nonresidential uses in the same or adjoining buildings on the same site shall be treated as nonresidential development. See Policy 3.1.3(d).
2. Usage intensity calculations shall include all people (e.g., employees, customers/visitors, etc.) who may be on the property at a single point in time, whether indoors or outside. Also applies to "Single Acre" and "With Bonus", both in the unit of people/acre.
3. Clustering of nonresidential development is permitted. However, no single acre of a project site shall exceed the indicated number of people per acre. See Policy 4.2.5 for details.
4. An intensity bonus may be allowed if the building design includes features intended to reduce risks to occupants in the event of an aircraft collision with the building. See Policy 4.2.6 for details.
5. Open land requirements are intended to be applied with respect to an entire zone. This is typically accomplished as part of a community general plan or a specific plan, but may also apply to large (10 acres or more) development projects. See Policy 4.2.4 for definition of open land.
6. Two options are provided for residential densities in Compatibility Zone D. Option (1) has a density limit of 0.2 dwelling units per acre (i.e., an average parcel size of at least 5.0 gross acres). Option (2) requires that the density be greater than 5.0 dwelling units per acre (i.e., an average parcel size less than 0.2 gross acres). The choice between these two options is at the discretion of the local land use jurisdiction. See Table 2B for explanation of rationale. All other criteria for Zone D apply to both options.
7. Hazards to flight include physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations. Land use development that may cause the attraction of birds to increase is also prohibited. See Policy 4.3.7.

Policy 3.3.5. **Parcels Lying within Two or More Compatibility Zones:** For the purposes of evaluating consistency with the compatibility criteria set forth herein, any parcel that is split by compatibility zone boundaries shall be considered as if it were multiple parcels divided at the compatibility zone boundary line. However, the density or intensity of development allowed within the more restricted portion of the parcel can (and is encouraged to) be transferred to the less restricted portion. This transfer of development is permitted even if the resulting density or intensity in the less restricted area would then exceed the limits which would otherwise apply within that compatibility zone. Due to the very limited size of the proposed project's Zone E area, density or intensity transfers are not practicable. (ALUC County-wide Policies document, Page 2-20)

Therefore, it is reasonable to analyze the entire Project site under the more restrictive Zone D.

Policy 3.3.6. **Other Special Conditions:** The compatibility criteria set forth in this Plan are intended to be applicable to all locations within each airport's influence area. However, it is recognized that there may be specific situations where a normally incompatible use can be considered compatible because of terrain, specific location, or other extraordinary factors or circumstances related to the site.
(a) After due consideration of all the factors involved in such situations, the Commission may find a normally incompatible use to be acceptable.
(b) In reaching such a decision, the Commission shall make specific findings as to why the exception is being made and that the land use will not create a safety hazard to people on the ground or aircraft in flight nor result in excessive noise exposure for the proposed use. Findings also shall be made as to the nature of the extraordinary circumstances that warrant the policy exception.
(c) The burden for demonstrating that special conditions apply to a particular development proposal rest with the project proponent and/or the referring agency, not with the ALUC.
(d) The granting of a special conditions exception shall be considered site specific and shall not be generalized to include other sites.
(e) Special conditions that warrant general application in all or part of the influence area of one airport, but not at other airports, are set forth in Chapter 3 of this Compatibility Plan. (ALUC County-wide Policies document, Page 2-20)

For (e), Chapter 3 further states, "These special conditions result in establishment of compatibility zone boundaries and/or compatibility criteria different in character from the zones and criteria applicable to other airports in the county. Where any such additional policies have been adopted for a particular airport, they are listed in the following sections of this chapter." For most airports, including the Jacqueline Cochran Airport, no special policies are noted and the countywide policies prevail. However, one policy in the ALUC JC plan is applicable to the Project:

2.1 Calculation of Residential Densities: Residential densities in Zone D shall be calculated on a "net" rather than "gross" basis. For the purposes of this Compatibility Plan, the net acreage of a project equals the overall developable area of the project site exclusive of permanently dedicated open lands (as defined in Policy 4.2.4) or other open space required for environmental purposes. (ALUC County-wide Policies document, Page 3-18)

Appendix D lists examples of the types of land uses which are potentially compatible under these criteria and the types of land uses which are considered incompatible. The listed land uses in Zone D relevant to the Project include:

Table 2. Zone D Land Use Examples for Compatibility Evaluations

Generally compatible:	**Generally incompatible:**	**Potentially compatible with restrictions (see Table 2A):**
Riding Stables	Fairgrounds and Race Tracks	Retail Stores (2 or 3 floors)
Marinas and Water Recreation	Rural Residential (0.5-1.0 du / acre);	Rural Estate (2.0-10.0 acre parcels)
Parks low intensity; no group activities	Low-Density Residential (1.1-5.0 du / acre)	Mobile Home Parks
Medium-Density Residential (5.1-15.0 du / acre)		Hotels and Motels (3 floors)
Restaurants and Drinking Establishments		Any Uses with more than 3 habitable floors aboveground
Retail Stores		Swimming Pools & Resorts
Automobile Parking		Electrical Substations

COMPATIBILITY EVALUATION

Occupancy Calculations: Commercial and Office Uses

For commercial and office uses, two methods of calculating occupancy[1] were used to analyse the project. These include the parking-based approach and that based on gross square footage; both are based on the California Building Code. As stated in referenced Appendix G of the California Airport Land Use Planning Handbook (CALUPH), "*Surveys of actual occupancy levels conducted by various agencies have indicated that many retail and office uses are generally occupied at no more than 50% of their maximum occupancy levels, even at the busiest times of day. Therefore, the number of people calculated for office and retail uses should usually be adjusted (50%) to reflect the actual occupancy levels before making the final people-per-acre determination."*

Occupancy Calculations: Residential Uses

According to the CALUPH, "*for residential densities the chief distinguishing feature among residential land uses is the number of dwelling units per acre. To be compatible with airport activities, the number of dwelling units per acre should not exceed the criterion specified for the compatibility zone where the use would occur.*" Footnotes from Table 2A of the County ALUC Compatibility Plan Policy Document state that, "*Residential development must not contain more than the indicated number of dwelling units (excluding secondary units) per gross acre. Clustering of units is encouraged. See Policy 4.2.5 for limitations. Gross acreage includes the property at issue plus a share of adjacent roads and any adjacent, permanently dedicated, open lands.*"

Equestrian Center (PA-1)

Safety and Occupancy Density

The proposed equestrian center/horse show area (PA-1) will encompass 223± acres in the center of the project. As listed above in Appendix D of the ALUC policy document, riding stables are generally compatible, while racetracks are not. It is important to note that the proposed equestrian uses are more in line with riding stables than racetracks. The equestrian center will not hold major spectator-oriented events that draw large crowds. Rather, the majority of attendees to the competitive riding events to be held at the facility are comprised of riders, trainers, owners and family members. Most event will be open to the public, but they do not draw and no facilities are planned that would accommodate large groups of other spectators. The events are also spread out across many arenas and are held throughout the day and evening. Therefore, there are generally no single large equestrian events that will attract large crowds.

[1] Appendix G, California Airport Land Use Planning Handbook, California Department of Transportation, Division of Aeronautics. October 2011.

The equestrian center will also have related office space and will host related retail (tack shops, etc.) and dining areas that will only serve equestrian-related visitors. As shown on the accompanying ALUC Compatibility Matrix prepared for the Thermal Ranch Specific Plan project, at maximum occupancy, the Thermal Ranch could have up to 39 people per average acre and up to 69 persons for any single acre.

Obstruction to Navigation
There will be no structures, landscaping or other objects planned in PA-1 that would constitute hazards to aircraft in flight. At its closest, the equestrian center will be approximately 1.4 miles southwest of the south runway center line. PA-1 will be comprised of barns, event arenas, other equestrian-related buildings and lighting at some arena areas. Maximum structure height in PA-1 will be 65 feet and most buildings will not exceed 40 feet.

Lighting within PA-1 is primarily planned for the safe movement of horses and people, and for on-building security. Planned arena lighting will be shielded and oriented downward to illuminate arena areas. No unshielded skyward uplighting is planned in PA-1 or elsewhere in the project and no lighting is planned that could be mistaken for airport lighting or cause glare that could affect pilots. Activities and uses in PA-1 are not expected to generate dust, steam, or smoke which could impair pilot visibility.

Noise
The PA-1 area will be approximately one mile west of the closest 55 CNEL contour projected for ultimate airport buildout and based on future airport operations of approximately 220,000 annually. The project location is rural in character and relatively quiet. Therefore, current and future airport noise, as well as ambient conditions, will not significantly impact on users within PA-1.

Aircraft Overflights
PA-1 is depicted as occurring within the airport airspace described as the “General Traffic Pattern Envelope”, which is projected to include 80%± of aircraft overflights. Note that the north half of the northeast quarter of the project site (PA-2) is located outside the traffic pattern envelope. Impacts of overflight noise in PA-1 and project-wide is are also mitigated by aircraft height, versus those on airport landing approach or departure. As noted, PA-1 uses are not especially noise sensitive and are not expected to be adversely impacted by aircraft overflights.

Equestrian Center (PA-1) Compatibility Summary
Based on a review of the potential effects of the equestrian center on airport operations, the planned equestrian center is consistent and compatible with the Jacqueline Cochran Regional Airport. At maximum occupancy, the Thermal Ranch could have up to 39 people per average acre and up to a maximum of 69 persons for any single acre. Activities and uses in PA-1 are not expected to have skyward lighting, or generate excessive dust, steam, or smoke which could impair pilot visibility. The entire project site is located well outside of the current and ultimate airport 55 CNEL contour. Finally, PA-1 uses are not especially noise sensitive and are not expected to be adversely impacted by aircraft overflights.

Commercial Uses (PA-5 & 6)

Safety and Occupancy Density
Beyond the PA-1 equestrian-related commercial uses described above, the proposed project includes a neighborhood-scale retail center (PA-6) and a resort hotel with associated retail (PA-5) which are planned along Harrison Street in the southwestern portion of the site. Neighborhood centers mainly address day to day needs of local residents, including groceries, convenience items, personal services, snacks, pharmaceuticals, and other health related items. Resort commercial is oriented to the resort guest but is also open to outside customers.

Occupancy densities in the retail commercial areas are calculated based upon parking requirements and maximum allowable occupancy as set forth in the California Building Code. Both methods yielded essentially the same results for the neighborhood and resort commercial components. The analysis conservatively assumes five spaces per 1,000 square feet of gross space. Based upon 200,000 square feet of retail commercial space, a maximum total parking of 1,000 spaces would be provided. This corresponds to a maximum floor area allowance per occupant of 100 square feet[2] or 2,000 maximum allowable occupants in the retail commercial portions of PA-5 and 6.

As noted above, the number of people calculated for office and retail uses has been adjusted (50%) to reflect the actual occupancy levels before making the final people-per-acre determination. The calculated single acre/average acre occupancy for the resort commercial is 219/65.5. For the neighborhood commercial center the calculated single acre/average acre occupancy is 218/35. Both densities are well below the Zone D maximum of 300 (without a density bonus).

It should also be noted that a variety of commercial uses that are found to be compatible or potentially compatible in Zone D[3], including retails stores, restaurants and drinking establishments, fast food restaurants, office buildings, banks and financial institutions, and motels. Also, compatible or potentially compatible uses in Zone D are motels and hotels up to three story, and theaters/auditoriums/large assembly halls.

Obstruction to Navigation
The maximum building height limit is 65 feet, while the associated commercial structures will be limited to 40 feet in height. The maximum height of buildings in the neighborhood commercial center will be 50 feet. Therefore, proposed development in these areas will not create any height-related obstructions to navigation.

Noise
Project PA-5 and 6 are located approximately one mile west of the closest approach of the ultimate airport 55 CNEL noise contour. All of the uses planned in these PAs are identified as “Clearly Acceptable” on Table 2B (Supporting Compatibility Criteria: Noise) of the County Airport Land Use Compatibility Plan. Therefore, uses proposed in PAs 5 and 6 will not conflict with the noise provisions of the local airport.

Resort Hotel (PA-5b)

Safety and Occupancy Density
The project proposes a 150-room upscale hotel to be located in the northern portion of PA-6b. The hotel site will encompass 8.1 acres and, based on a construction ratio of 750 square feet per room[4] (key) yields a hotel building encompassing 112,500± square feet. Hotel occupancy density was analysed based upon average room occupancy of 2.0 and 100% hotel occupancy, and conservatively yielded maximum single acre and average acre occupancy of 116 and 37, respectively. The proposed project includes up to 340 resort condominium units adjacent to the PA-5b resort hotel planning area, which are addressed with the other proposed residential uses below.

Obstruction to Navigation
The hotel area has a maximum building height limit of 65 feet. The hotel site is approximately 1.4 miles west of the southerly extension of the airport runway center line and 3.2 miles southwest of the closest approach to the airport north-south runway. Therefore, the maximum building height will be below the 70-

2 Table 1004.1.2, California Code of Regulations Title 24, Part 2, Vol. 1., 2016 California Building Code
3 Appendix D: Compatibility Guidelines for Specific Land Uses, Riverside County Airport Land Use Compatibility Plan Policy Document, 2004.
4 Hospitalitynet.org, accessed 3.30.23.

foot threshold for structure height in Zone D. No unshielded skyward uplighting is proposed in PA 5b and no lighting is planned that could be mistaken for airport lighting or cause a glare in the eyes of pilots. Activities and uses in PA 5b are not expected to generate dust, steam, or smoke which could impair pilot visibility.

Noise
The proposed hotel is planned in PA-5b and approximately one mile west of the closest approach of the ultimate airport 55 CNEL noise contour. All of the uses planned in these PAs- 5 and 6, including the PA-5b hotel (analysed as residential for noise), are identified as "Clearly Acceptable" on Table 2B (Supporting Compatibility Criteria: Noise) of the County Airport Land Use Compatibility Plan. Therefore, uses proposed in PAs 5 and 6 will not conflict with the noise provisions of the local airport.

Residential Uses in PAs-3, 4a, 4b, 5a

ALUC Residential Density Guidelines and Rationale
As noted, all but a small portion of the project site is located within Zone D; a very small portion of the southwest corner of the site (6.50± acres) occurs in Zone E. The basic compatibility criteria for residential uses in Zone D are those with average densities below 0.2 units per acre (min. average five acre lots), or above 5 units per acre (average 5,000 square foot lots or smaller). Also see Table 1, above.

As discussed under the **Project-Wide Open Land** discussion below, 10% open land requirement that applies to the entire Specific Plan project site is met. As shown on the accompanying ALUC Compatibility Matrix prepared for the Thermal Ranch Specific Plan project, residential densities will range from 0.6 du/ac to up to 27.3 du/ac. All planned residential development in PAs-3 (5.6 du/ac), 4a (16.3-27.3 du/ac) and 5a (7.4 du/ac) satisfy ALUC policies and guidance for residential development densities in Zone D.

Obstructions to Navigation
Structure heights in PAs 3, 4 and 5a are limited in the residential planning areas to 40 feet or less. Therefore, none of the planned residential areas will create an obstruction to navigation. Planned lighting will be shielded and oriented downward. No unshielded skyward uplighting is proposed in PAs-3, 4a, 4b, or 5a or elsewhere in the project and no lighting is planned that could be mistaken for airport lighting or that could cause a glare in the eyes of pilots. Activities and uses in PAs-3, 4a, 4b or 5a are not expected to generate dust, steam, or smoke which could impair pilot visibility.

Noise
Project PAs 3, 4 and 5a are located approximately one mile west of the closest approach of the ultimate (buildout) airport 55 CNEL noise contour. All of the uses planned in these PAs are identified as "Clearly Acceptable" on Table 2B (Supporting Compatibility Criteria: Noise) of the County Airport Land Use Compatibility Plan. Therefore, uses proposed in PAs 3, 4 and 5a will not conflict with the noise provisions of the local airport.

Residential Uses in PA-2

The County Airport Land Use Compatibility Policy Document and other ALUC regulatory and guidance documents make provisions for consideration of project-specific circumstances to further interpret and apply polices and regulations regarding permissible residential densities. Table 2A of the ALUC policy document identifies prohibited uses in Zone D to include "highly noise-sensitive outdoor residential uses" with cited examples being amphitheaters and drive-in theaters. PA-2 development will be limited to single family estates some with equestrian facilities. No highly noise-sensitive uses will occur in PA-2.

For an explanation of the rationale for the division of permissible residential densities in Zone D, Table 2A refers to Table 2B of the same policy document, which addresses the noise compatibility issues associated with various land uses. The consideration of future airport noise contours is especially appropriate for this Specific Plan project due to its size, including "sites large enough to have a 3 dB or more variation in CNELs"[5].

ALUC guidance is also directed to protecting indoor noise levels, which are established by code to be 45 dB and indicates that single and multi-family residences need not demonstrate any special measures to meet the 45 dB interior standard if development lies outside the airport's 60 dB CNEL noise contour.

At its closest, PA-2 homes would be more than 1,500 feet west of (outside) the ultimate 55 CNEL contour generated by airport operations under future buildout conditions.[6] It should be noted that the cited airport CNEL noise contours are based on an "ultimate" 220,000 operations per year at the airport; the current number of operations is approximately half that. As noted in the County ALUC policy document, which dates from 2004-2005, aircraft noise is expected to be reduced by new and quieter engine design. Most importantly, Table 2B: Supporting Compatibility Criteria: Noise states ***that below the 55 CNEL contour single-family and multi-family homes are "Clearly Acceptable"***. Accordingly, the proposed estate residential uses on PA-2, while outside the density levels specifically allowed in Zone D, are also located in an area that is well below the existing and future (buildout) airport noise levels of concern that form the primary basis of the density restrictions.

Proposed development in PA-2 is also not expected to create any significant hazards to flight or create substantial hazards for aircraft passengers or people on the ground. In fact, from a safety standpoint, the very low-density estate residential uses maintain extremely low numbers of people per acre, as compared with the 5du/acre and greater densities that are specifically allowed in Zone D. In addition, most of the east half of the PA-2 is located outside the traffic pattern envelope[7]. Impacts of overflight noise in PA-2 and project-wide are also mitigated by aircraft altitude, versus those aircraft on landing approach or departure.

As noted, maximum structure height in PA-2 is 35 feet. There will be no visual or electronic forms of interference that could affect aircraft safety. As discussed in the bird hazard discussion below, no large ponds of other water bodies are planned that could attract flocks of birds.

<u>Basis for PA-2 Compatibility Determination</u>
Therefore, and consistent with Policy 3.3.6: Other Special Conditions of the County ALUC policy document, the various specific and special conditions that will occur within the PA-2 planning area should in this instance provide the basis for finding that this normally incompatible residential density should be considered as compatible here because of the circumstances of the site and planned development. Potential findings in support of a compatibility determination for PA-2 include:

A. No highly noise-sensitive uses will occur in PA-2.
B. PA-2 lies more than 1,500 feet outside the airport ultimate 55 CNEL contour.
C. Both the Specific Plan area and PA-2 are large enough to have a 3 dB or more variation in CNELs.
D. No special measures will be required for interior residential 45 CNEL noise standards to be met.

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5 Policy 4.1.4: Noise Exposure in Residential Areas, Riverside County Airport Land Use Compatibility Plan Policy Document. October 2004.

6 Map JC-3: Noise Compatibility Contours, prepared by Mead & Hunt, Inc., Riverside County Airport Land Use Compatibility Plan Policy Document. June 2005.

7 Exhibit JC-7: Compatibility Factors Map, Jacqueline Cochran Regional Airport, Airport Land Use Compatibility Plan, East County Airports Background Data. Prepared by Riverside County Airport Land Use Commission. 2004.

E. Limited structure height, lighting standards and guidelines, and restrictions on water bodies that could attract birds will further ensure that uses and densities in PA-2 are compatible with airport operations.

Project-Wide

Bird Hazards

Land use development that may cause the potentially hazardous attraction of birds to increase in the vicinity of an airport is prohibited. Due to the project site's location and the breadth of the proposed project, a study was performed to determine whether the project could create a significant wildlife/bird strike hazard by attracting large flocks of birds to the site.[8] The greatest potential for creation of a bird hazard within the project is associated with the creation of large bodies of water that can attract waterfowl and other aggregations of birds in numbers. Although no large water bodies are proposed within the project, resort and clubhouse pools and related amenities (i.e., lazy river), as well as any irrigation or retention ponds, will be subject to the measures recommended in the Wildlife Hazard Management Plan to ensure any potential safety hazards will be avoided.

The mitigating design measures recommended in the study include appropriate landscape planning and materials, limitations on the physical design of potential water bodies, water treatment, trash management, no wildlife feeding policies, and active harassment of birds or other wildlife, as needed. Implementation of the study's recommendations will ensure bird and other wildlife risks to nearby aviation operations will be minimized at the project site and will be less than significant.

Open Land

Open land compatibility requirements are intended to be applied with respect to an entire zone. Within the Specific Plan project area, the equestrian center alone provides substantial and well-distributed open land, including areas that meet the minimum dimensions of 75' X 300' as set forth in the ALUC Land Use Compatibility Document. Open space areas that meet this requirement include the large east-west-oriented pasture area on the north end of PA-1 (Equestrian Center), which provides a minimum open space area 1,980' X 75'+. Another important qualifying open land area is the north-south-oriented grass stadium on the east side of the Equestrian Center with field dimensions of 462'± X 330'±.

Other portions of the equestrian center along all boundaries of PA-1 will include performance rings with minimum dimensions of 200' X 300' and several that will be 200' X 500'. Finally, in the southeast quadrant of the equestrian center large "fields" are planned that will range from more than 200 feet in length and up to 2,000 feet in length.

In addition to the above and as discussed in Policy 4.2.4., the County-wide policy document states that roads and automobile parking lot are acceptable "open land" if they meet the minimum area dimensions. In this regard, internal parking areas with adequate clear area that can meet these criteria are planned along the west (200' X 1,050') and south portions (230' X 1,320') of the equestrian center in PA-1. Also see Thermal Ranch Specific Plan Conceptual Site Plan.

It should also be noted that arterial roadways will be constructed on the project's west, east and north boundaries with paved half sections and parkways that may also meet open land requirements as described in ALUC Policy 4.2.4. Therefore, zone-wide the equestrian center of PA-1 and SP00401 overall will readily satisfy this compatibility criteria.

[8] Wildlife Hazard Site Visit and Wildlife Hazard Management Plan, Thermal Ranch Project, Thermal, California, July 2022 (Revised March 2023), prepared by Russell P. DeFusco, Ph.D., BASH, Inc.

Safety and Airspace Compatibility Factors

Background data provided in County ALUC—East County Airports Background Data report provides important information on the Jacqueline Cochran Regional Airport and patterns of operations. Exhibit JC-7 of the referenced report shows the general air traffic pattern envelope where approximately 80% of aircraft overflights are estimated to occur. This exhibit also plots areas of relative accident risk intensity contours for takeoffs and landings. Exhibit JC-7 clearly shows that the lowest plotted risks for aircraft operations are located between 750± feet and 1,750 feet east of the project site. Accordingly, the entire project site is located well outside of the airport's plotted risk areas.

It should also be noted that Table 3A of the County policy document sets forth the safety and airspace protection factors considered in making compatibility determinations. The primary concern in Zone D is primary aircraft traffic patterns. Factors[9] affecting safety include:

- Aircraft on instrument approaches below 1,000 feet
- About 20% to 30% of general aviation accidents take place in this zone, but large area encompassed means low likelihood of accident occurrence in any given location
- Risk concern is primarily with uses for which potential consequences are severe (e.g., very-high intensity activities in a confined area)
- Object height limits generally at least 100 feet

The north-south airport runway center line (extended) is located one-half mile east of the project site. The project encompasses a large area (619± acres) with numerous potential emergency landing areas, which means a low likelihood of an accident occurrence in any given location of the project site. Residential, commercial and equestrian occupancy densities within the project generally comply with or fall well below Zone D standards. And the maximum structure height proposed project-wide is 65 feet.

It is also important to again note that no portion of the project site is located within the airport's future ultimate 55 CNEL noise contour, which will occur approximately 1,280 feet east of the project site. Because the project site is not and will not in the future be subject to airport noise impacts above 55 CNEL, neither low density nor high density residential uses would expose people to excessive noise.

Conclusions and Recommendation

Based upon a comprehensive assessment of the proposed project and the various documents regulating airport land use compatibility county-wide and at the Jacqueline Cochran Regional Airport, the proposed Thermal Ranch Specific Plan and related plans are compatible with and meet the applicable noise, safety, airspace protection, and overflight regulations and guidelines. The applicant demonstrates that special conditions apply to the proposed project, such that a normally incompatible use (PA-2 Zone D residential density guidelines) can be considered compatible because of specific location, or other extraordinary factors or circumstances related to the site.

The above discussion demonstrates that the exception to compatibility criteria will not create a safety hazard to people on the ground or aircraft in flight nor result in excessive noise exposure for the proposed uses. Therefore, it is asked that the County Airport Land Use Commission adopt the following findings regarding the compatibility of the Thermal Ranch project with ALUC regulations and guidelines.

A. All of the proposed residential and commercial uses and densities/intensities within the proposed project are consistent with the Basic Compatibility Criteria in Table 2A of the Airport Land Use Compatibility Plan (ALUCP), except possibly the single-family estate homes proposed in PA-2.

[9] Table 3A, Chapter 3: Individual Airport Policies and Compatibility Maps, Riverside County Airport Land Use Compatibility Policy Document. 2004.

B. The applicant has provided data and information on the project and its relationship to the airport, including "special circumstances" that justify finding that the proposed estate residential units in PA-2 do not conflict with the ALUCP and justify an exception to the Zone D residential limits under Policy 3.3.6. These include but are not limited to:

1. The project will not expose residents or the public to excessive noise levels because the entire project site lies outside of the 60 dB CNEL contour for the ultimate buildout of the airport (See Exhibit JC-6 on p. E6-6 of the ALUCP). Furthermore, the entire project site lies outside of the ultimate 55 dB CNEL contour. As shown in Table 2B on page 2-23 of the ALUCP, residential uses are considered "clearly acceptable" outside of the 55 dB CNEL contour;

2. The approved and partially developed Kohl Ranch Specific Plan project, located between the project site and the airport, includes several planning areas with low-to-medium density residential development (2-5 du/acre) which also fall between the "low" and "high" density options specified for Zone D. These residential densities, along with the rest of the Kohl Ranch master planned community will serve as a substantial buffer between the airport and the Thermal Ranch project;

3. Zone D is assigned to the airport's primary traffic pattern areas that are not adjacent to runways and fall outside of the extended approach and departure zones. These areas are considered to have a moderate risk of noise impact and a low risk of safety impacts.

4. The ALUCP provides both a high and low residential density option in Zone D because "noise concerns can be minimized either by limiting the number of dwelling units in affected areas or by allowing high-density development which tends to have comparably high ambient noise levels" (see Table 3A on p. 3-3 of the ALUCP). Development densities in PA-2 will be low and will thereby limit the number of residents in this area exposed to aircraft noise or from future vehicular traffic noise on adjoining Avenue62.

5. The estate residential homes proposed in PA-2 will be part of a master planned equestrian-oriented community and will include extensive and centrally located open space areas.

ALUC Compatibility Matrix
Thermal Ranch Specific Plan et al

Planning Area	Description	Acres [1]	ALUC Zone	Residential Units	People On Site Max./Adjusted[7]	Residential Density Density/Min Lot	Non-Residential Intensity[5] Max. Single Acre /Average Acre	Noise Exposure	Building Height Max.	Open Land Compliant [6]	Prohibited or Discouraged Uses	Flight Hazard
1	Equestrian Center (2,700 horses)[3]	223.1	D	N/A	8,100	N/A	69[3]/36.3	None Outside 55 CNEL	65 feet	Yes	None	None
2	SFR Estate (132 lots)	194.3	D	132	356	0.6 du/ac	N/A	None Outside 55 CNEL	35 feet	Yes	None	None
3	SFR 5000	69.5	D	390	1,053	5.6 du/ac /5,000 sf avg lot	N/A	None Outside 55 CNEL	40 feet	Yes	None	None
4b	Workforce RV Park	22.8	D	320	864[4]	14 du/ac /NA	34/34	None Outside 55 CNEL	20 feet	Yes	None	None
4a	Workforce Cottages	18.3	D	300-500	810-1,350[4]	16.3-27.3 du/ac /NA	27.3/27.3	None Outside 55 CNEL	20 feet	Yes	None	None
5a	Condominiums	42.1	D/E	340	918	7.4 du/ac /NA	N/A	None Outside 55 CNEL	40 feet	Yes	Lagoon/Birds	Lagoon/Birds
5b	Hotel (150 Keys)	8.1	D	N/A	275	N/A	116/37	None Outside 55 CNEL	65 feet	Yes	None	None
5c	Resort Retail (50,000 SF)	4.2	D	N/A	500/250	N/A	219/65.5	None Outside 55 CNEL	40 feet	Yes	None	None
6	Commercial Retail (150,000 SF)	21.4	D	N/A	1,500/750	N/A	218/35	None Outside 55 CNEL	50 feet	Yes	None	None
Totals:		**603.8** [2]		**1,060-1,362**	**4,001-5,886**[8]							

1. *Acres are approximate and net of perimeter ROW dedications.*
2. *Excluding 18.20± acres of perimeter ROW dedication.*
3. *Based on 223.1-acre central core of equine showgrounds.*
4. *Maximum assumes 2.7 persons per household; average occupancy expected to be <2/du. Coachella Valley CCD, Riverside County, CA - Profile data - Census Reporter.*
5. *Table 1004.1.2, California Code of Regulations Title 24, Part 2, Vol. 1., 2016 California Building Code; For other uses persons on site are estimates.*
6. *Open Land is best calculated at the Specific Plan level (Countywide Policies, Table 2A, Footnote 3). Zone D assumed 619.1± gross acres within this Specific Plan. Open land in PA1 alone totals 177 acres or 29% of Zone D. This substantially exceeds the required 10% minimum without considering open land in any other PA.*
7. *Residential occupancy based on US Census 2020 for Eastern Coachella Valley. Non-residential)office and retail commercial) reflects a 50% adjustment as provided for in Appendix G, California Airport Land Use Planning Handbook.*
8. *Net number of people at PA-1 (Equestrian Showgrounds) includes on-site workforce population.*

ALUC Standards for Zone D: **Revised 4.4.23**

Residential dwelling density per acre: (1) ≤0.2(Average parcel size ≥5.0 ac.) or (2) ≥5.0 (average parcel size ≤0.2 ac (8,700 sf)

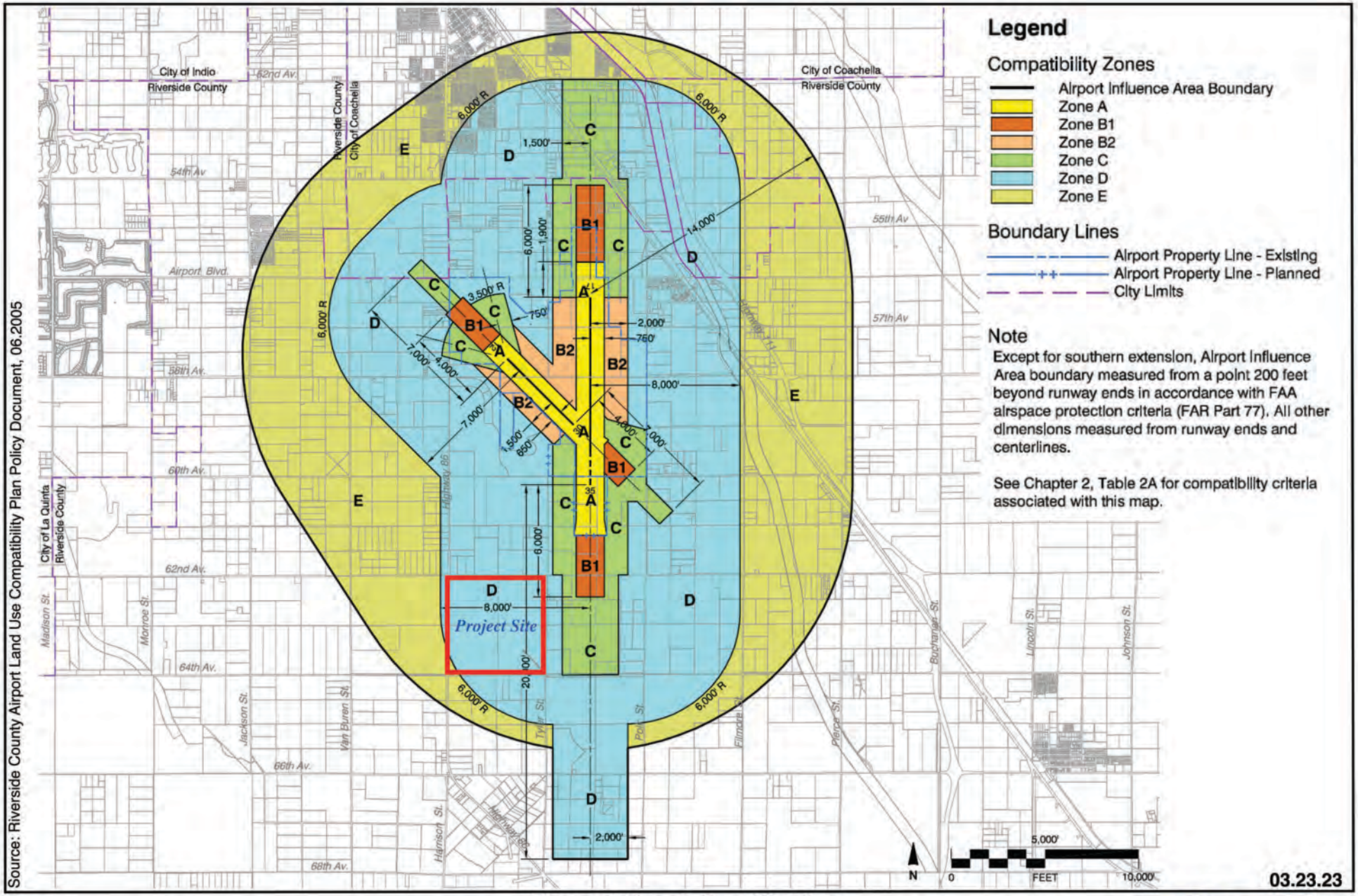
Nonresidential intensity per acre: (1) Average: 100, (2) Single Acre: 300, (3) Single Acre w/Bonus: 390.

Required open land: 10%

Prohibited Uses: Highly noise-sensitive outdoor nonresidential uses, Hazards to flight (e.g. waterbodies)

Discouraged Uses: Children's schools, hospitals, and nursing homes

Other regulations: Airspace review required for objects >70 feet tall



Source: Riverside County Airport Land Use Compatibility Plan Policy Document, 06.2005

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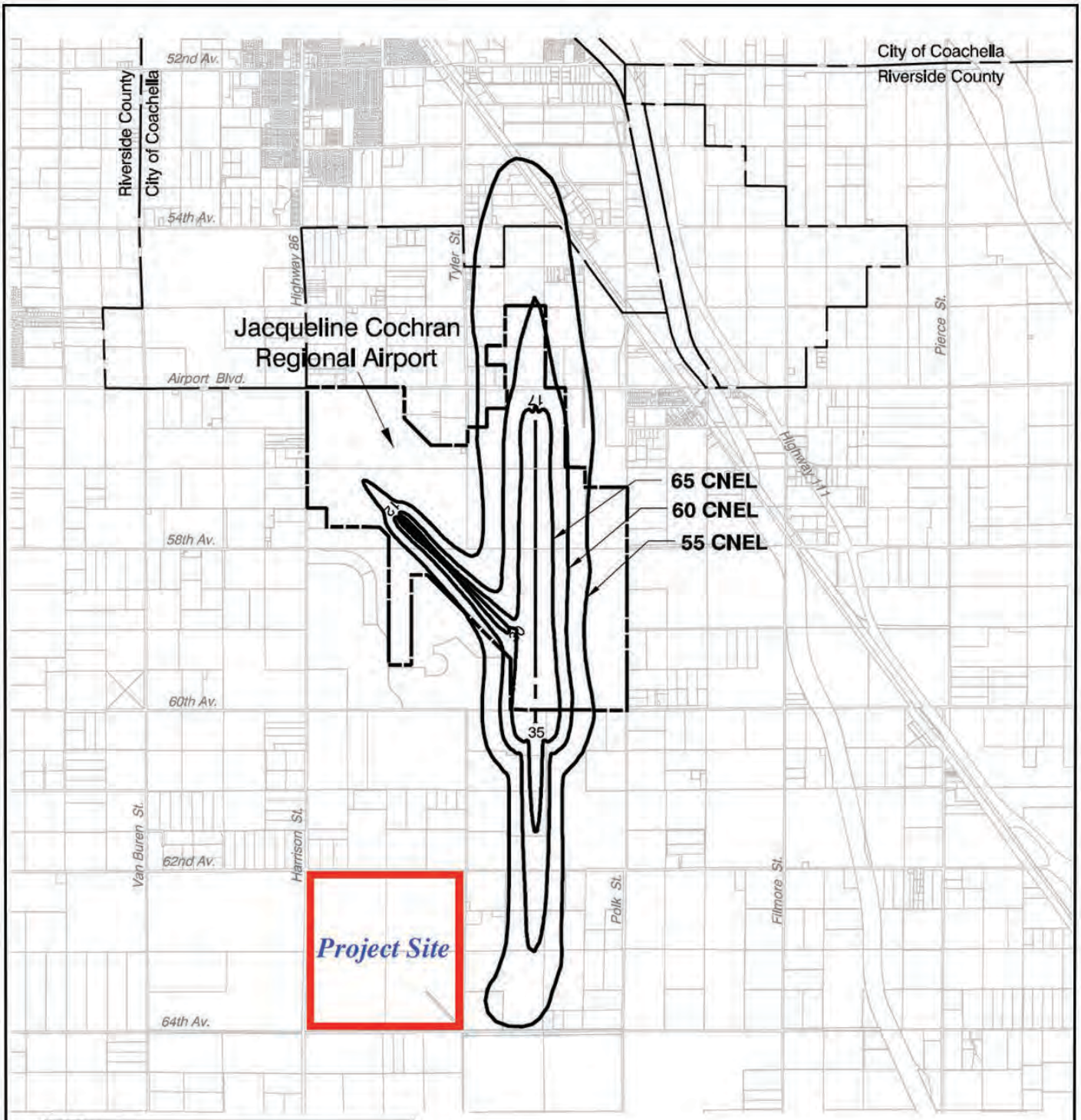
Thermal Ranch Specific Plan
Riverside County ALUC
Airport Land Use Compatibiltiy Zones
Thermal, California

Exhibit
1



Ultimate	
Annual Operations	220,000
Average Annual Day	616*

* Also representative of future (2025) peak-season day

Source: Mead & Hunt, Inc. (October 2004)

N

0 5,000' 10,000'

FEET

Source: Riverside County Airport Land Use Compatibility Plan Policy Document, 06.2005

03.23.23

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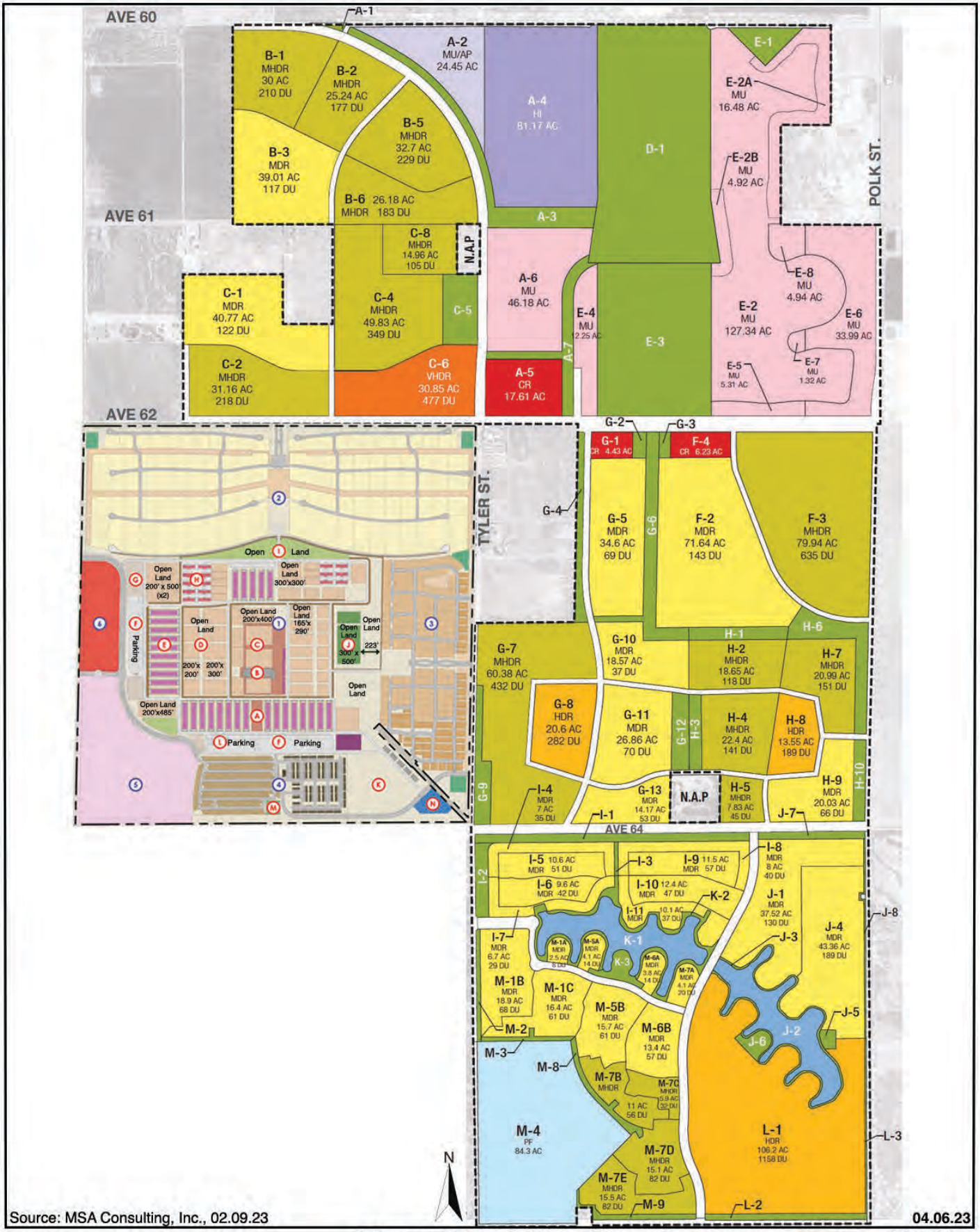
Thermal Ranch Specific Plan
Riverside County ALUC
Noise Contours
Thermal, California

Exhibit

2



Source: MSA Consulting, Inc., 02.09.23

04.06.23

Thermal Ranch Specific
Riverside County ALUC
Project and Kohl Ranch Specific Plan
Thermal, California

TERRA NOVA®
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Exhibit
3

	Project Boundary				
1	Horse Park	A	Grand Entry	H	Private Barns
2	Estate Lots	B	Gathering/Dining Commons	I	Pasture
3	Neighborhoods	C	Competition Rings	J	Grass Field
4	Horse Park Workforce Housing	D	Warmup/Jumper Rings	K	Back of House
5	Hotel/Resort	E	Common Barns	L	Office
6	Commercial	F	Parking	M	CVWD Well Site
		G	Staging Area	N	Potential Substation

Note: This exhibit illustrates one possible development scenario. Other site development concepts are allowed subject to the standards and guidelines of this Specific Plan.

Source: MSA Consulting, Inc., 02.09.23

04.06.23

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Thermal Ranch Specific
Riverside County ALUC
Conceptual Development Plan
Thermal, California

Exhibit

4

COUNTY OF RIVERSIDE
AIRPORT LAND USE COMMISSION

THERMAL RANCH SPECIFIC PLAN SP 00401 ET AL
COACHELLA VALLEY

Project Description

The Thermal Ranch Specific Plan, inclusive of two accompanying subdivision maps (Tentative Tract Map (TTM) No. 38578 and Tentative Tract Map (TTM) 38531, two plot plan applications, and a General Plan Amendment (GPA) and Change of Zone (CZ), is proposed on 619.1±-acres and will be comprised of a mix of uses including and centered around a 223.1±-acre equestrian center and related show facilities, including barns, stabling and related equestrian services (Planning Area 1/PA-1). The equestrian center will require 300 staff, and will have an additional 8,100 visitors on peak event days comprised of riders, trainers, stable hands and visitors.

Other components of the Thermal Ranch Specific Plan would include a mix of residential neighborhoods ranging horse park workforce housing (including modular housing and RV parking accommodations) (Planning Area 4/PA-4), to large single-family estate lots, some suitable for keeping horses (Planning Area 2/PA-2). Other residential product planned includes single-family attached and detached homes (Planning Area 3/PA-3) and condominiums (possibly extended stay) in Planning Area 5 (PA-5) and may also be available to the planned hotel room pool. At buildout, the Project will provide up to 1,362 dwelling units ranging in densities from 0.60 to 27.3 units per acre.

Proposed commercial areas would provide 275,000± gross leasable square feet of retail and other commercial space, including 75,000± square feet of equestrian event-related retail space, and 10,000 square feet of office space; and up to 150,000 square feet of retail space in Planning Area 6 (PA-6). A 54.4±-acre mixed use resort with a 150± key resort hotel, beach club and ancillary retail is also proposed (Planning Area 5/PA-5). The Project provides four Coachella Valley Water District (CVWD) well sites to be located in the northern and eastern portions of the Project site.

Additionally, two subdivision maps (TTM No. 385378 and TTM No. 38531), and two Plot Plan applications have been filed and are addressed in this CEQA analysis. TTM No. 38531 will subdivide the property into nine large parcels and TTM No. 38578 will further subdivide PA-2 (Estate Residential) into 132 individual lots and PA-3 into 390 single-family lots. The two plot plans will allow development to commence in PA-1 and PA-4 following approval of the Specific Plan and these related applications. Each of the major Specific Plan components is described below.

The Project will result in full half-street improvements, phased to Project improvements, of Avenue 62, Harrison Street and Tyler Street. Water and sewer will be extended from immediately off-site to serve the proposed Project. Two sewerage lift stations are proposed in the southerly portion of the Project. An on-site electric power substation is also planned. These on-site and off-site utility infrastructure improvements will be fully analyzed in the EIR.

The Thermal Ranch Specific Plan site is currently designated "Agriculture" in the Foundation Element and the Eastern Coachella Valley Area Plan (ECVAP) of the General Plan. The applicant proposes a land use change to the Foundation Element designation to "Community Development" and to apply a variety of ECVAP land use designations consistent with proposed underlying land uses. Consistency zoning is also proposed and a part of this Project, with proposed zoning designation that correspond to the proposed ECVAP land use designations. See Table 2 below.

Project Location

The subject Thermal Ranch Specific Plan property is located in the southeastern portion of the Coachella Valley in the central unincorporated area of Riverside County. The subject property encompasses approximately one square mile with a net acreage of 619.1± acres. It is bounded on the north by Avenue 62, on the south by Avenue 64, on the west by Harrison Street and on the east by Tyler Street. It is comprised of Assessor's Parcel Numbers: 751-020-002,003, 006, 007 and 010, and is also described as being Section 5, Township 7 South, Range 8 East, SBB&M. It is located 3.7± miles west of State Highway 86 Expressway and 2 miles west of the CVWD Water Reclamation Plant No. 4 (WRP # 4). The site is also approximately 1.25 miles south of the closest runway of the Jackie Cochran Regional Airport and approximately 2.5 miles west of the Coachella Valley Stormwater Channel. The separate APN: 751-020-010 is an exempt parcel under "USA" (US Bureau of Reclamation/USBR) ownership and planned for avoidance or as an owner-allowed "off-site" use area with USBR permission.

Existing Conditions

The entire Project property is currently in agricultural use inclusive of several ag-related haybarns, packing sheds and other structures, irrigation water well and other irrigation-related infrastructure, and an agricultural drain along the property's south boundary within or adjacent to the Avenue 64 alignment. There are no undisturbed areas within the boundaries of the subject property (see Exhibit 3).

The Project's west boundary is Harrison Street, which is partially improved, providing approximately 38± feet of pavement with two travel lanes and graded and partially paved shoulders. The Project's north boundary of Avenue 62 is partially improved, providing approximately 24± feet of pavement and two travel lanes with graded but not otherwise improved shoulders. The subject property is bounded on the east by Tyler Street, which currently provides two travel lanes within a 24± feet paved section and with graded but unpaved shoulders.

The south of the subject property is bounded by the future Avenue 64, and is comprised of the following, described north-to-south: a 95-foot wide electric utility easement with power poles; a 25-foot wide pipeline easement; and a 25-foot wide parcel owned in fee by the Coachella Valley Water District (CVWD) for a future stormwater channel. The future Avenue 64 center line is located 55 feet south of the property line. These easements and drainage facilities separate the development portion of the site from the existing and future Avenue 64 right-of-way

Table 1: Land Use Summary
Thermal Ranch Specific Plan

Planning Area	GPLU	Base Zone	Description	Acres	Residential Units & Density	Hotel Keys	Population	Commercial FAR	Commercial SF	Office SF	Employees	Bldg Height (feet)
1	C-T	A-1	Horse Park	223.1					75,000	10,000	300	65
2	LDR	R-R	Estate Residential	194.3	132 / 0.6		356					35
3	MDR	R-1	Single Family Attached/Detached	69.5	390 / 5.6		1,053					40
4a	HDR	R-T	Workforce Cottages	18.3	300-500 / 16.3-27.3		810-1,350					20
4b	HDR	R-T	Workforce RV Park	22.8	320 / 14		864					20
5a	CT	C-T	` Resort Condos	42.1	340 / 8.1		918					40
5b	CT	C-T	Hotel	8.1		150					**TBD**	65
5c	CT	C-T	Resort Retail	4.2				0.20 - 0.35	50,000		200	40
6	CR	C-1	Commercial Retail	21.4				0.20 - 0.35	150,000		600	50
Perimeter ROW				15.3								
TOTALS				**619.1**	**1,060-1,362 Residences 320 RVs**	**150**	**4,001 – 4,541**		**275,000**	**10,000**	**1,100**	

General Plan Amendment and Change of Zone

The proposed Thermal Ranch Specific Plan project includes a General Plan Amendment and a Change of Zone on the subject 619± acres. These requested change in land use and zoning designations are summarized as follows:

General Plan Amendment

Proposal to amend the Riverside County General Plan Land Use Element as it applies to the project site by changing the land use designation from Agriculture: Agriculture to Community Development: Tourist Commercial, Low Density Residential, Medium Density Residential, High Density Residential, and Commercial Retail as reflected on the proposed land use plan.

Change of Zone

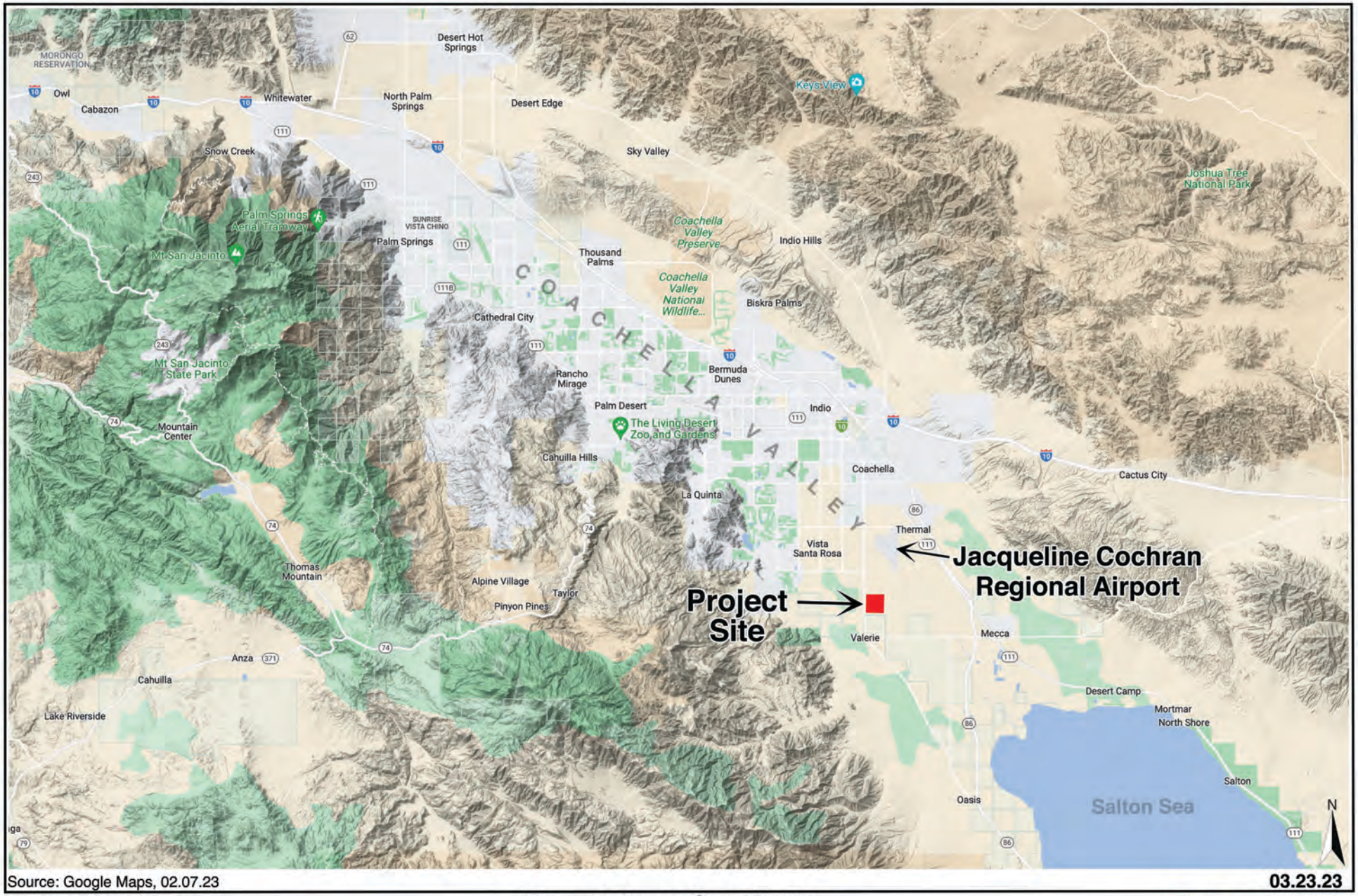
Proposal to change the site's current zoning classifications of Heavy Agriculture (A-2-10) and Controlled Development Area (W-2) to Specific Plan and to amend Ordinance 348 to include the Specific Plan Zoning Standards for the site.

Thermal Ranch & Jacqueline Cochran Regional Airport

The Thermal Ranch property is located 1.25± miles southwest of the nearest runway of the County-owned and operated Jacqueline Cochran Regional Airport ((JCRA; aka Thermal Airport), which consists of a long north-south runway and a shorter NW/SE runway, as well as a variety of hangers, offices and other buildings and facilities.

Nearly the entire Project site is located within Land Use Compatibility Zone D for the airport (a small portion in the S/W corner is in Zone E). The proposed Project's uses and densities/intensities are generally consistent with the Basic Compatibility Criteria in Table 2A of the Airport Land Use Compatibility Plan (ALUCP), except for single-family estate homes proposed in Planning Area 2.

The entire Project site lies outside of the 60 dB and 55 dB CNEL contours for the ultimate buildout of the airport (See Exhibit JC-6 on p. E6-6 of the ALUCP). As shown in Table 2B on page 2-23 of the ALUCP, residential uses are considered "clearly appropriate" outside of the 55 dB CNEL contour.



Source: Google Maps, 02.07.23

03.23.23

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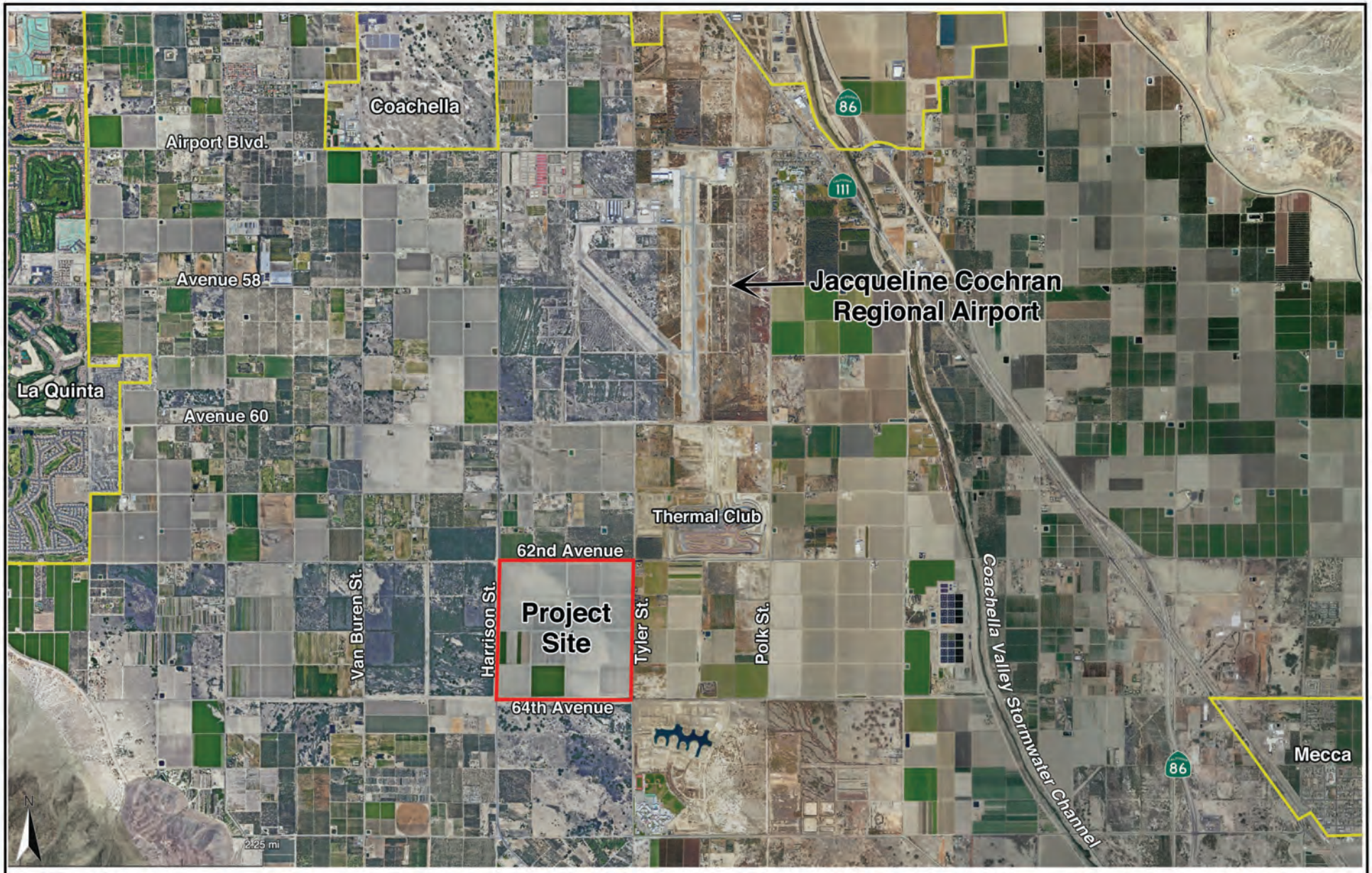
Thermal Ranch Specific Plan
Riverside County ALUC
Area Location Map
Thermal, California

Exhibit
1



Source: Google Earth, 02.07.23

03.23.23

TERRA NOVA®
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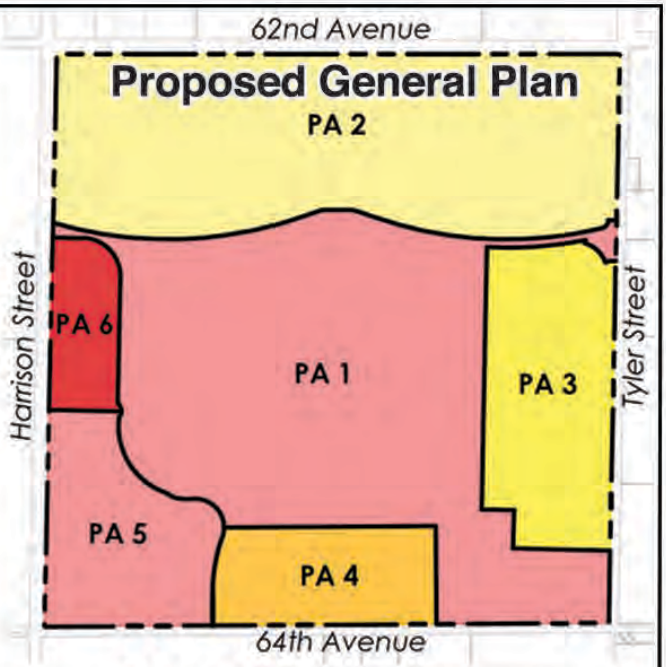
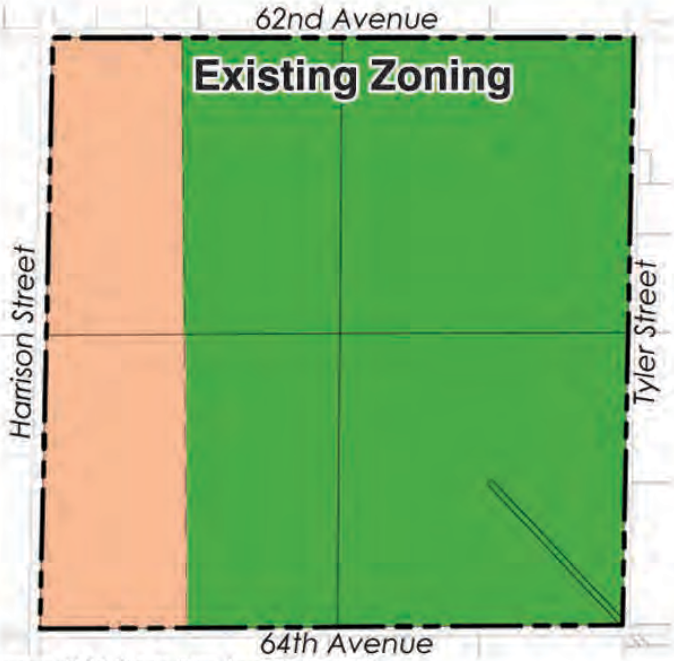
Thermal Ranch Specific Plan
Riverside County ALUC
Vicinity Map
Thermal, California

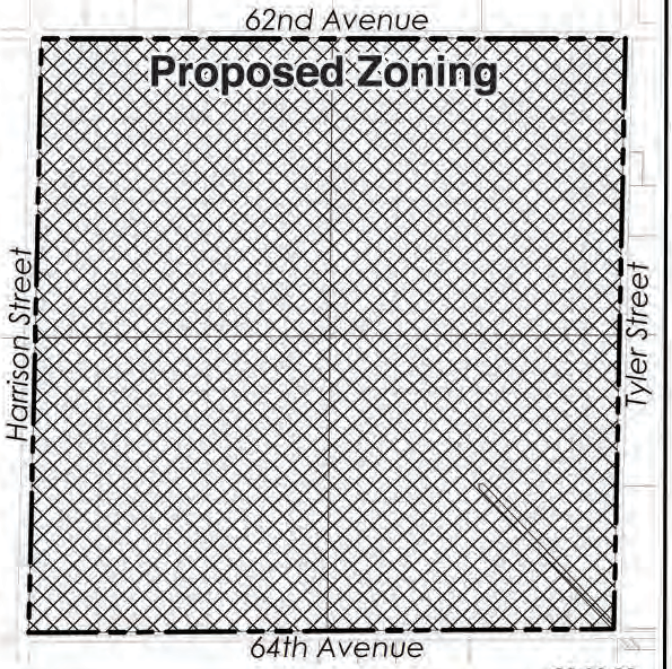
Exhibit
2



Legend	
	Specific Plan Boundary
Existing	
A-2-10	Heavy Agriculture - 10 Acre Min. Lot Size
W-2	Controlled Development Area
Proposed	
	Specific Plan

Legend	
	Specific Plan Boundary
	Planning Area Boundary
	Existing
	Agriculture
	Proposed
PA 1	Tourist Commercial (CT)
PA 2	Low Density Residential (LDR)
PA 3	Medium Density Residential (MDR)
PA 4	High Density Residential (HDR)
PA 5	Tourist Commercial (CT)
PA 6	Commercial Retail (CR)





Source: MSA Consulting, Inc., 09.23.2022

03.23.23

TERRA NOVA®
PLANNING & RESEARCH, INC.

Thermal Ranch Specific Plan
Riverside County ALUC
Proposed GPA and Change of Zone
Thermal, California

Exhibit

3

	Project Boundary				
1	Horse Park	A	Grand Entry	H	Private Barns
2	Estate Lots	B	Gathering/Dining Commons	I	Pasture
3	Neighborhoods	C	Competition Rings	J	Grass Field
4	Horse Park Workforce Housing	D	Warmup/Jumper Rings	K	Back of House
5	Hotel/Resort	E	Common Barns	L	Office
6	Commercial	F	Parking	M	CVWD Well Site
		G	Staging Area	N	Potential Substation

Note: This exhibit illustrates one possible development scenario. Other site development concepts are allowed subject to the standards and guidelines of this Specific Plan.

Source: MSA Consulting, Inc., 02.09.23

03.23.23

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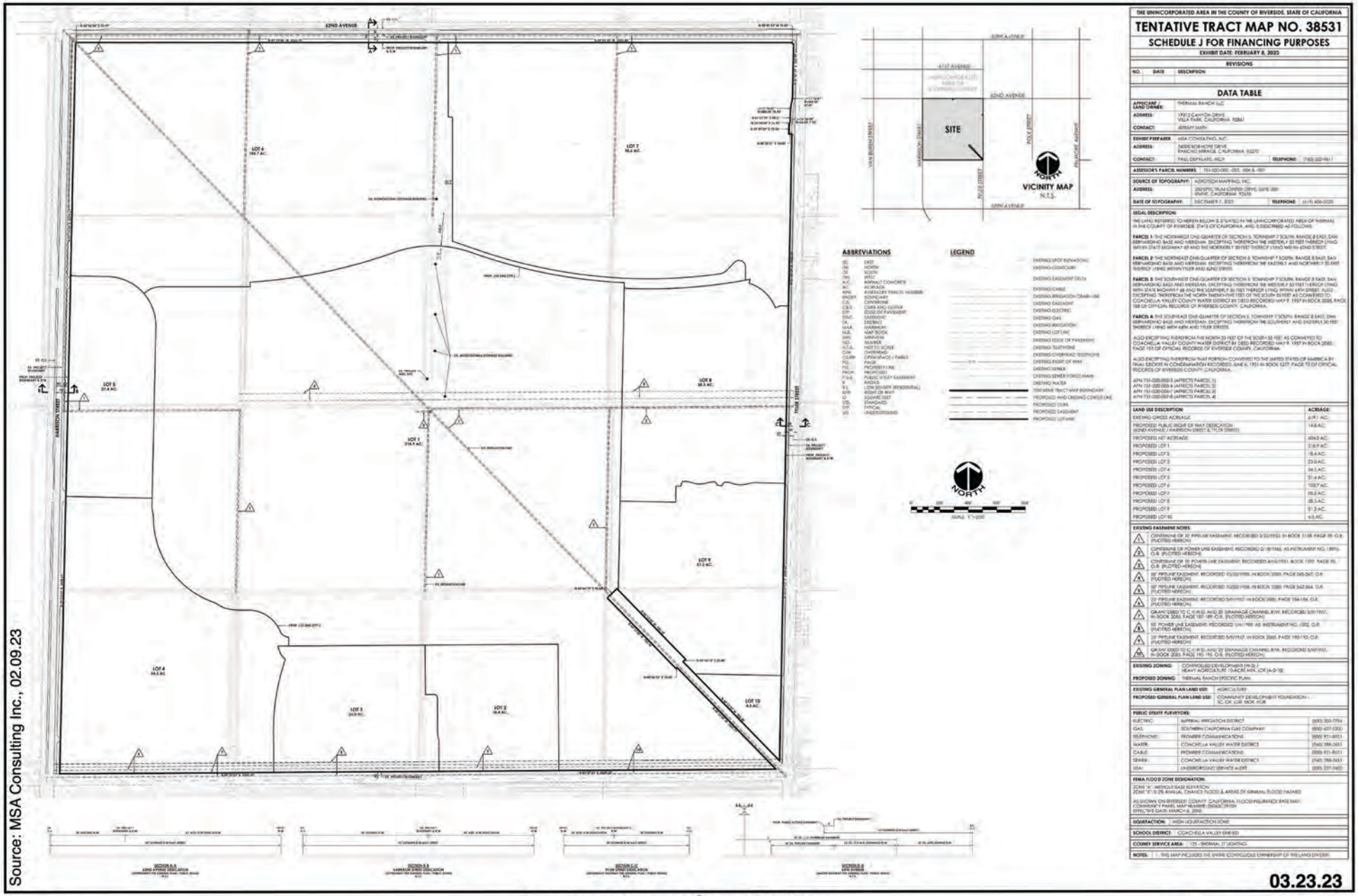
Thermal Ranch Specific
Riverside County ALUC
Conceptual Development Plan
Thermal, California

Exhibit

4



Source: MSA Consulting Inc., 02.09.23

THE UNINCORPORATED AREA IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

TENTATIVE TRACT MAP NO. 38531

SCHEDULE J FOR FINANCING PURPOSES

EXHIBIT DATE: FEBRUARY 8, 2023

REVISIONS		
NO.	DATE	DESCRIPTION

DATA TABLE

APPLICANT / LAND OWNER:	THERMAL RANCH LLC	
ADDRESS:	19312 CANYON DRIVE VILLA PARK, CALIFORNIA 92861	
CONTACT:	JEREMY SMITH	
EXHIBIT PREPARER:	MSA CONSULTING, INC.	
ADDRESS:	34000 BOB HOPE DRIVE RANCHO MIRAGE, CALIFORNIA 92270	
CONTACT:	PAUL DEPALATIS, AICP	TELEPHONE: (760) 320-9811
ASSESSOR'S PARCEL NUMBERS:	751-020-002, -003, -004 & -007	
SOURCE OF TOPOGRAPHY:	AEROTECH MAPPING, INC.	
ADDRESS:	2001 SPECTRUM CENTER DRIVE, SUITE 200 IRVINE, CALIFORNIA 92618	
DATE OF TOPOGRAPHY:	DECEMBER 7, 2021	TELEPHONE: (619) 606-3220

LEGAL DESCRIPTION:

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE UNINCORPORATED AREA OF THERMAL IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL 1: THE NORTHWEST ONE-QUARTER OF SECTION 5, TOWNSHIP 7 SOUTH, RANGE 8 EAST, SAN BERNARDINO BASE AND MERIDIAN, EXCEPTING THEREFROM THE WESTERLY 33 FEET THEREOF LYING WITHIN STATE HIGHWAY 69 AND THE NORTHERLY 30 FEET THEREOF LYING WITHIN 62ND STREET.

PARCEL 2: THE NORTHEAST ONE-QUARTER OF SECTION 6, TOWNSHIP 7 SOUTH, RANGE 8 EAST, SAN BERNARDINO BASE AND MERIDIAN, EXCEPTING THEREFROM THE EASTERLY AND NORTHERLY 30 FEET THEREOF LYING WITHIN TYLER AND 62ND STREETS.

PARCEL 3: THE SOUTHWEST ONE-QUARTER OF SECTION 5, TOWNSHIP 7 SOUTH, RANGE 8 EAST, SAN BERNARDINO BASE AND MERIDIAN, EXCEPTING THEREFROM THE WESTERLY 33 FEET THEREOF LYING WITHIN STATE HIGHWAY 69 AND THE SOUTHERLY 30 FEET THEREOF LYING WITHIN 66TH STREET. ALSO EXCEPTING THEREFROM THE NORTH TWENTY-FIVE FEET OF THE SOUTH 55 FEET AS CONVEYED TO COACHELLA VALLEY COUNTY WATER DISTRICT BY DEED RECORDED MAY 9, 1957 IN BOOK 2050, PAGE 188 OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

PARCEL 4: THE SOUTHEAST ONE-QUARTER OF SECTION 5, TOWNSHIP 7 SOUTH, RANGE 8 EAST, SAN BERNARDINO BASE AND MERIDIAN, EXCEPTING THEREFROM THE SOUTHERLY AND EASTERLY 30 FEET THEREOF LYING WITH 66TH AND TYLER STREETS.

ALSO EXCEPTING THEREFROM THE NORTH 25 FEET OF THE SOUTH 55 FEET AS CONVEYED TO COACHELLA VALLEY COUNTY WATER DISTRICT BY DEED RECORDED MAY 9, 1957 IN BOOK 2050, PAGE 193 OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

ALSO EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE UNITED STATES OF AMERICA BY FINAL DECREE IN CONDEMNATION RECORDED JUNE 6, 1951 IN BOOK 1277, PAGE 70 OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

APN 751-020-002-5 (AFFECTS PARCEL 1)
APN 751-020-003-6 (AFFECTS PARCEL 2)
APN 751-020-004-7 (AFFECTS PARCEL 3)
APN 751-020-007-0 (AFFECTS PARCEL 4)

ABBREVIATIONS

(E)	EAST
(N)	NORTH
(S)	SOUTH
(W)	WEST
A.C.	ASPHALT CONCRETE
AC	ACREAGE
APN	ASSESSOR'S PARCEL NUMBER
BNDRY	BOUNDARY
C/L	CENTERLINE
C.B.G.	CURB AND GUTTER
EP	EDGE OF PAVEMENT
ESMT.	EASEMENT
DI.	DIESEL
M.A.X.	MAXIMUM
M.B.	MAP BOOK
MIN.	MINIMUM
NO.	NUMBER
N.T.S.	NOT TO SCALE
O.H.	OVERHEAD
O.S.P.	OPEN SPACE / PARCEL
PG.	PAGE
P.O.L.	PROPERTY LINE
PROP.	PROPOSED
P.U.E.	PUBLIC UTILITY EASEMENT
R	RADIUS
R.S.	LOW DENSITY (RESIDENTIAL)
R/W	RIGHT OF WAY
SF	SQUARE FEET
STD.	STANDARD
TYP.	TYPICAL
UG	UNDERGROUND

LEGEND

EXISTING SPOT ELEVATION
EXISTING CONTOUR
EXISTING EASEMENT DELTA
EXISTING CABLE
EXISTING IRRIGATION CRASH LINE
EXISTING EASEMENT
EXISTING ELECTRIC
EXISTING GAS
EXISTING IRRIGATION
EXISTING LOT LINE
EXISTING EDGE OF PAVEMENT
EXISTING TELEPHONE
EXISTING OVERHEAD TELEPHONE
EXISTING RIGHT OF WAY
EXISTING SEWER
EXISTING SEWER FORCE MAIN
EXISTING WATER
TENTATIVE TRACT MAP BOUNDARY
PROPOSED AND EXISTING CENTER LINE
PROPOSED CURB
PROPOSED EASEMENT
PROPOSED LOT LINE

LAND USE DESCRIPTION:	ACREAGE:
EXISTING GROSS ACREAGE	619± AC.
PROPOSED PUBLIC RIGHT OF WAY DEDICATION (62ND AVENUE / HARRISON STREET & TYLER STREET)	148 AC.
PROPOSED NET ACREAGE	604.5 AC.
PROPOSED LOT 1	21.6 P AC.
PROPOSED LOT 2	19.4 AC.
PROPOSED LOT 3	23.0 AC.
PROPOSED LOT 4	54.5 AC.
PROPOSED LOT 5	21.4 AC.
PROPOSED LOT 6	103.7 AC.
PROPOSED LOT 7	90.6 AC.
PROPOSED LOT 8	38.3 AC.
PROPOSED LOT 9	51.2 AC.
PROPOSED LOT 10	4.6 AC.

EXISTING EASEMENT NOTES:

1. CENTERLINE OF 30' PIPELINE EASEMENT, RECORDED 3/22/1955, IN BOOK 1158, PAGE 39, O.R. (PLOTTED HEREON)
2. CENTERLINE OF POWER LINE EASEMENT, RECORDED 2/18/1966, AS INSTRUMENT NO. 19976, O.R. (PLOTTED HEREON)
3. CENTERLINE OF 30' POWER LINE EASEMENT, RECORDED 6/16/1951, BOOK 1207, PAGE 70, O.R. (PLOTTED HEREON)
4. 50' PIPELINE EASEMENT, RECORDED 10/20/1958, IN BOOK 2550, PAGE 565-567, O.R. (PLOTTED HEREON)
5. 50' PIPELINE EASEMENT, RECORDED 10/20/1958, IN BOOK 2550, PAGE 562-564, O.R. (PLOTTED HEREON)
6. 25' PIPELINE EASEMENT, RECORDED 5/9/1957, IN BOOK 2050, PAGE 184-186, O.R. (PLOTTED HEREON)
7. GRANT DEED TO C.V.W.D. AND 25' DRAINAGE CHANNEL R/W, RECORDED 5/9/1957, IN BOOK 2051, PAGE 187-189, O.R. (PLOTTED HEREON)
8. 50' POWER LINE EASEMENT, RECORDED 1/4/1989, AS INSTRUMENT NO. 1302, O.R. (PLOTTED HEREON)
9. 25' PIPELINE EASEMENT, RECORDED 5/9/1957, IN BOOK 2065, PAGE 190-192, O.R. (PLOTTED HEREON)
10. GRANT DEED TO C.V.W.D. AND 25' DRAINAGE CHANNEL R/W, RECORDED 5/9/1957, IN BOOK 2065, PAGE 193-195, O.R. (PLOTTED HEREON)

EXISTING ZONING:	CONFINED DEVELOPMENT (W-2) / HEAVY AGRICULTURE (5-AC-BE MIN. LOT) (A-2-10)
PROPOSED ZONING:	THERMAL RANCH SPECIFIC PLAN
EXISTING GENERAL PLAN LAND USE:	AGRICULTURE
PROPOSED GENERAL PLAN LAND USE:	COMMUNITY DEVELOPMENT FOUNDATION - RC, CR, LDR, MDR, HDR

PUBLIC UTILITY PURVEYORS:

ELECTRIC:	IMPERIAL IRRIGATION DISTRICT	(800) 303-7794
GAS:	SOUTHERN CALIFORNIA GAS COMPANY	(800) 427-2200
TELEPHONE:	FRONTIER COMMUNICATIONS	(800) 921-8101
WATER:	COACHELLA VALLEY WATER DISTRICT	(760) 398-2651
CABLE:	FRONTIER COMMUNICATIONS	(800) 921-8101
SEWER:	COACHELLA VALLEY WATER DISTRICT	(760) 398-2651
USA:	UNDERGROUND SERVICE ALERT	(800) 227-2600

FEMA FLOOD ZONE DESIGNATION:

ZONE "A": WITHOUT BASE ELEVATION
ZONE "X": 0.2% ANNUAL CHANCE FLOOD & AREAS OF MINIMAL FLOOD HAZARD

AS SHOWN ON RIVERSIDE COUNTY, CALIFORNIA, FLOOD INSURANCE RATE MAP / COMMUNITY PANEL MAP NUMBER: 06065C2915H
EFFECTIVE DATE: MARCH 8, 2017

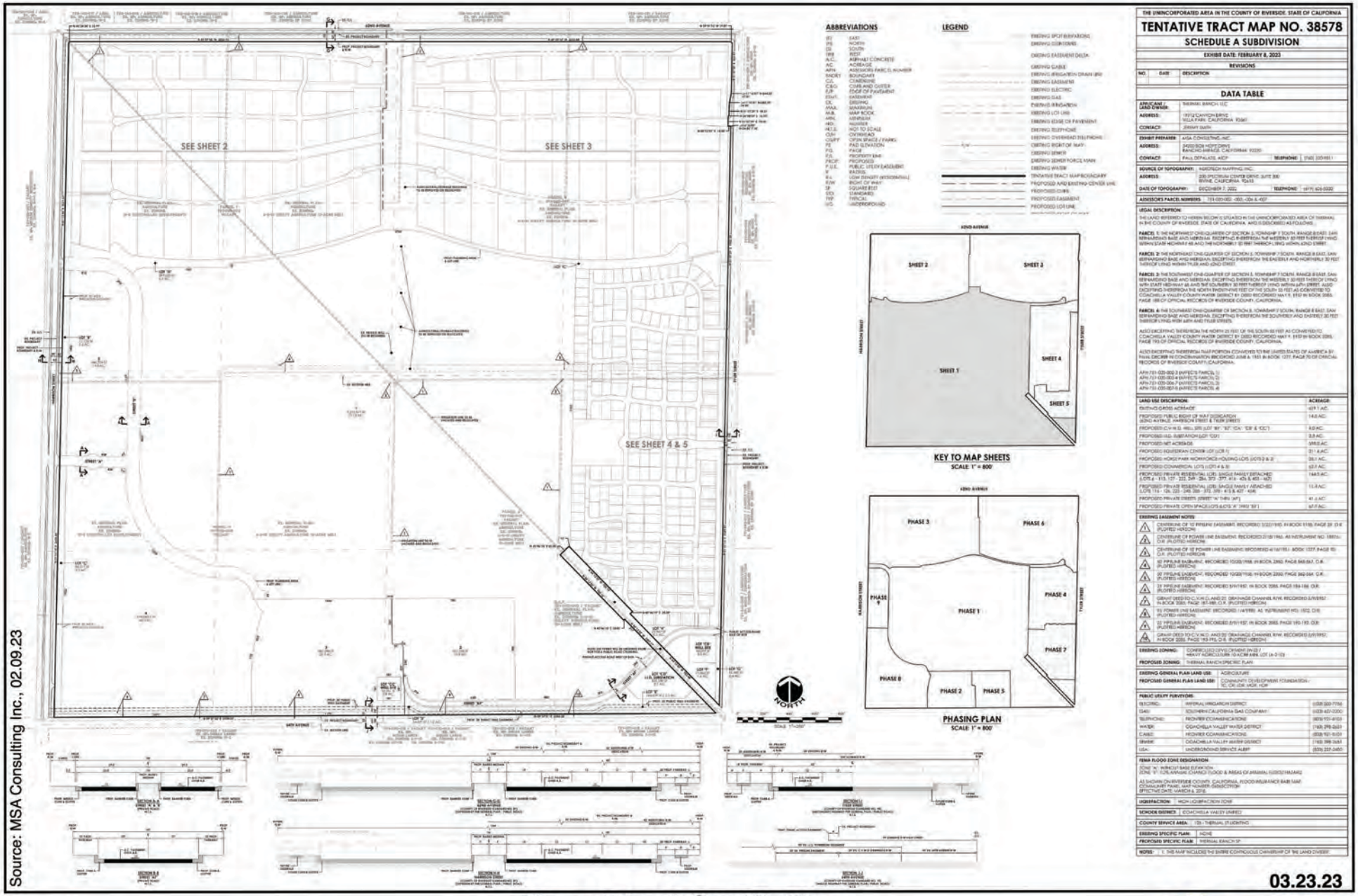
LIQUEFACTION:	HIGH LIQUEFACTION ZONE
SCHOOL DISTRICT:	COACHELLA VALLEY UNIFIED
COUNTY SERVICE AREA:	125 - THERMAL ST LIGHTING
NOTES:	1. THIS MAP INCLUDES THE ENTIRE CONTIGUOUS OWNERSHIP OF THE LAND DIVISION.

03.23.23

TERRA NOVA®
PLANNING & RESEARCH, INC.

Thermal Ranch Specific Plan
Riverside County ALUC
Tentative Tract Map 38531
Thermal, California

Exhibit 5



THE UNINCORPORATED AREA IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

TENTATIVE TRACT MAP NO. 38578

SCHEDULE A SUBDIVISION

EXHIBIT DATE: FEBRUARY 8, 2023

REVISIONS		
NO.	DATE	DESCRIPTION

DATA TABLE		
APPLICANT / LAND OWNER:	THERMAL RANCH, LLC	
ADDRESS:	19712 CAMPION DRIVE VILLA PARK, CALIFORNIA 92861	
CONTACT:	JOHNNY SMITH	
EXHIBIT PREPARER:	MSA CONSULTING, INC.	
ADDRESS:	24200 SOBA HOPE DRIVE RANCHO MIRAGE, CALIFORNIA 92270	
CONTACT:	PAUL DEPALATE, AICP	TELEPHONE: (760) 320-9811
SOURCE OF TOPOGRAPHY:	AEROTECH MAPPING, INC.	
ADDRESS:	235 SPECTRUM CENTER DRIVE, SUITE 300 IRVINE, CALIFORNIA 92618	
DATE OF TOPOGRAPHY:	DECEMBER 7, 2022	TELEPHONE: (877) 609-0220
ASSESSOR'S PARCEL NUMBERS:	726-020-002, -003, -004 & -007	

LAND USE DESCRIPTION:	ACREAGE:
EXISTING GROSS ACREAGE	409.1 AC.
PROPOSED PUBLIC RIGHT OF WAY DEDICATION (62ND AVENUE, HARRISON STREET & TYLER STREET)	14.6 AC.
PROPOSED CVWD WELL SITE (LOT "B", "E", "D", "D-1", "D-2" & "CC")	8.0 AC.
PROPOSED MID. SUBSTATION (LOT "CC")	2.5 AC.
PROPOSED NET ACREAGE	388.0 AC.
PROPOSED EQUESTRIAN CENTER LOT (LOT 1)	21.1 AC.
PROPOSED HONEYPARK NEIGHBORHOOD HOUSING (LOTS 2 & 3)	28.1 AC.
PROPOSED COMMERCIAL LOTS (LOTS 4 & 5)	63.7 AC.
PROPOSED PRIVATE RESIDENTIAL (OR) SINGLE FAMILY DETACHED (LOTS 6 - 113, 127 - 222, 249 - 284, 373 - 377, 413 - 426 & 453 - 467)	144.5 AC.
PROPOSED PRIVATE RESIDENTIAL (OR) SINGLE FAMILY ATTACHED (LOTS 114 - 126, 223 - 248, 285 - 372, 378 - 412 & 427 - 434)	11.8 AC.
PROPOSED PRIVATE STREETS (STREET "A" THRU "M")	41.2 AC.
PROPOSED PRIVATE OPEN SPACE LOTS (LOTS "A" THRU "EE")	67.7 AC.

EXISTING ZONING:	CONSERVED CONSERVATION (W-2) / HEAVY AGRICULTURE - 10 AC MIN. (HA-10)
PROPOSED ZONING:	THERMAL RANCH SPECIFIC PLAN
EXISTING GENERAL PLAN LAND USE:	AGRICULTURE
PROPOSED GENERAL PLAN LAND USE:	COMMUNITY DEVELOPMENT FOUNDATION - VL (1 DU/ 2.5 AC), MDR, HDR

ELECTRIC:	IMPERIAL IRRIGATION DISTRICT	(800) 303-7756
GAS:	SOUTHERN CALIFORNIA GAS COMPANY	(800) 427-2200
TELEPHONE:	FRONTIER COMMUNICATIONS	(909) 931-8100
WATER:	COACHELLA VALLEY WATER DISTRICT	(760) 398-2651
CABLE:	FRONTIER COMMUNICATIONS	(909) 931-8100
SEWER:	COACHELLA VALLEY SANITARY DISTRICT	(760) 398-2651
USA:	UNDERGROUND SERVICE ALERT	(800) 227-2600

ZONE "A": 100-YEAR FLOOD ELEVATION ZONE "X": FLOOD HAZARD, CURRENT FLOOD 0.2 PERCENT ANNUAL CHANCE FLOOD; & AREAS OF MINIMAL FLOOD HAZARD	
AS SHOWN ON RIVERSIDE COUNTY, CALIFORNIA, FLOOD INSURANCE RATE MAP, COMMUNITY PANEL, MAP NUMBER: 06065C1710H EFFECTIVE DATE: MARCH 8, 2018	
LIQUEFACTION:	HIGH LIQUEFACTION ZONE
SCHOOL DISTRICT:	COACHELLA VALLEY UNIFIED
COUNTY SERVICE AREA:	126 - THERMAL (TLIGHTING)
EXISTING SPECIFIC PLAN:	NONE
PROPOSED SPECIFIC PLAN:	THERMAL RANCH SP

NOTES: 1. THIS MAP INCLUDES THE ENTIRE CONTIGUOUS OWNERSHIP OF THE LAND DIVISION

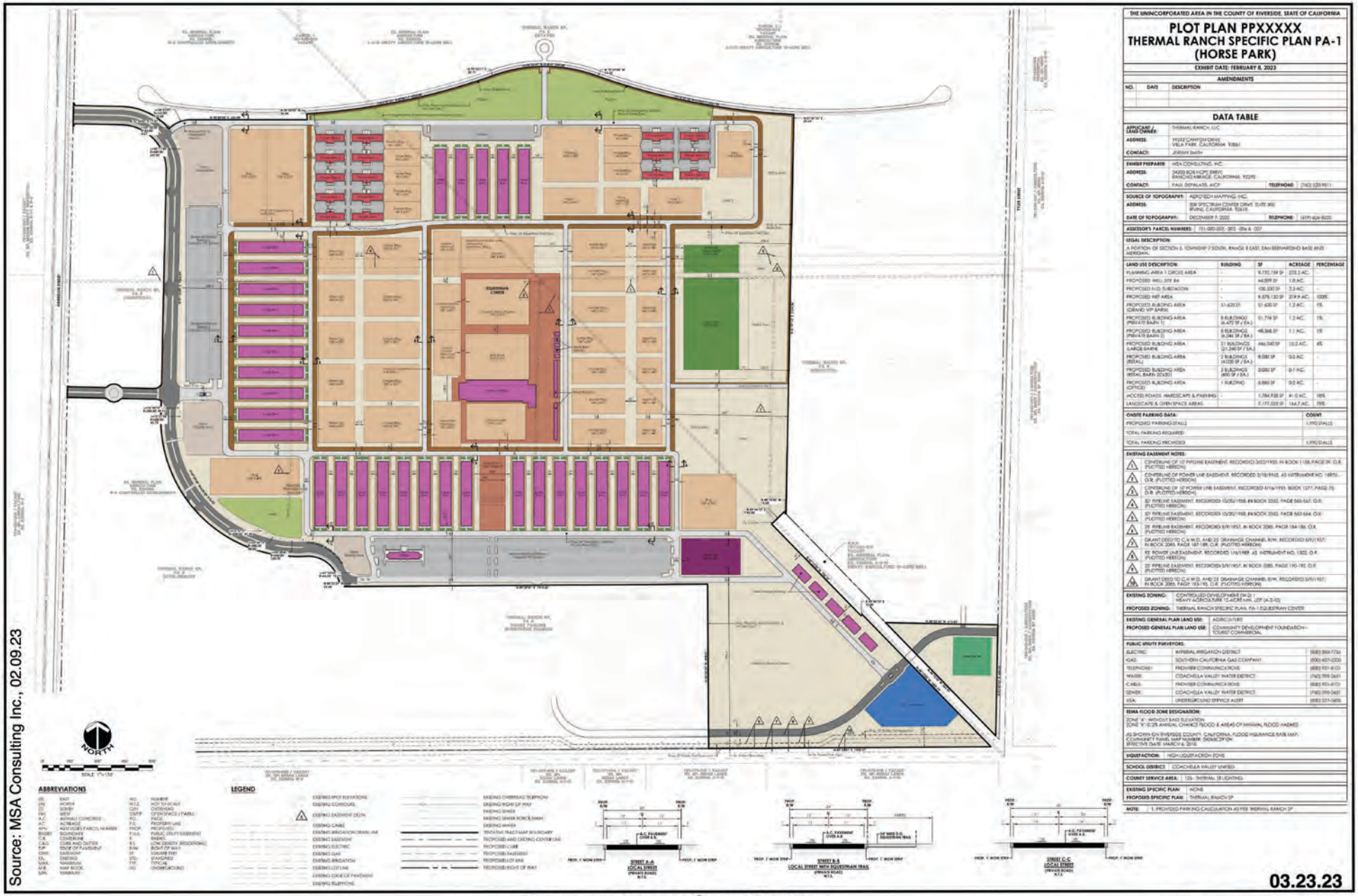
03.23.23

Source: MSA Consulting Inc., 02.09.23

TERRA NOVA®
PLANNING & RESEARCH, INC.

Thermal Ranch Specific Plan
Riverside County ALUC
Tentative Tract Map 38578
Thermal, California

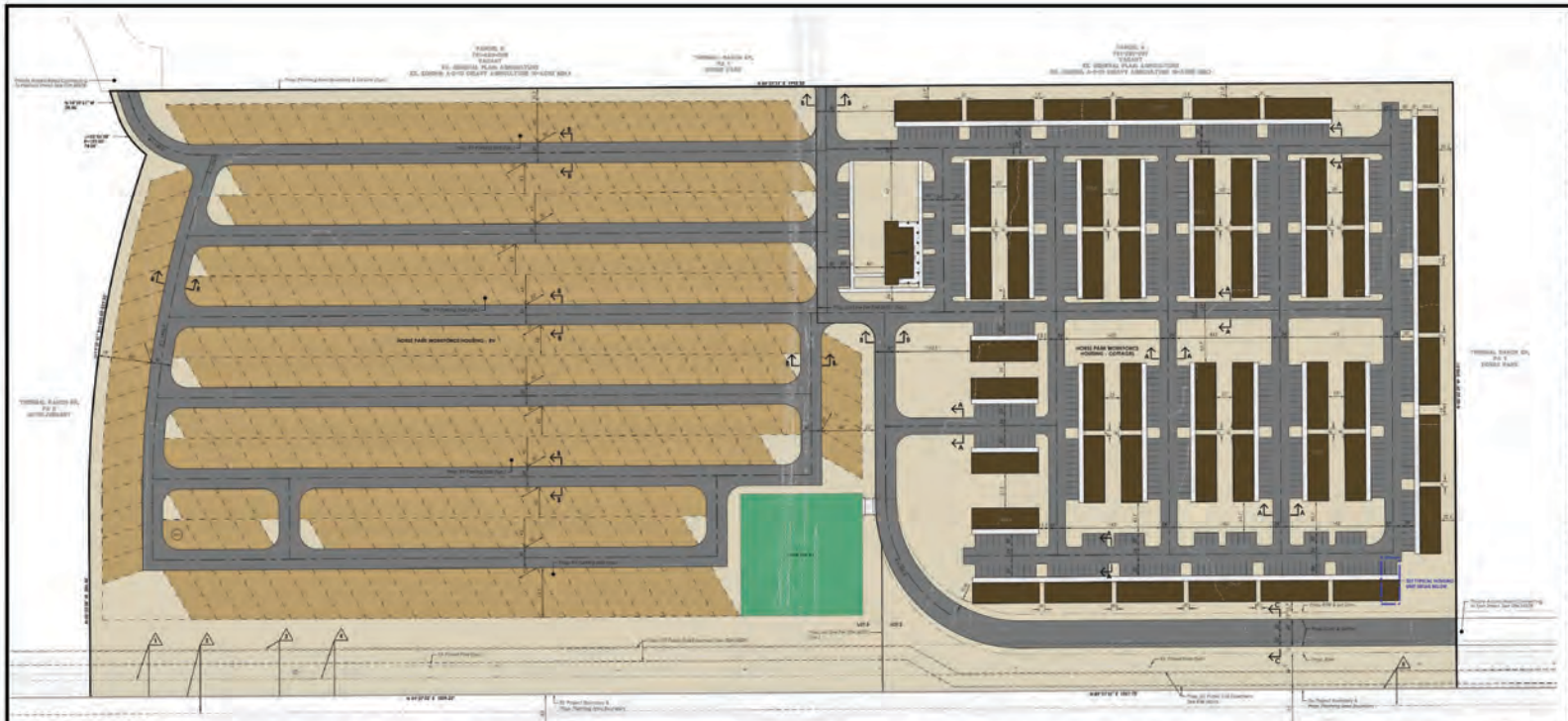
Exhibit 6



TERRA NOVA®
PLANNING & RESEARCH, INC.

Thermal Ranch Specific Plan
Riverside County ALUC
PA - 1 Plot Plan
Thermal, California

Exhibit 7



THE UNINCORPORATED AREA IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

PLOT PLAN PPXXXXX
THERMAL RANCH SPECIFIC PLAN PA-4
(HORSE PARK WORKFORCE HOUSING)

EXHIBIT DATE: FEBRUARY 8, 2023

AMENDMENTS

NO.	DATE	DESCRIPTION

DATA TABLE

APPLICANT / LAND OWNER:	THERMAL RANCH, LLC		
ADDRESS:	77312 CANYON DRIVE, VILLA PARK, CALIFORNIA 92861		
CONTACT:	JEREMY SMITH		
EXHIBIT PREPARER:	MSA CONSULTING, INC.		
ADDRESS:	24200 SOB HOPE DRIVE, RANCHO MIRAGE, CALIFORNIA 92270		
CONTACT:	PAUL DEPALATIS, AICP	TELEPHONE:	(760) 320-9811
SOURCE OF TOPOGRAPHY:	AEROTECH MAPPING, INC.		
ADDRESS:	200 SPECTRUM CENTER DRIVE, SUITE 300, IRVINE, CALIFORNIA 92618		
DATE OF TOPOGRAPHY:	DECEMBER 7, 2022	TELEPHONE:	(619) 609-9020
ASSESSOR'S PARCEL NUMBERS:	751-020-006 & -007		
LEGAL DESCRIPTION:	A PORTION OF SECTION 6, TOWNSHIP 7 SOUTH, RANGE 8 EAST, SAN BERNARDINO BASE AND MERIDIAN.		

LAND USE DESCRIPTION:	UNIT	SF	ACREAGE	PERCENTAGE
PLANNING AREA 4 GROSS AREA:	-	1,800,018 SF	41.3 AC.	-
PROPOSED WELL SITE #4	-	20,749 SF	0.8 AC.	-
PROPOSED NET AREA	-	1,747,255 SF	40.0 AC.	100%
PROPOSED BUILDING AREA (LAUNDRY BUILDING)	1 BUILDING	3,530 SF	0.1 AC.	1%
PROPOSED BUILDING AREA (WORKFORCE HOUSING - COTTAGES) - STANDARD UNIT (450 UNITS) - ACCESSIBLE UNIT (50 UNITS)	500 UNITS (350 SF / UNIT) (400 SF / UNIT)	155,000 SF 135,000 SF 20,000 SF	3.6 AC.	9%
PROPOSED RV STALL	-	548,988 SF	12.6 AC.	31%
ACCESS ROADS, HARDSCAPE & PARKING	-	531,724 SF	12.2 AC.	30%
LANDSCAPE & OPEN SPACE AREAS	-	526,016 SF	12.0 AC.	29%

ONSITE PARKING DATA:	COUNT
PROPOSED RV PARKING STALLS	361 STALLS
PROPOSED LAUNDRY BUILDING PARKING STALLS	10 STALLS
PROPOSED WORKFORCE HOUSING PARKING STALLS	527 STALLS
TOTAL PARKING REQUIRED	
TOTAL PARKING PROVIDED	898 STALLS

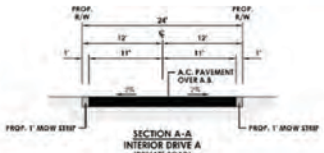
EXISTING EASEMENT NOTES:

1. 25' PIPELINE EASEMENT, RECORDED 5/9/1957, IN BOOK 2085, PAGE 184-186, O.R. (PLOTTED HEREON)
2. GRANT DEED TO C.V.W.D. AND 22' DRAINAGE CHANNEL R/W, RECORDED 5/9/1957, IN BOOK 2085, PAGE 187-189, O.R. (PLOTTED HEREON)
3. 92' POWER LINE EASEMENT, RECORDED 1/4/1 REF. AS INSTRUMENT NO. 1302, O.R. (PLOTTED HEREON)
4. 25' PIPELINE EASEMENT, RECORDED 5/9/1957, IN BOOK 2085, PAGE 190-192, O.R. (PLOTTED HEREON)
5. GRANT DEED TO C.V.W.D. AND 25' DRAINAGE CHANNEL R/W, RECORDED 5/9/1957, IN BOOK 2085, PAGE 193-195, O.R. (PLOTTED HEREON)

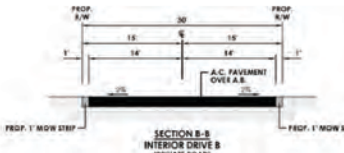
EXISTING ZONING:	CONTROLLED DEVELOPMENT (W-2) / HEAVY AGRICULTURE (I-A-(H) MIN. LOT (A-(H))
PROPOSED ZONING:	THERMAL RANCH SPECIFIC PLAN: PA 4 RECREATIONAL VEHICLE PARKING / WORKFORCE HOUSING
EXISTING GENERAL PLAN LAND USE:	AGRICULTURE
PROPOSED GENERAL PLAN LAND USE:	COMMUNITY DEVELOPMENT FOUNDATION - HIGH DENSITY

PUBLIC UTILITY PURVEYORS:		
ELECTRIC:	IMPERIAL IRRIGATION DISTRICT	(800) 303-7734
GAS:	SOUTHERN CALIFORNIA GAS COMPANY	(800) 427-2200
TELEPHONE:	FRONTIER COMMUNICATIONS	(800) 921-8101
WATER:	COACHELLA VALLEY WATER DISTRICT	(760) 398-2651
CABLE:	FRONTIER COMMUNICATIONS	(800) 921-8101
SEWER:	COACHELLA VALLEY WATER DISTRICT	(760) 398-2651
USA:	UNDERGROUND SERVICE ALERT	(800) 227-2600

FEMA FLOOD ZONE DESIGNATION:	ZONE "A" - WITHOUT BASE ELEVATION. ZONE "X" - 0.2% ANNUAL CHANCE FLOOD & AREAS OF MINIMAL FLOOD HAZARD. AS SHOWN ON RIVERSIDE COUNTY, CALIFORNIA, FLOOD INSURANCE RATE MAP, COMMUNITY PANEL AND NUMBER: 06065C1130H, EFFECTIVE DATE: MARCH 4, 2018.
LIQUEFACTION:	HIGH LIQUEFACTION ZONE
SCHOOL DISTRICT:	COACHELLA VALLEY UNIFIED
COUNTY SERVICE AREA:	125 - THERMAL ST LIGHTING
EXISTING SP SPECIFIC PLAN:	NONE
PROPOSED SPECIFIC PLAN:	THERMAL RANCH SP
NOTE:	1. PROVIDED PARKING CALCULATION AS PER THERMAL RANCH SP.



SECTION A-A
INTERIOR DRIVE A
(PRIVATE ROAD)
N.T.S.



SECTION B-B
INTERIOR DRIVE B
(PRIVATE ROAD)
N.T.S.

SECTION C-C
ACCESS ROAD
(PRIVATE ROAD)
N.T.S.

ABBREVIATIONS

(E)	EAST	NO.	NUMBER
(N)	NORTH	N.T.S.	NOT TO SCALE
(S)	SOUTH	O/H	OVERHEAD
(W)	WEST	OS/PP	OPEN SPACE / PARKS
A.C.	ASPHALT CONCRETE	PCC	PACIF
AC.	ACREAGE	P/L	PROPERTY LINE
APN	ASSESSORS PARCEL NUMBER	PROP.	PROPOSED
BNDRY	BOUNDARY	P.U.E.	PUBLIC UTILITY EASEMENT
C/L	CENTER LINE	R	RADIUS
C&G	CURB AND GUTTER	R-L	LOW DENSITY (RESIDENTIAL)
E/P	EDGE OF PAVEMENT	R/W	RIGHT OF WAY
ESMT.	EASEMENT	SF	SQUARE FEET
EX.	EXISTING	STD.	STANDARD
MAX.	MAXIMUM	TYP.	TYPICAL
M.B.	MAP BOOK	UG	UNDERGROUND
MIN.	MINIMUM		

LEGEND

- EXISTING SPOT ELEVATIONS
- EXISTING CONTOURS
- 2 EXISTING EASEMENT DELTA
- EXISTING CABLE
- EXISTING IRRIGATION DRAIN LINE
- EXISTING EASEMENT
- EXISTING ELECTRIC
- EXISTING GAS
- EXISTING IRRIGATION
- EXISTING LOT LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING TELEPHONE
- EXISTING OVERHEAD TELEPHONE
- EXISTING RIGHT OF WAY
- EXISTING SEWER
- EXISTING SEWER FORCE MAIN
- EXISTING WATER
- TENTATIVE TRACT MAP BOUNDARY
- PROPOSED AND EXISTING CENTER LINE
- PROPOSED CURB
- PROPOSED EASEMENT
- PROPOSED LOT LINE
- PROPOSED RIGHT OF WAY

TYPICAL WORKFORCE HOUSING UNIT
SCALE: 1" = 8'

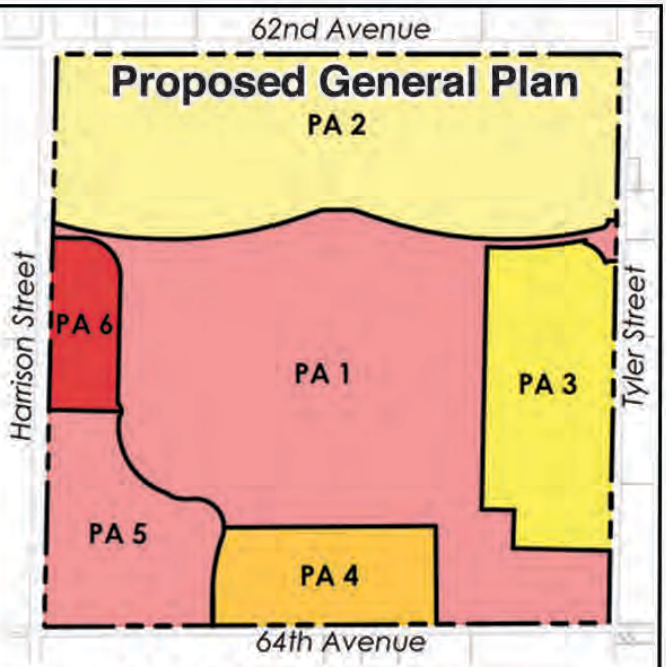
03.23.23

Source: MSA Consulting Inc., 02.09.23

TERRA NOVA®
PLANNING & RESEARCH, INC.

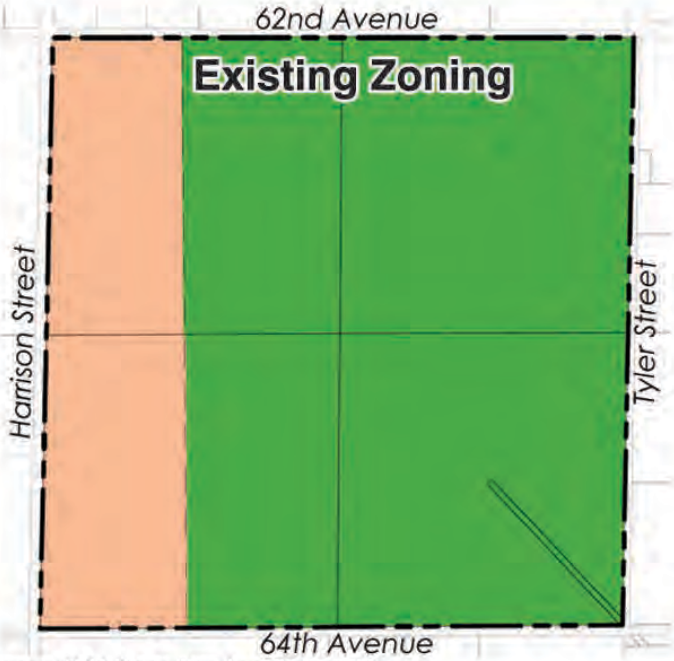
Thermal Ranch Specific Plan
Riverside County ALUC
PA - 4 Plot Plan
Thermal, California

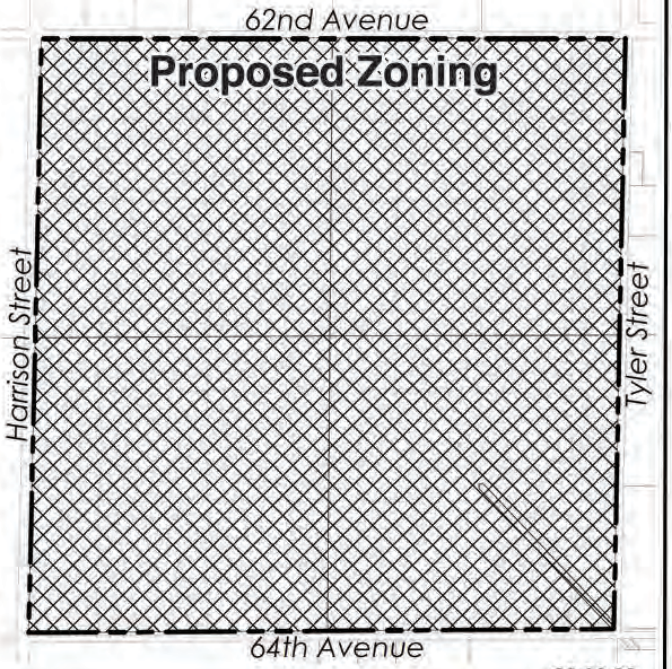
Exhibit
8



Legend	
	Specific Plan Boundary
Existing	
A-2-10	Heavy Agriculture - 10 Acre Min. Lot Size
W-2	Controlled Development Area
Proposed	
	Specific Plan

Legend	
	Specific Plan Boundary
	Planning Area Boundary
	Existing
	Agriculture
	Proposed
PA 1	Tourist Commercial (CT)
PA 2	Low Density Residential (LDR)
PA 3	Medium Density Residential (MDR)
PA 4	High Density Residential (HDR)
PA 5	Tourist Commercial (CT)
PA 6	Commercial Retail (CR)





Source: MSA Consulting, Inc., 09.23.2022

03.23.23

TERRA NOVA®
PLANNING & RESEARCH, INC.

Thermal Ranch Specific Plan
Riverside County ALUC
Proposed GPA and Change of Zone
Thermal, California

Exhibit

3

Legend:						
Symbol	**Description**	**Area**	**Zone "D"**			
			Open Land Required	**Percentage Required**	**Open Land Provided**	**Percentage Provided**
	SP Boundary	*599.5 Ac.*	-	-	-	-
	Airport Influence Boundary	-	-	-	-	-
	Airport Influence Zone "E"	*±5.7 Ac.*	*None*	-	*None*	-
	Airport Influence Zone "D"	*±593.8 Ac.*	*±59.4 Ac.*	-	-	-
	Outdoor Riding Areas & Parking	-	-	-	*±176.3 Ac.*	-
Total		**-**	**±59.4 Ac.**	**10%**	**±176.3 Ac.**	**30%**

ALUC Open Land Requirements

Open Land requirements are intended to be applied with respect to an entire zone. This is typically accomplished as part of a community general plan or a specific plan, but may also apply to large (10 acres or more) development projects. See Policy 4.2.4 for definition of open land.

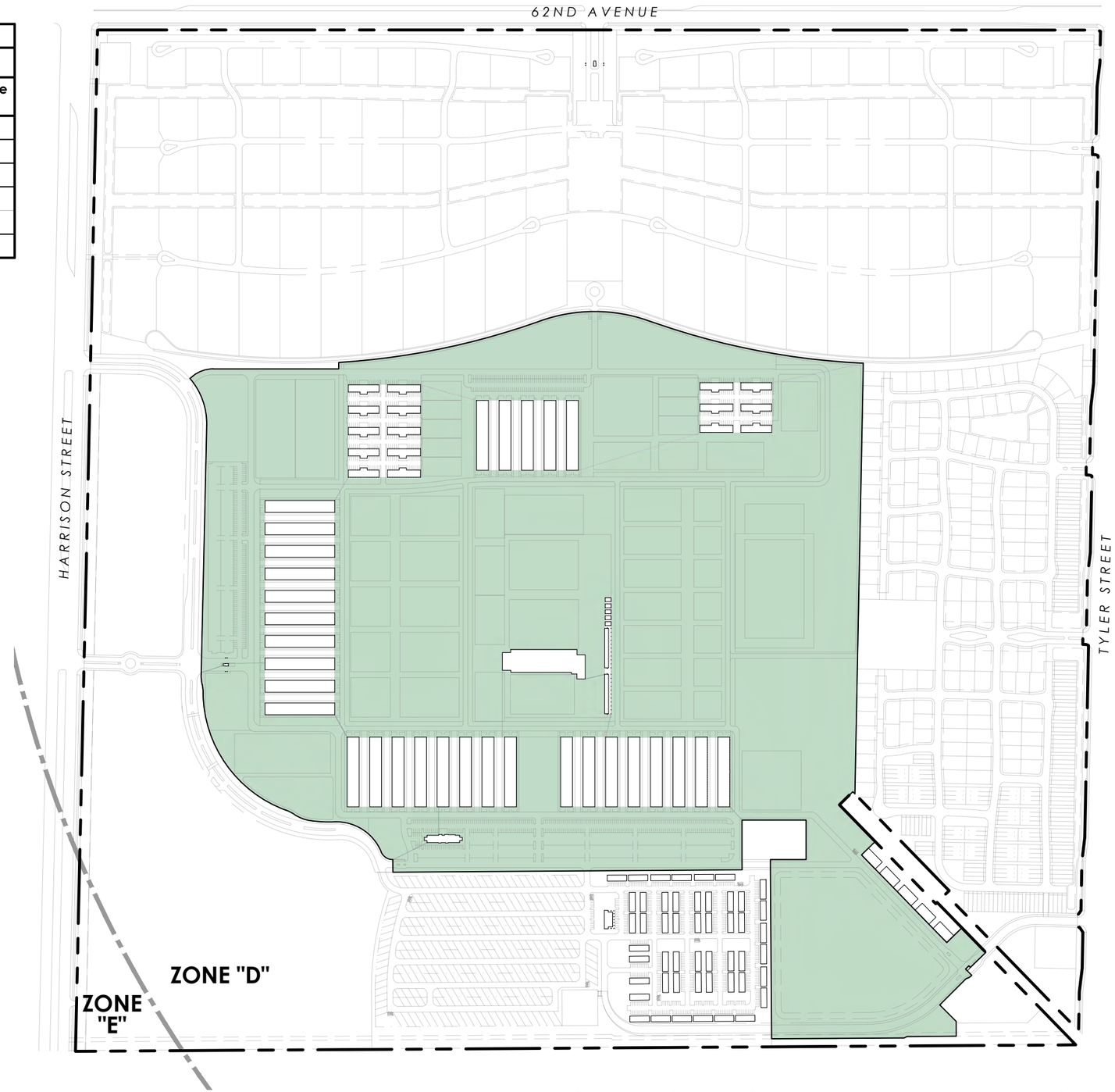
4.2.4 Open Land:

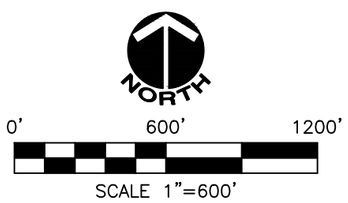
a. To qualify as open land, an area should be:

a.1. Free of most structures and other major obstacles such as walls, large trees or poles (greater than 4 inches in diameter, measured 4 feet above the ground), and overhead wires.

a.2. Have a minimum dimensions of approximately 75 feet by 300 feet.

b. Roads and automobile parking lots are acceptable as open land areas if they meet the above criteria.



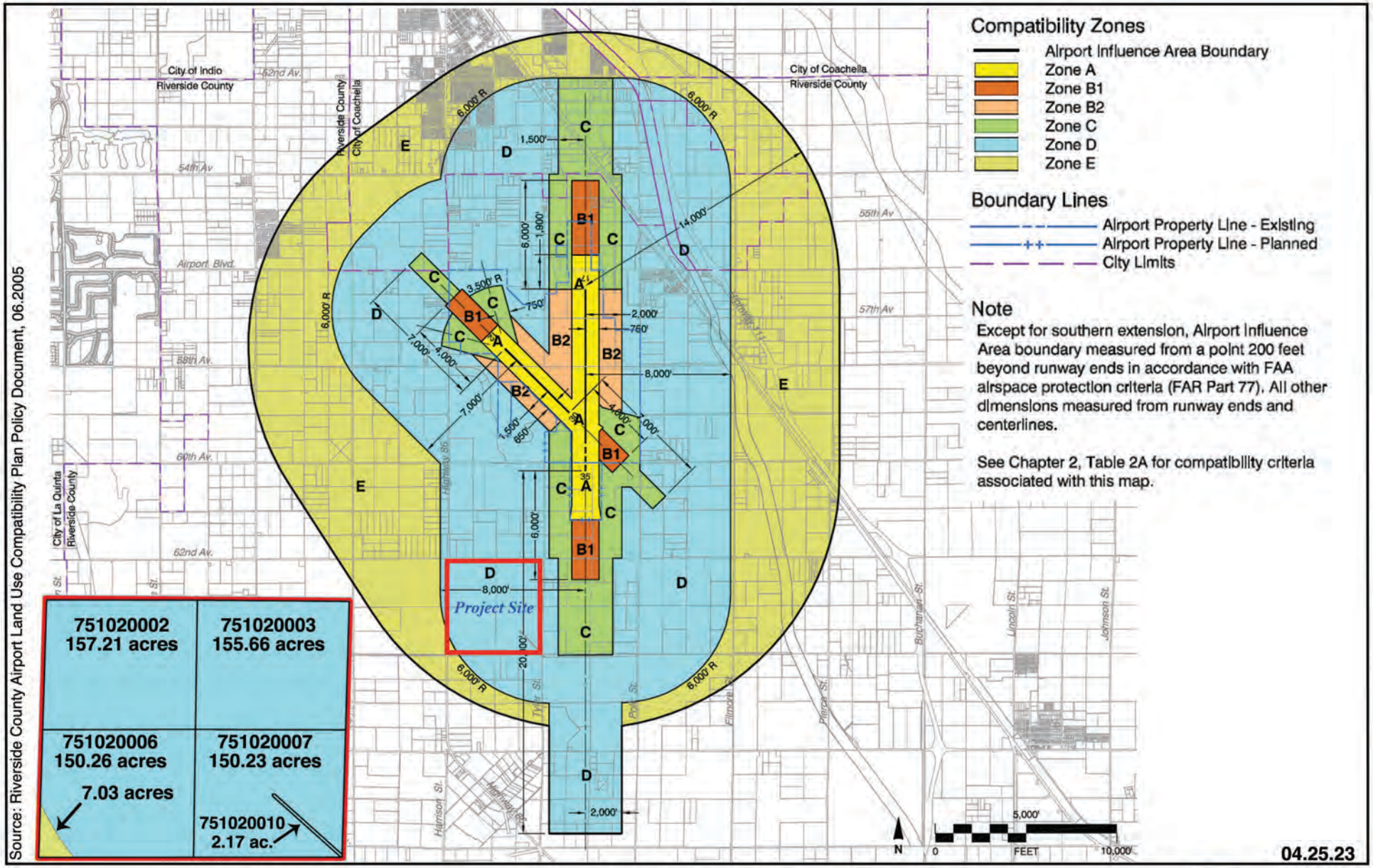


MSA CONSULTING, INC.
> PLANNING > CIVIL ENGINEERING > LAND SURVEYING
34200 Bob Hope Drive, Rancho Mirage, CA 92270
760.320.9811 **msaconsultinginc.com**

AIRPORT ZONE OPEN LAND ANALYSIS

MAY 17, 2023

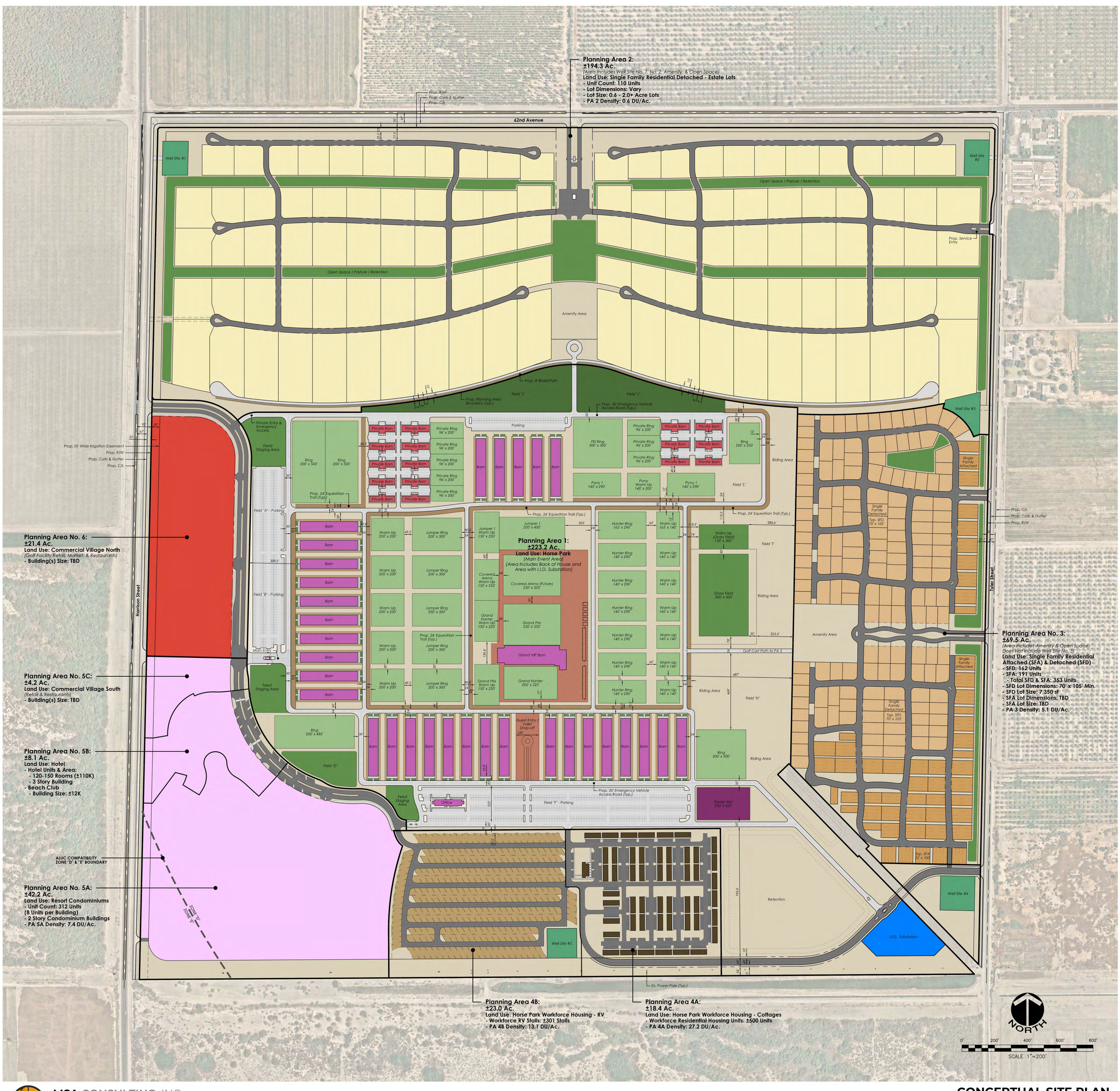
THERMAL RANCH SPECIFIC PLAN



Thermal Ranch Specific Plan EIR
Jaqueline Cochran Regional Airport Land Use Compatibiltiy Zones
Thermal, California

TERRA NOVA®
PLANNING & RESEARCH, INC.

Exhibit
2.11-4



MSA CONSULTING, INC.
> PLANNING > CIVIL ENGINEERING > LAND SURVEYING
34200 Bob Hope Drive, Rancho Mirage, CA 92270
760.320.9811 **msaconsultinginc.com**

CONCEPTUAL SITE PLAN

JANUARY 11, 2023

THERMAL RANCH

R:\2735\Acad\Planning\Site Plan\2735 Conceptual Site Plan.dwg, 1/11/2023 11:40:47 AM, dgutteron, MSA Consulting, Inc.

	Project Boundary				
1	Horse Park	A	Grand Entry	H	Private Barns
2	Estate Lots	B	Gathering/Dining Commons	I	Pasture
3	Neighborhoods	C	Competition Rings	J	Grass Field
4	Horse Park Workforce Housing	D	Warmup/Jumper Rings	K	Back of House
5	Hotel/Resort	E	Common Barns	L	Office
6	Commercial	F	Parking	M	CVWD Well Site
		G	Staging Area	N	Potential Substation

Note: This exhibit illustrates one possible development scenario. Other site development concepts are allowed subject to the standards and guidelines of this Specific Plan.

Source: MSA Consulting, Inc., 02.09.23

03.23.23

TERRA NOVA®
PLANNING & RESEARCH, INC.

Thermal Ranch Specific
Riverside County ALUC
Conceptual Development Plan
Thermal, California

Exhibit

4

THE UNINCORPORATED AREA IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

PLOT PLAN PPXXXXX
THERMAL RANCH SPECIFIC PLAN PA-1 (HORSE PARK)

EXHIBIT DATE: FEBRUARY 16, 2023

AMENDMENTS

NO.	DATE	DESCRIPTION

DATA TABLE

APPLICANT / LAND OWNER:	THERMAL RANCH, LLC		
ADDRESS:	19312 CANYON DRIVE VILLA PARK, CALIFORNIA 92861		
CONTACT:	JEREMY SMITH	**TELEPHONE:**	(760) 801-5166
EXHIBIT PREPARER:	MSA CONSULTING, INC.		
ADDRESS:	34200 BOB HOPE DRIVE RANCHO MIRAGE, CALIFORNIA 92270		
CONTACT:	PAUL DEPALATIS, AICP	**TELEPHONE:**	(760) 320-9811
SOURCE OF TOPOGRAPHY:	AEROTECH MAPPING, INC.		
ADDRESS:	200 SPECTRUM CENTER DRIVE, SUITE 300 IRVINE, CALIFORNIA 92618		
DATE OF TOPOGRAPHY:	DECEMBER 7, 2022	**TELEPHONE:**	(619) 606-5020
ASSESSOR'S PARCEL NUMBERS:	751-020-002, -003, -006 & -007		

LEGAL DESCRIPTION:

A PORTION OF SECTION 5, TOWNSHIP 7 SOUTH, RANGE 8 EAST, SAN BERNARDINO BASE AND MERIDIAN.

LAND USE DESCRIPTION:	BUILDING	SF	ACREAGE	PERCENTAGE
PLANNING AREA 1 GROSS AREA	-	9,722,759 SF	223.2 AC.	-
PROPOSED WELL SITE #4	-	44,099 SF	1.0 AC.	-
PROPOSED I.I.D. SUBSTATION	-	100,530 SF	2.3 AC.	-
PROPOSED NET AREA	-	9,578,130 SF	219.9 AC.	100%
PROPOSED BUILDING AREA (GRAND VIP BARN)	51,620 SF	51,620 SF	1.2 AC.	1%
PROPOSED BUILDING AREA (PRIVATE BARN 1)	8 BUILDINGS (6,472 SF / EA.)	51,776 SF	1.2 AC.	1%
PROPOSED BUILDING AREA (PRIVATE BARN 2)	8 BUILDINGS (6,046 SF / EA.)	48,368 SF	1.1 AC.	1%
PROPOSED BUILDING AREA (LARGE BARN)	21 BUILDINGS (21,240 SF / EA.)	446,040 SF	10.2 AC.	4%
PROPOSED BUILDING AREA (RETAIL)	2 BUILDINGS (4,000 SF / EA.)	8,000 SF	0.2 AC.	-
PROPOSED BUILDING AREA (RETAIL BARN 20'x30')	5 BUILDINGS (600 SF / EA.)	3,000 SF	0.1 AC.	-
PROPOSED BUILDING AREA (OFFICE)	1 BUILDING	6,885 SF	0.2 AC.	-
ACCESS ROADS, HARDSCAPE & PARKING	-	1,784,938 SF	41.0 AC.	18%
LANDSCAPE & OPEN SPACE AREAS	-	7,177,503 SF	164.7 AC.	75%

ONSITE PARKING DATA:	COUNT
PROPOSED PARKING STALLS	1,990 STALLS
TOTAL PARKING REQUIRED	
TOTAL PARKING PROVIDED	1,990 STALLS

EXISTING EASEMENT NOTES:

1. CENTERLINE OF 10' PIPELINE EASEMENT, RECORDED 3/22/1950, IN BOOK 1158, PAGE 39, O.R. (PLOTTED HEREON)
2. CENTERLINE OF POWER LINE EASEMENT, RECORDED 2/18/1965, AS INSTRUMENT NO. 18976, O.R. (PLOTTED HEREON)
3. CENTERLINE OF 10' POWER LINE EASEMENT, RECORDED 4/16/1951, BOOK 1277, PAGE 70, O.R. (PLOTTED HEREON)
4. 50' PIPELINE EASEMENT, RECORDED 10/20/1958, IN BOOK 2350, PAGE 565-567, O.R. (PLOTTED HEREON)
5. 50' PIPELINE EASEMENT, RECORDED 10/20/1958, IN BOOK 2350, PAGE 562-564, O.R. (PLOTTED HEREON)
6. 25' PIPELINE EASEMENT, RECORDED 5/9/1957, IN BOOK 2085, PAGE 184-186, O.R. (PLOTTED HEREON)
7. GRANT DEED TO C.V.W.D. AND 25' DRAINAGE CHANNEL R/W, RECORDED 5/9/1957, IN BOOK 2085, PAGE 187-189, O.R. (PLOTTED HEREON)
8. 95' POWER LINE EASEMENT, RECORDED 1/4/1989, AS INSTRUMENT NO. 1502, O.R. (PLOTTED HEREON)
9. 25' PIPELINE EASEMENT, RECORDED 5/9/1957, IN BOOK 2085, PAGE 190-192, O.R. (PLOTTED HEREON)
10. GRANT DEED TO C.V.W.D. AND 25' DRAINAGE CHANNEL R/W, RECORDED 5/9/1957, IN BOOK 2085, PAGE 193-195, O.R. (PLOTTED HEREON)

EXISTING ZONING:	CONTROLLED DEVELOPMENT (W-2) / HEAVY AGRICULTURE 10-ACRE MIN. LOT (A-2-10)	
PROPOSED ZONING:	THERMAL RANCH SPECIFIC PLAN, PA-1 EQUESTRIAN CENTER	
EXISTING GENERAL PLAN LAND USE:	AGRICULTURE	
PROPOSED GENERAL PLAN LAND USE:	COMMUNITY DEVELOPMENT FOUNDATION - TOURIST COMMERCIAL	

PUBLIC UTILITY PURVEYORS:		
ELECTRIC:	IMPERIAL IRRIGATION DISTRICT	(800) 303-7756
GAS:	SOUTHERN CALIFORNIA GAS COMPANY	(800) 427-2200
TELEPHONE:	FRONTIER COMMUNICATIONS	(800) 921-8101
WATER:	COACHELLA VALLEY WATER DISTRICT	(760) 398-2651
CABLE:	FRONTIER COMMUNICATIONS	(800) 921-8101
SEWER:	COACHELLA VALLEY WATER DISTRICT	(760) 398-2651
USA:	UNDERGROUND SERVICE ALERT	(800) 227-2600

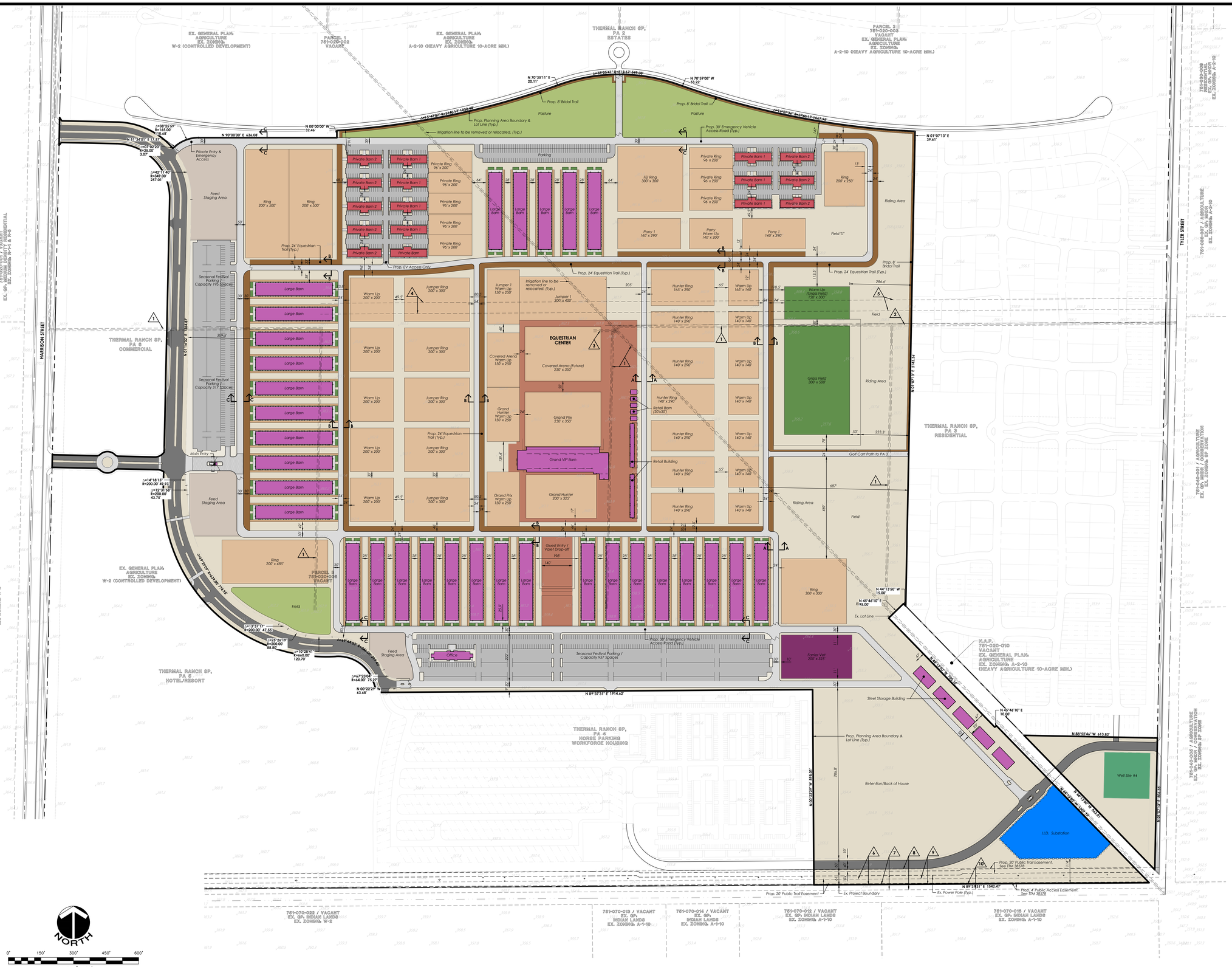
FEMA FLOOD ZONE DESIGNATION:

ZONE "A": WITHOUT BASE ELEVATION
ZONE "X": 0.2% ANNUAL CHANCE FLOOD & AREAS OF MINIMAL FLOOD HAZARD

AS SHOWN ON RIVERSIDE COUNTY, CALIFORNIA, FLOOD INSURANCE RATE MAP, COMMUNITY PANEL MAP NUMBER: 06065C2910H
EFFECTIVE DATE: MARCH 6, 2018.

LIQUEFACTION:	HIGH LIQUEFACTION ZONE
SCHOOL DISTRICT:	COACHELLA VALLEY UNIFIED
COUNTY SERVICE AREA:	125 - THERMAL ST LIGHTING
EXISTING SPECIFIC PLAN:	NONE
PROPOSED SPECIFIC PLAN:	THERMAL RANCH SP

NOTE: 1. PROVIDED PARKING CALCULATION AS PER THERMAL RANCH SP

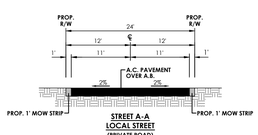


ABBREVIATIONS

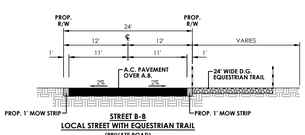
(E)	EAST	NO.	NUMBER
(N)	NORTH	N.T.S.	NOT TO SCALE
(S)	SOUTH	O/H	OVERHEAD
(W)	WEST	OS/PP	OPEN SPACE / PARKS
A.C.	ASPHALT CONCRETE	PG.	PAGE
AC	ACREAGE	P/L	PROPERTY LINE
APN	ASSESSORS PARCEL NUMBER	PROP.	PROPOSED
BNDRY	BOUNDARY	P.U.E.	PUBLIC UTILITY EASEMENT
C/L	CENTERLINE	R	RADIUS
C&G	CURB AND GUTTER	R-L	LOW DENSITY (RESIDENTIAL)
E/P	EDGE OF PAVEMENT	R/W	RIGHT OF WAY
ESMT.	EASEMENT	SF	SQUARE FEET
EX.	EXISTING	STD.	STANDARD
MAX.	MAXIMUM	TYP.	TYPICAL
M.B.	MAP BOOK	UG	UNDERGROUND
MIN.	MINIMUM		

LEGEND

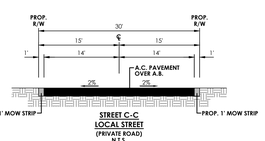
679.3 EXISTING SPOT ELEVATIONS
EXISTING CONTOURS
EXISTING EASEMENT DELTA
EXISTING CABLE
EXISTING IRRIGATION DRAIN LINE
EXISTING EASEMENT
EXISTING ELECTRIC
EXISTING GAS
EXISTING IRRIGATION
EXISTING LOT LINE
EXISTING EDGE OF PAVEMENT
EXISTING TELEPHONE
EXISTING OVERHEAD TELEPHONE
EXISTING RIGHT OF WAY
EXISTING SEWER
EXISTING SEWER FORCE MAIN
EXISTING WATER
TENTATIVE TRACT MAP BOUNDARY
PROPOSED AND EXISTING CENTER LINE
PROPOSED CURB
PROPOSED EASEMENT
PROPOSED LOT LINE
PROPOSED RIGHT OF WAY



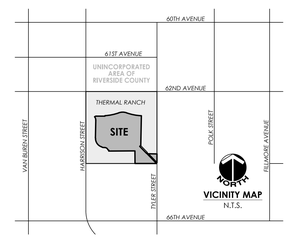
STREET A-A
LOCAL STREET
(PRIVATE ROAD)
N.T.S.



STREET B-B
LOCAL STREET WITH EQUESTRIAN TRAIL
(PRIVATE ROAD)
N.T.S.



STREET C-C
LOCAL STREET
(PRIVATE ROAD)
N.T.S.



VICINITY MAP
N.T.S.

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Planning • Environmental Services • Dry Utility Coordination • GIS
34200 Bob Hope Drive Rancho Mirage, CA 92270 | 760.320.9811 | MSAConsultinginc.com

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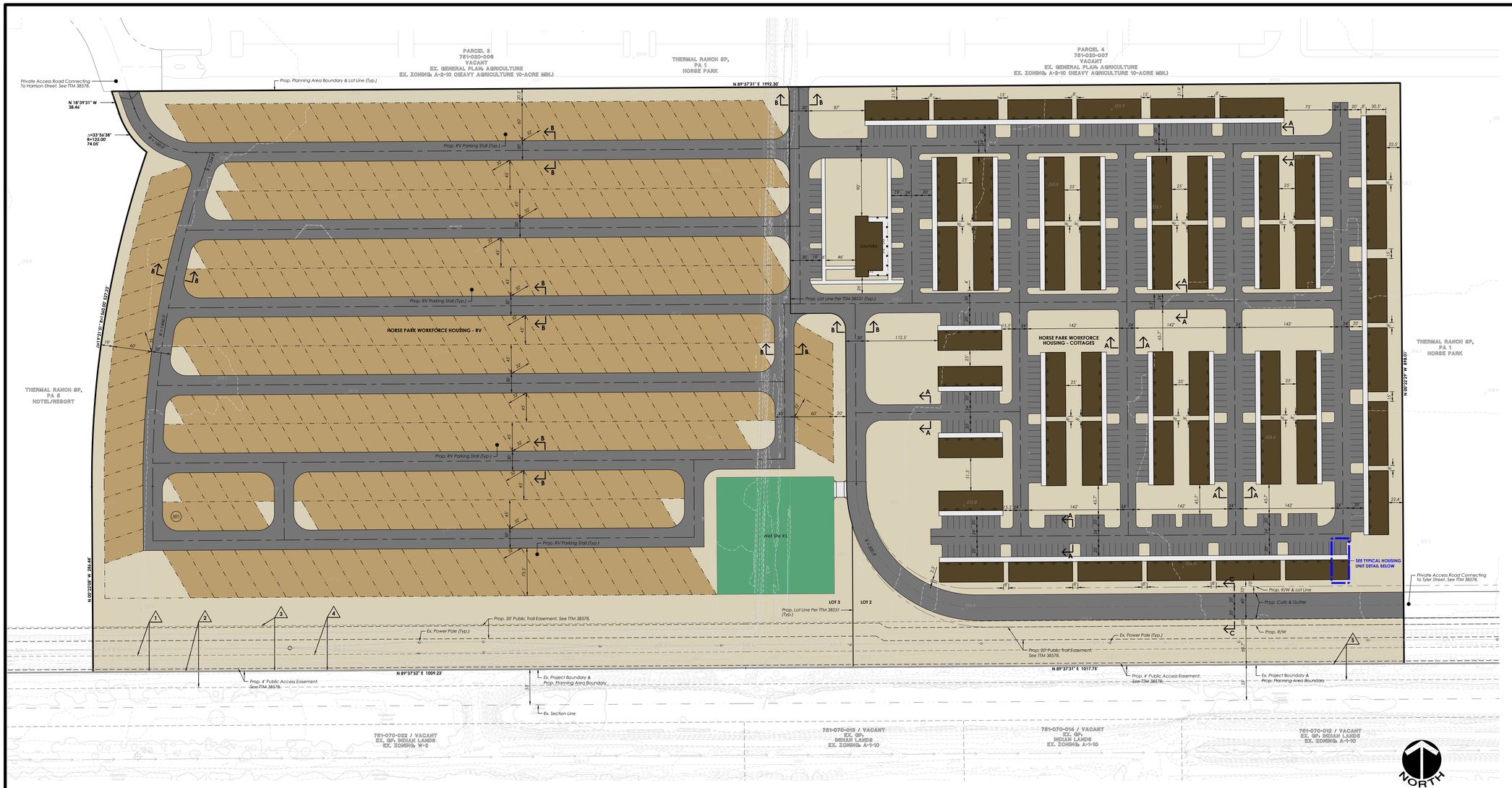


THE UNINCORPORATED AREA IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

PLOT PLAN PPXXXXX
THERMAL RANCH SPECIFIC PLAN PA-4 (HORSE PARK WORKFORCE HOUSING)

EXHIBIT DATE: FEBRUARY 16, 2023

AMENDMENTS

NO.	DATE	DESCRIPTION

DATA TABLE

APPLICANT / LAND OWNER:	THERMAL RANCH, LLC		
ADDRESS:	19312 CANYON DRIVE VILLA PARK, CALIFORNIA 92861		
CONTACT:	JEREMY SMITH	**TELEPHONE:**	(760) 801-5166
EXHIBIT PREPARER:	MSA CONSULTING, INC.		
ADDRESS:	34200 BOB HOPE DRIVE RANCHO MIRAGE, CALIFORNIA 92270		
CONTACT:	PAUL DEPALATIS, AICP	**TELEPHONE:**	(760) 320-9811
SOURCE OF TOPOGRAPHY:	AEROTECH MAPPING, INC.		
ADDRESS:	200 SPECTRUM CENTER DRIVE, SUITE 300 IRVINE, CALIFORNIA 92618		
DATE OF TOPOGRAPHY:	DECEMBER 7, 2022	**TELEPHONE:**	(619) 606-5020
ASSESSOR'S PARCEL NUMBERS:	751-020-006 & -007		

LEGAL DESCRIPTION:

A PORTION OF SECTION 5, TOWNSHIP 7 SOUTH, RANGE 8 EAST, SAN BERNARDINO BASE AND MERIDIAN.

LAND USE DESCRIPTION:	UNIT	SF	ACREAGE	PERCENTAGE
PLANNING AREA 4 GROSS AREA	-	1,800,018 SF	41.3 AC.	-
PROPOSED WELL SITE #5	-	32,760 SF	0.8 AC.	-
PROPOSED NET AREA	-	1,767,258 SF	40.5 AC.	100%
PROPOSED BUILDING AREA (LAUNDRY BUILDING)	1 BUILDING	3,530 SF	0.1 AC.	1%
PROPOSED BUILDING AREA (WORKFORCE HOUSING - COTTAGES) - STANDARD UNIT (450 UNITS) - ACCESSIBLE UNIT (50 UNITS)	500 UNITS - (300 SF / UNIT) (400 SF / UNIT)	155,000 SF - 135,000 SF 20,000 SF	3.6 AC.	9%
PROPOSED RV STALL	-	548,988 SF	12.6 AC.	31%
ACCESS ROADS, HARDSCAPE & PARKING	-	531,724 SF	12.2 AC.	30%
LANDSCAPE & OPEN SPACE AREAS	-	528,016 SF	12.0 AC.	29%

ONSITE PARKING DATA:	COUNT
PROPOSED RV PARKING STALLS	301 STALLS
PROPOSED LAUNDRY BUILDING PARKING STALLS	30 STALLS
PROPOSED WORKFORCE HOUSING PARKING STALLS	527 STALLS
TOTAL PARKING REQUIRED	
TOTAL PARKING PROVIDED	858 STALLS

EXISTING EASEMENT NOTES:

1. 25' PIPELINE EASEMENT, RECORDED 5/9/1957, IN BOOK 2085, PAGE 184-186, O.R. (PLOTTED HEREON)
2. GRANT DEED TO C.V.W.D. AND 25' DRAINAGE CHANNEL R/W, RECORDED 5/9/1957, IN BOOK 2085, PAGE 187-189, O.R. (PLOTTED HEREON)
3. 95' POWER LINE EASEMENT, RECORDED 1/4/1989, AS INSTRUMENT NO. 1502, O.R. (PLOTTED HEREON)
4. 25' PIPELINE EASEMENT, RECORDED 5/9/1957, IN BOOK 2085, PAGE 190-192, O.R. (PLOTTED HEREON)
5. GRANT DEED TO C.V.W.D. AND 25' DRAINAGE CHANNEL R/W, RECORDED 5/9/1957, IN BOOK 2085, PAGE 193-195, O.R. (PLOTTED HEREON)

EXISTING ZONING:	CONTROLLED DEVELOPMENT (W-2) / HEAVY AGRICULTURE 10-ACRE MIN. LOT (A-2-10)
PROPOSED ZONING:	THERMAL RANCH SPECIFIC PLAN, PA 4 RECREATIONAL VEHICLE PARKING / WORKFORCE HOUSING
EXISTING GENERAL PLAN LAND USE:	AGRICULTURE
PROPOSED GENERAL PLAN LAND USE:	COMMUNITY DEVELOPMENT FOUNDATION - HIGH DENSITY

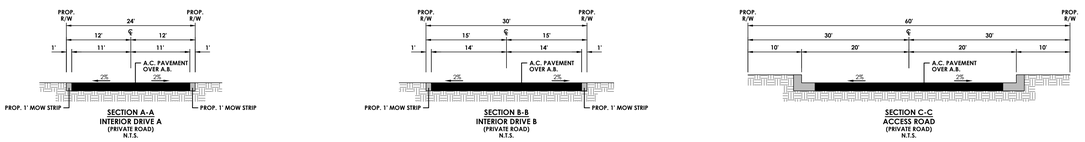
PUBLIC UTILITY PURVEYORS:		
ELECTRIC:	IMPERIAL IRRIGATION DISTRICT	(800) 303-7756
GAS:	SOUTHERN CALIFORNIA GAS COMPANY	(800) 427-2200
TELEPHONE:	FRONTIER COMMUNICATIONS	(800) 921-8101
WATER:	COACHELLA VALLEY WATER DISTRICT	(760) 398-2651
CABLE:	FRONTIER COMMUNICATIONS	(800) 921-8101
SEWER:	COACHELLA VALLEY WATER DISTRICT	(760) 398-2651
USA:	UNDERGROUND SERVICE ALERT	(800) 227-2600

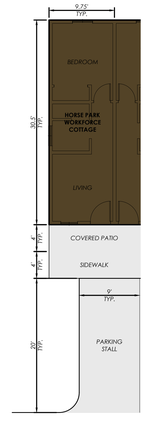
FEMA FLOOD ZONE DESIGNATION:

ZONE "A": WITHOUT BASE ELEVATION
ZONE "X": 0.2% ANNUAL CHANCE FLOOD & AREAS OF MINIMAL FLOOD HAZARD

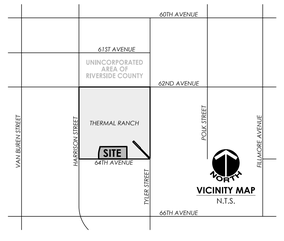
AS SHOWN ON RIVERSIDE COUNTY, CALIFORNIA, FLOOD INSURANCE RATE MAP, COMMUNITY PANEL MAP NUMBER: 06065C2910H
EFFECTIVE DATE: MARCH 6, 2018.

LIQUEFACTION:	HIGH LIQUEFACTION ZONE
SCHOOL DISTRICT:	COACHELLA VALLEY UNIFIED
COUNTY SERVICE AREA:	125 - THERMAL ST LIGHTING
EXISTING SPECIFIC PLAN:	NONE
PROPOSED SPECIFIC PLAN:	THERMAL RANCH SP
NOTE:	1. PROVIDED PARKING CALCULATION AS PER THERMAL RANCH SP





TYPICAL WORKFORCE HOUSING UNIT
SCALE: 1" = 8'



VICINITY MAP
N.T.S.

ABBREVIATIONS

(E)	EAST	NO.	NUMBER
(N)	NORTH	N.T.S.	NOT TO SCALE
(S)	SOUTH	O/H	OVERHEAD
(W)	WEST	OS/PP	OPEN SPACE / PARKS
A.C.	ASPHALT CONCRETE	PG.	PAGE
AC	ACREAGE	P/L	PROPERTY LINE
APN	ASSESSORS PARCEL NUMBER	PROP.	PROPOSED
BNDRY	BOUNDARY	P.U.E.	PUBLIC UTILITY EASEMENT
C/L	CENTERLINE	R	RADIUS
C&G	CURB AND GUTTER	R-L	LOW DENSITY (RESIDENTIAL)
E/P	EDGE OF PAVEMENT	R/W	RIGHT OF WAY
ESMT.	EASEMENT	SF	SQUARE FEET
EX.	EXISTING	STD.	STANDARD
MAX.	MAXIMUM	TYP.	TYPICAL
M.B.	MAP BOOK	U/G	UNDERGROUND
MIN.	MINIMUM		

LEGEND

- 679.3 EXISTING SPOT ELEVATIONS
- EXISTING CONTOURS
- EXISTING EASEMENT DELTA
- EXISTING CABLE
- EXISTING IRRIGATION DRAIN LINE
- EXISTING EASEMENT
- EXISTING ELECTRIC
- EXISTING GAS
- EXISTING IRRIGATION
- EXISTING LOT LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING TELEPHONE
- EXISTING OVERHEAD TELEPHONE
- EXISTING RIGHT OF WAY
- EXISTING SEWER
- EXISTING SEWER FORCE MAIN
- EXISTING WATER
- TENTATIVE TRACT MAP BOUNDARY
- PROPOSED AND EXISTING CENTER LINE
- PROPOSED CURB
- PROPOSED EASEMENT
- PROPOSED LOT LINE
- PROPOSED RIGHT OF WAY

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Civil Engineering • Land Surveying • Landscape Architecture
Planning • Environmental Services • Dry Utility Coordination • GIS
34200 Bob Hope Drive Rancho Mirage, CA 92270 | 760.320.9811 | MSAConsultinginc.com

SHEET 1 OF 1 SHEETS

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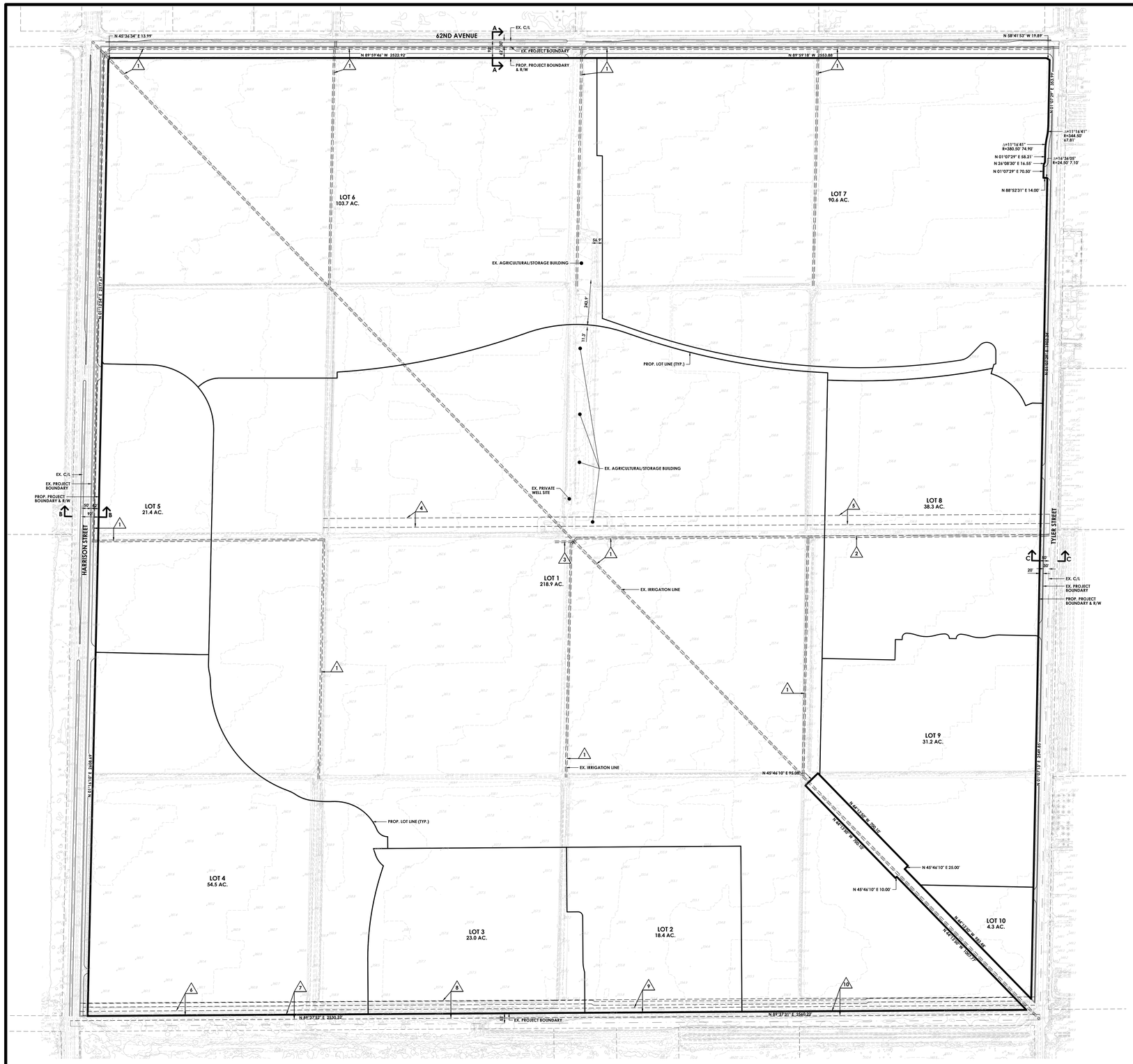
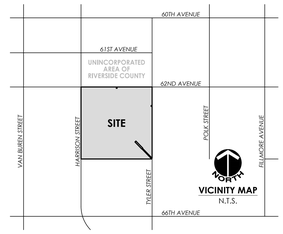


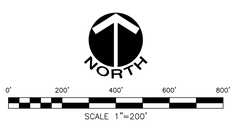


ABBREVIATIONS

(E)	EAST
(N)	NORTH
(S)	SOUTH
(W)	WEST
A.C.	ASPHALT CONCRETE
AC.	ACREAGE
APN	ASSESSORS PARCEL NUMBER
BNDRY	BOUNDARY
C/L	CENTERLINE
C&G	CURB AND GUTTER
E/P	EDGE OF PAVEMENT
ESMT.	EASEMENT
EX.	EXISTING
MAX.	MAXIMUM
M.B.	MAP BOOK
MIN.	MINIMUM
NO.	NUMBER
N.T.S.	NOT TO SCALE
O/H	OVERHEAD
OS/PP	OPEN SPACE / PARKS
PG.	PAGE
P/L	PROPERTY LINE
PROP.	PROPOSED
P.U.E.	PUBLIC UTILITY EASEMENT
R	RADIUS
R-L	LOW DENSITY (RESIDENTIAL)
R/W	RIGHT OF WAY
SF	SQUARE FEET
STD.	STANDARD
TYP.	TYPICAL
UG	UNDERGROUND

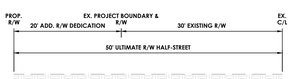
LEGEND

679.3	EXISTING SPOT ELEVATIONS
	EXISTING CONTOURS
	EXISTING EASEMENT DELTA
C	EXISTING CABLE
DRN	EXISTING IRRIGATION DRAIN LINE
	EXISTING EASEMENT
E	EXISTING ELECTRIC
G	EXISTING GAS
IRR	EXISTING IRRIGATION
	EXISTING LOT LINE
	EXISTING EDGE OF PAVEMENT
T	EXISTING TELEPHONE
O/H T	EXISTING OVERHEAD TELEPHONE
R/W	EXISTING RIGHT OF WAY
S	EXISTING SEWER
FM	EXISTING SEWER FORCE MAIN
W	EXISTING WATER
	TENTATIVE TRACT MAP BOUNDARY
	PROPOSED AND EXISTING CENTER LINE
	PROPOSED CURB
	PROPOSED EASEMENT
	PROPOSED LOT LINE

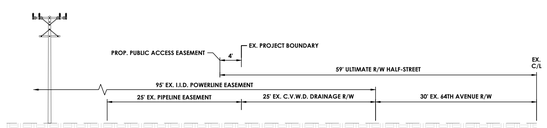


SECTION A-A
62ND AVENUE DEDICATION
(EXPRESSWAY PER GENERAL PLAN / PUBLIC ROAD)
N.T.S.

SECTION B-B
HARRISON STREET DEDICATION
(EXPRESSWAY PER GENERAL PLAN / PUBLIC ROAD)
N.T.S.



SECTION C-C
TYLER STREET DEDICATION
(SECONDARY HIGHWAY PER GENERAL PLAN / PUBLIC ROAD)
N.T.S.



SECTION D-D
64TH AVENUE
(MAJOR HIGHWAY PER GENERAL PLAN / PUBLIC ROAD)
N.T.S.

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THE UNINCORPORATED AREA IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

TENTATIVE TRACT MAP NO. 38531

SCHEDULE J FOR FINANCING PURPOSES

EXHIBIT DATE: FEBRUARY 16, 2023

REVISIONS

NO.	DATE	DESCRIPTION

DATA TABLE

APPLICANT / LAND OWNER:	THERMAL RANCH, LLC		
ADDRESS:	19312 CANYON DRIVE VILLA PARK, CALIFORNIA 92861		
CONTACT:	JEREMY SMITH	**TELEPHONE:**	(760) 801-5166
EXHIBIT PREPARER:	MSA CONSULTING, INC.		
ADDRESS:	34200 BOB HOPE DRIVE RANCHO MIRAGE, CALIFORNIA 92270		
CONTACT:	PAUL DEPALATIS, AICP	**TELEPHONE:**	(760) 320-9811
ASSESSOR'S PARCEL NUMBERS:	751-020-002, -003, -006 & -007		
SOURCE OF TOPOGRAPHY:	AEROTECH MAPPING, INC.		
ADDRESS:	200 SPECTRUM CENTER DRIVE, SUITE 300 IRVINE, CALIFORNIA 92618		
DATE OF TOPOGRAPHY:	DECEMBER 7, 2022	**TELEPHONE:**	(619) 606-5020

LEGAL DESCRIPTION:

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE UNINCORPORATED AREA OF THERMAL IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL 1: THE NORTHWEST ONE-QUARTER OF SECTION 5, TOWNSHIP 7 SOUTH, RANGE 8 EAST, SAN BERNARDINO BASE AND MERIDIAN, EXCEPTING THEREFROM THE WESTERLY 50 FEET THEREOF LYING WITHIN STATE HIGHWAY 68 AND THE NORTHERLY 30 FEET THEREOF LYING WITHIN 62ND STREET.

PARCEL 2: THE NORTHEAST ONE-QUARTER OF SECTION 5, TOWNSHIP 7 SOUTH, RANGE 8 EAST, SAN BERNARDINO BASE AND MERIDIAN, EXCEPTING THEREFROM THE EASTERLY AND NORTHERLY 30 FEET THEREOF LYING WITHIN TYLER AND 62ND STREET.

PARCEL 3: THE SOUTHWEST ONE-QUARTER OF SECTION 5, TOWNSHIP 7 SOUTH, RANGE 8 EAST, SAN BERNARDINO BASE AND MERIDIAN, EXCEPTING THEREFROM THE WESTERLY 50 FEET THEREOF LYING WITH STATE HIGHWAY 68 AND THE SOUTHERLY 30 FEET THEREOF LYING WITHIN 64TH STREET. ALSO EXCEPTING THEREFROM THE NORTH TWENTY-FIVE FEET OF THE SOUTH 55 FEET AS CONVEYED TO COACHELLA VALLEY COUNTY WATER DISTRICT BY DEED RECORDED MAY 9, 1957 IN BOOK 2085, PAGE 188 OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

PARCEL 4: THE SOUTHEAST ONE-QUARTER OF SECTION 5, TOWNSHIP 7 SOUTH, RANGE 8 EAST, SAN BERNARDINO BASE AND MERIDIAN, EXCEPTING THEREFROM THE SOUTHERLY AND EASTERLY 30 FEET THEREOF LYING WITH 64TH AND TYLER STREETS.

ALSO EXCEPTING THEREFROM THE NORTH 25 FEET OF THE SOUTH 55 FEET AS CONVEYED TO COACHELLA VALLEY COUNTY WATER DISTRICT BY DEED RECORDED MAY 9, 1957 IN BOOK 2085, PAGE 193 OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

ALSO EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE UNITED STATES OF AMERICA BY FINAL DECREE IN CONDEMNATION RECORDED JUNE 6, 1951 IN BOOK 1277, PAGE 70 OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

APN 751-020-002-3 (AFFECTS PARCEL 1)
APN 751-020-003-4 (AFFECTS PARCEL 2)
APN 751-020-006-7 (AFFECTS PARCEL 3)
APN 751-020-007-8 (AFFECTS PARCEL 4)

LAND USE DESCRIPTION:	ACREAGE:
EXISTING GROSS ACREAGE	619.1 AC.
PROPOSED PUBLIC RIGHT OF WAY DEDICATION (62ND AVENUE / HARRISON STREET & TYLER STREET)	14.8 AC.
PROPOSED NET ACREAGE	604.3 AC.
PROPOSED LOT 1	218.9 AC.
PROPOSED LOT 2	18.4 AC.
PROPOSED LOT 3	23.0 AC.
PROPOSED LOT 4	54.5 AC.
PROPOSED LOT 5	21.4 AC.
PROPOSED LOT 6	103.7 AC.
PROPOSED LOT 7	90.6 AC.
PROPOSED LOT 8	38.3 AC.
PROPOSED LOT 9	31.2 AC.
PROPOSED LOT 10	4.3 AC.

EXISTING EASEMENT NOTES:

1	CENTERLINE OF 10' PIPELINE EASEMENT, RECORDED 3/22/1950, IN BOOK 1158, PAGE 39, O.R. (PLOTTED HEREON)
2	CENTERLINE OF POWER LINE EASEMENT, RECORDED 2/18/1965, AS INSTRUMENT NO. 18976, O.R. (PLOTTED HEREON)
3	CENTERLINE OF 10' POWER LINE EASEMENT, RECORDED 4/16/1951, BOOK 1277, PAGE 70, O.R. (PLOTTED HEREON)
4	50' PIPELINE EASEMENT, RECORDED 10/20/1958, IN BOOK 2350, PAGE 565-567, O.R. (PLOTTED HEREON)
5	50' PIPELINE EASEMENT, RECORDED 10/20/1958, IN BOOK 2350, PAGE 562-564, O.R. (PLOTTED HEREON)
6	25' PIPELINE EASEMENT, RECORDED 5/9/1957, IN BOOK 2085, PAGE 184-186, O.R. (PLOTTED HEREON)
7	GRANT DEED TO C.V.W.D. AND 25' DRAINAGE CHANNEL R/W, RECORDED 5/9/1957, IN BOOK 2085, PAGE 187-189, O.R. (PLOTTED HEREON)
8	95' POWER LINE EASEMENT, RECORDED 1/4/1989, AS INSTRUMENT NO. 1502, O.R. (PLOTTED HEREON)
9	25' PIPELINE EASEMENT, RECORDED 5/9/1957, IN BOOK 2085, PAGE 190-192, O.R. (PLOTTED HEREON)
10	GRANT DEED TO C.V.W.D. AND 25' DRAINAGE CHANNEL R/W, RECORDED 5/9/1957, IN BOOK 2085, PAGE 193-195, O.R. (PLOTTED HEREON)

EXISTING ZONING:	CONTROLLED DEVELOPMENT (W-2) / HEAVY AGRICULTURE 10-ACRE MIN. LOT (A-2-10)
PROPOSED ZONING:	THERMAL RANCH SPECIFIC PLAN
EXISTING GENERAL PLAN LAND USE:	AGRICULTURE
PROPOSED GENERAL PLAN LAND USE:	COMMUNITY DEVELOPMENT FOUNDATION - TC, CR, LDR, MDR, HDR

PUBLIC UTILITY PURVEYORS:

ELECTRIC:	IMPERIAL IRRIGATION DISTRICT	(800) 303-7756
GAS:	SOUTHERN CALIFORNIA GAS COMPANY	(800) 427-2200
TELEPHONE:	FRONTIER COMMUNICATIONS	(800) 921-8101
WATER:	COACHELLA VALLEY WATER DISTRICT	(760) 398-2651
CABLE:	FRONTIER COMMUNICATIONS	(800) 921-8101
SEWER:	COACHELLA VALLEY WATER DISTRICT	(760) 398-2651
USA:	UNDERGROUND SERVICE ALERT	(800) 227-2600

FEMA FLOOD ZONE DESIGNATION:

ZONE "A": WITHOUT BASE ELEVATION
ZONE "X": 0.2% ANNUAL CHANCE FLOOD & AREAS OF MINIMAL FLOOD HAZARD

AS SHOWN ON RIVERSIDE COUNTY, CALIFORNIA, FLOOD INSURANCE RATE MAP, COMMUNITY PANEL MAP NUMBER: 06065C2910H
EFFECTIVE DATE: MARCH 6, 2018.

LIQUEFACTION:	HIGH LIQUEFACTION ZONE
SCHOOL DISTRICT:	COACHELLA VALLEY UNIFIED
COUNTY SERVICE AREA:	125 - THERMAL ST LIGHTING
NOTES:	1. THIS MAP INCLUDES THE ENTIRE CONTIGUOUS OWNERSHIP OF THE LAND DIVIDER.

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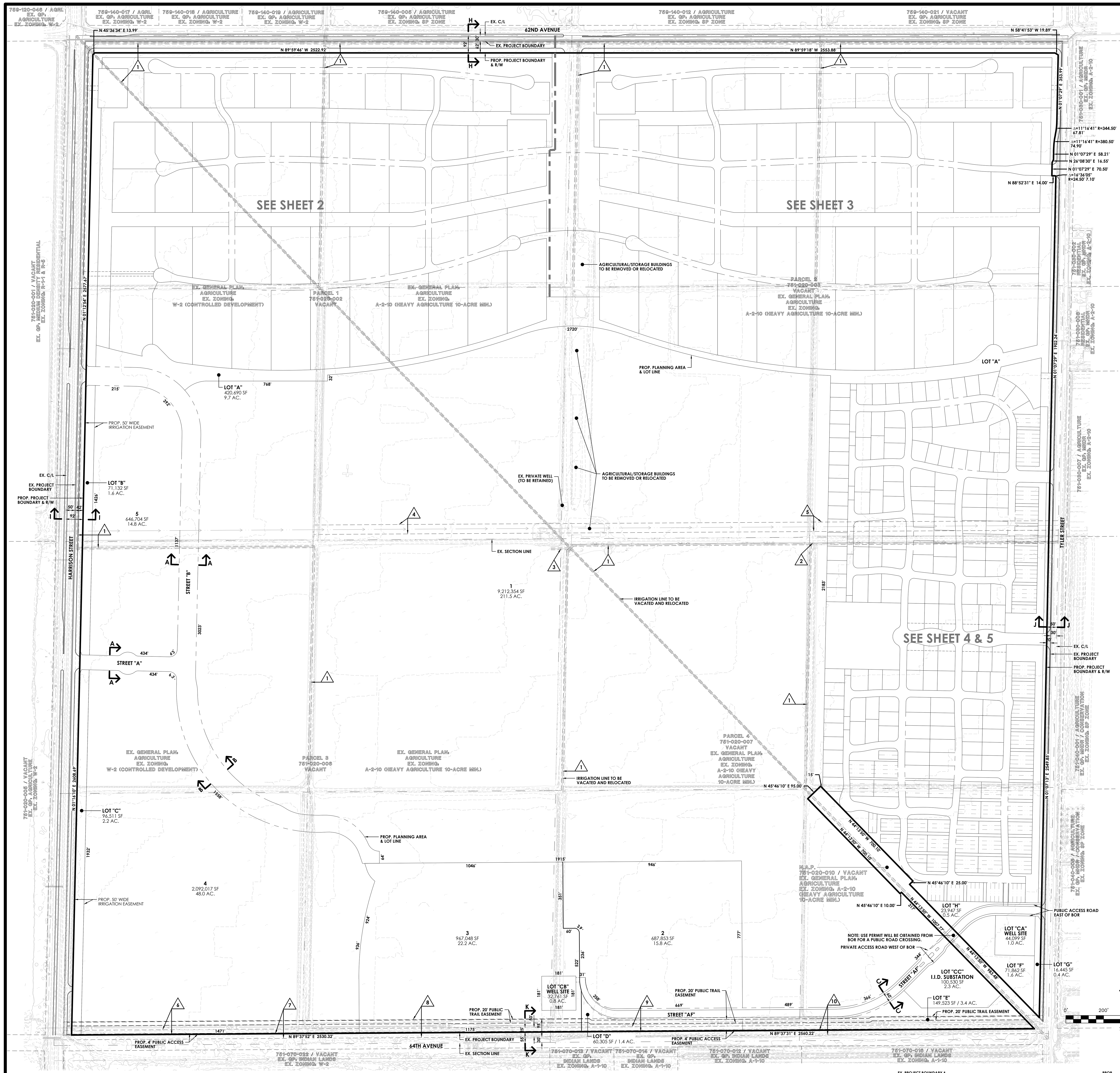
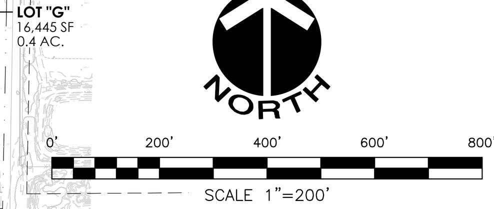
SHEET 1 OF 1 SHEETS

R:\2735\Acad\Planning\Tentative Map\Schedule J\2735 Schedule J - TTM 38531.dwg, 2/16/2023 11:24:31 AM, dgallemore, MSA Consulting Inc.



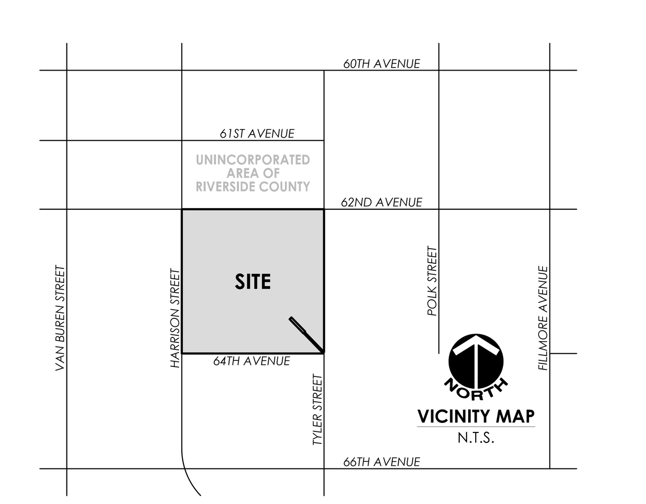


ABBREVIATIONS

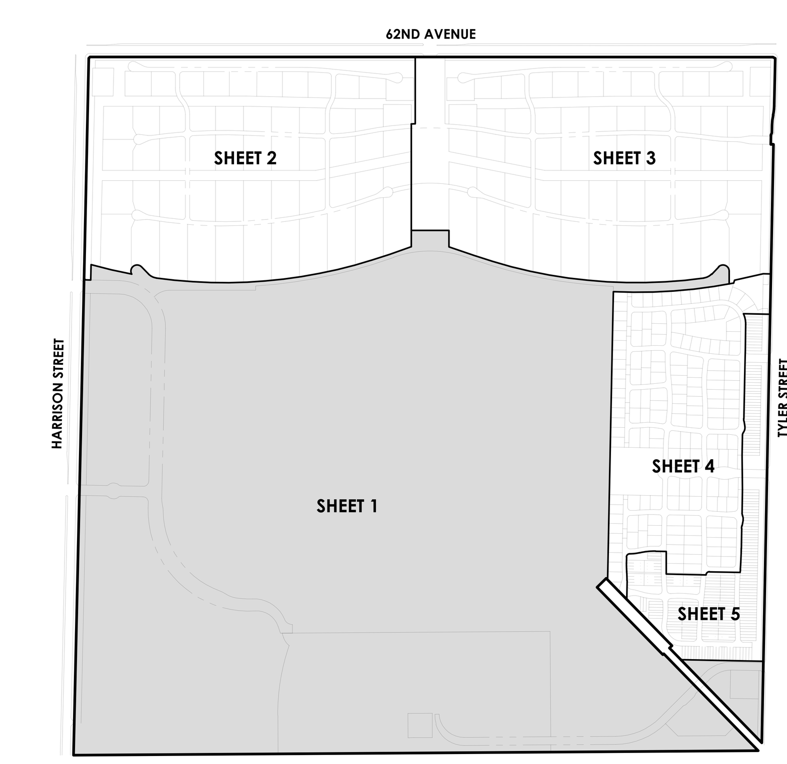
(E)	EAST
(N)	NORTH
(S)	SOUTH
(W)	WEST
A.C.	ASPHALT CONCRETE
AC	ACREAGE
APN	ASSESSORS PARCEL NUMBER
BNDRY	BOUNDARY
C/L	CENTERLINE
C&G	CURB AND GUTTER
E/P	EDGE OF PAVEMENT
ESMT.	EASEMENT
EX.	EXISTING
MAX.	MAXIMUM
M.B.	MAP BOOK
MIN.	MINIMUM
NO.	NUMBER
N.T.S.	NOT TO SCALE
O/H	OVERHEAD
OS/PP	OPEN SPACE / PARKS
PE	PAD ELEVATION
PG.	PAGE
P/L	PROPERTY LINE
PROP.	PROPOSED
P.U.E.	PUBLIC UTILITY EASEMENT
R	RADIUS
R-L	LOW DENSITY (RESIDENTIAL)
R/W	RIGHT OF WAY
SF	SQUARE FEET
STD.	STANDARD
TYP.	TYPICAL
UG	UNDERGROUND

LEGEND

679.3 EXISTING SPOT ELEVATIONS
EXISTING CONTOURS
EXISTING EASEMENT DELTA
EXISTING CABLE
EXISTING IRRIGATION DRAIN LINE
EXISTING EASEMENT
EXISTING ELECTRIC
EXISTING GAS
EXISTING IRRIGATION
EXISTING LOT LINE
EXISTING EDGE OF PAVEMENT
EXISTING TELEPHONE
EXISTING OVERHEAD TELEPHONE
EXISTING RIGHT OF WAY
EXISTING SEWER
EXISTING SEWER FORCE MAIN
EXISTING WATER
TENTATIVE TRACT MAP BOUNDARY
PROPOSED AND EXISTING CENTER LINE
PROPOSED CURB
PROPOSED EASEMENT
PROPOSED LOT LINE
PROPOSED RIGHT OF WAY



VICINITY MAP
N.T.S.



KEY TO MAP SHEETS
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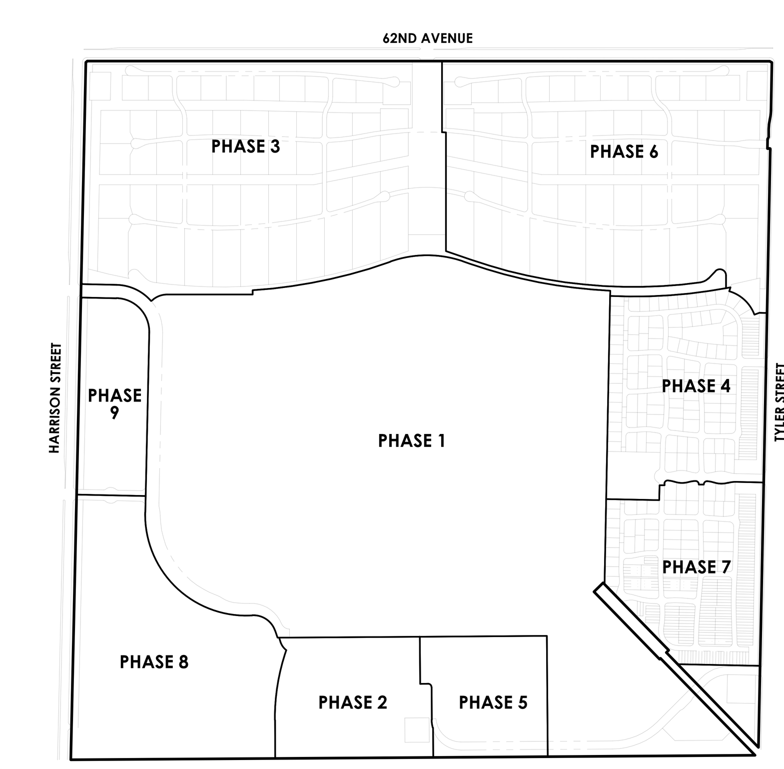
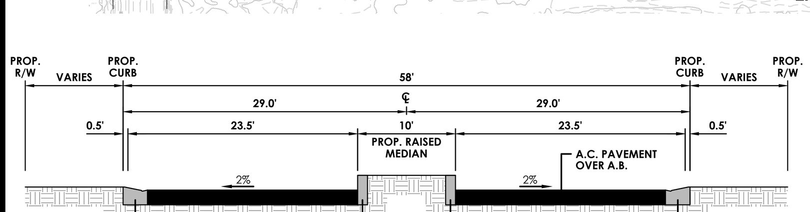
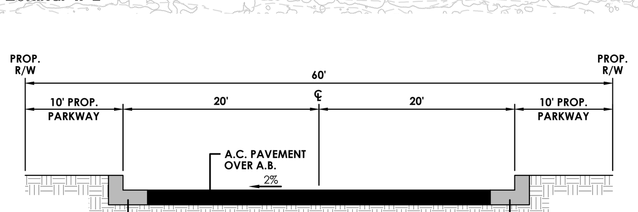


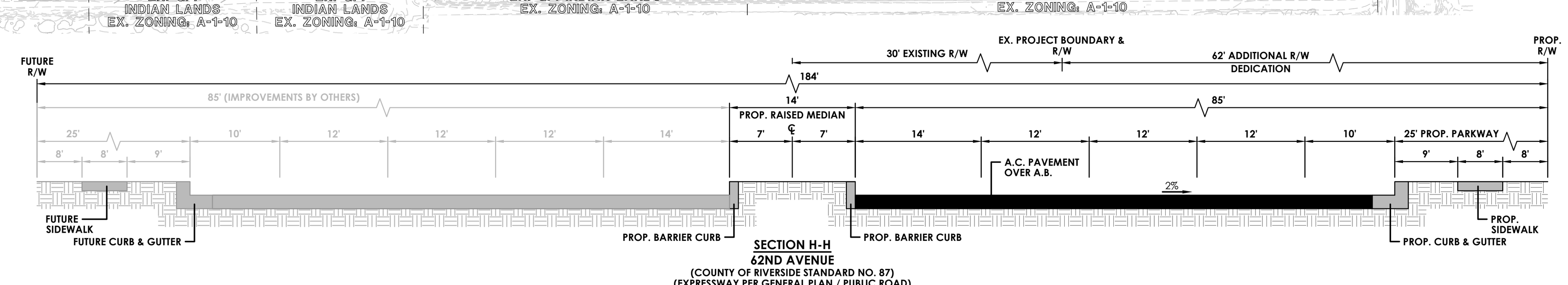
PHASING PLAN
SCALE: 1" = 800'



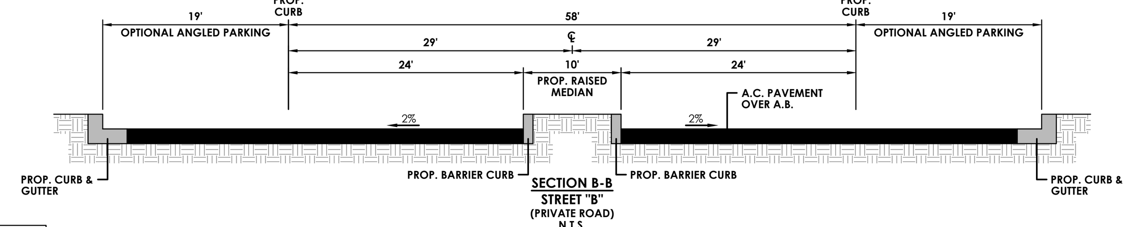
SECTION A-A
STREET "A" & "B"
(PRIVATE ROAD)
N.T.S.



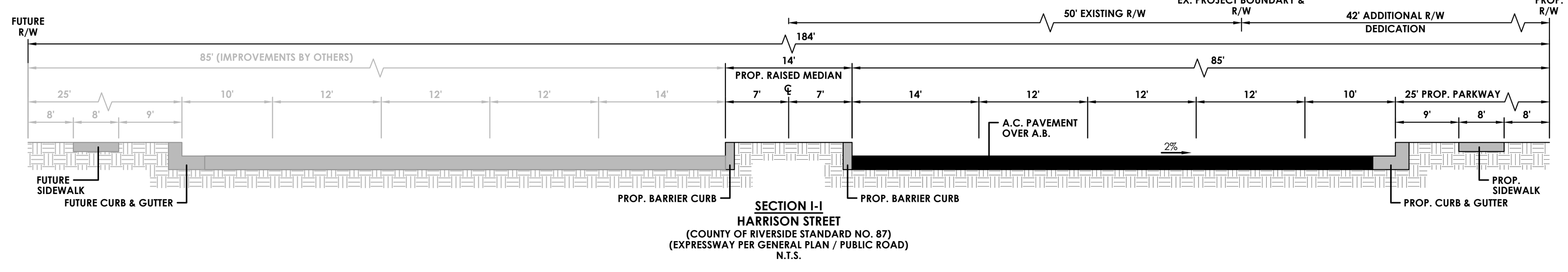
SECTION C-C
STREET "AF"
(PRIVATE ROAD)
N.T.S.



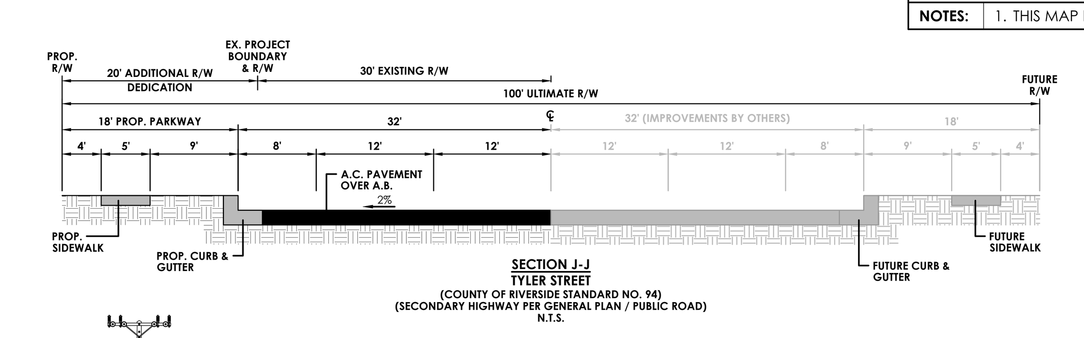
SECTION H-H
62ND AVENUE
(COUNTY OF RIVERSIDE STANDARD NO. 87)
(EXPRESSWAY PER GENERAL PLAN / PUBLIC ROAD)
N.T.S.



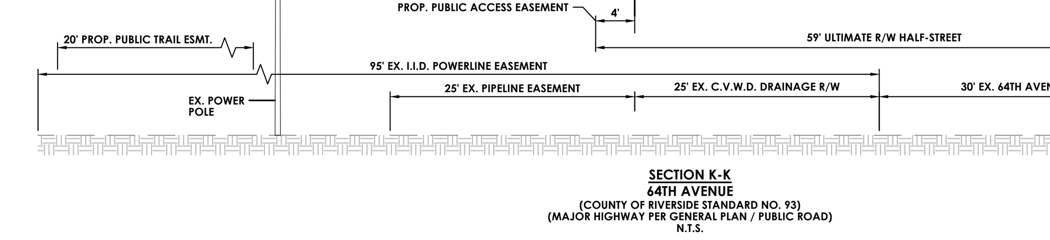
SECTION B-B
STREET "B"
(PRIVATE ROAD)
N.T.S.



SECTION I-I
HARRISON STREET
(COUNTY OF RIVERSIDE STANDARD NO. 87)
(EXPRESSWAY PER GENERAL PLAN / PUBLIC ROAD)
N.T.S.



SECTION J-J
TYLER STREET
(COUNTY OF RIVERSIDE STANDARD NO. 94)
(SECONDARY HIGHWAY PER GENERAL PLAN / PUBLIC ROAD)
N.T.S.



SECTION K-K
64TH AVENUE
(COUNTY OF RIVERSIDE STANDARD NO. 93)
(MAJOR HIGHWAY PER GENERAL PLAN / PUBLIC ROAD)
N.T.S.

THE UNINCORPORATED AREA IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

TENTATIVE TRACT MAP NO. 38578

SCHEDULE A SUBDIVISION

EXHIBIT DATE: FEBRUARY 16, 2023

REVISIONS

NO.	DATE	DESCRIPTION

DATA TABLE

APPLICANT / LAND OWNER:	THERMAL RANCH, LLC		
ADDRESS:	19312 CANYON DRIVE VILLA PARK, CALIFORNIA 92861		
CONTACT:	JEREMY SMITH	**TELEPHONE:**	(760) 801-5166
EXHIBIT PREPARER:	MSA CONSULTING, INC.		
ADDRESS:	34200 BOB HOPE DRIVE RANCHO MIRAGE, CALIFORNIA 92270		
CONTACT:	PAUL DEPALATIS, AICP	**TELEPHONE:**	(760) 320-9811
SOURCE OF TOPOGRAPHY:	AEROTECH MAPPING, INC.		
ADDRESS:	200 SPECTRUM CENTER DRIVE, SUITE 300 IRVINE, CALIFORNIA 92618		
DATE OF TOPOGRAPHY:	DECEMBER 7, 2022	**TELEPHONE:**	(619) 606-5020
ASSESSOR'S PARCEL NUMBERS:	751-020-002, -003, -006 & -007		

LEGAL DESCRIPTION:

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE UNINCORPORATED AREA OF THERMAL IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL 1: THE NORTHWEST ONE-QUARTER OF SECTION 5, TOWNSHIP 7 SOUTH, RANGE 8 EAST, SAN BERNARDINO BASE AND MERIDIAN. EXCEPTING THEREFROM THE WESTERLY 50 FEET THEREOF LYING WITHIN STATE HIGHWAY 68 AND THE NORTHERLY 30 FEET THEREOF LYING WITHIN 62ND STREET.

PARCEL 2: THE NORTHEAST ONE-QUARTER OF SECTION 5, TOWNSHIP 7 SOUTH, RANGE 8 EAST, SAN BERNARDINO BASE AND MERIDIAN. EXCEPTING THEREFROM THE EASTERLY AND NORTHERLY 30 FEET THEREOF LYING WITHIN TYLER AND 62ND STREET.

PARCEL 3: THE SOUTHWEST ONE-QUARTER OF SECTION 5, TOWNSHIP 7 SOUTH, RANGE 8 EAST, SAN BERNARDINO BASE AND MERIDIAN. EXCEPTING THEREFROM THE WESTERLY 50 FEET THEREOF LYING WITH STATE HIGHWAY 68 AND THE SOUTHERLY 30 FEET THEREOF LYING WITHIN 64TH STREET. ALSO EXCEPTING THEREFROM THE NORTH TWENTY-FIVE FEET OF THE SOUTH 55 FEET AS CONVEYED TO COACHELLA VALLEY COUNTY WATER DISTRICT BY DEED RECORDED MAY 9, 1957 IN BOOK 2085, PAGE 188 OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

PARCEL 4: THE SOUTHEAST ONE-QUARTER OF SECTION 5, TOWNSHIP 7 SOUTH, RANGE 8 EAST, SAN BERNARDINO BASE AND MERIDIAN. EXCEPTING THEREFROM THE SOUTHERLY AND EASTERLY 30 FEET THEREOF LYING WITH 64TH AND TYLER STREETS.

ALSO EXCEPTING THEREFROM THE NORTH 25 FEET OF THE SOUTH 55 FEET AS CONVEYED TO COACHELLA VALLEY COUNTY WATER DISTRICT BY DEED RECORDED MAY 9, 1957 IN BOOK 2085, PAGE 193 OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

ALSO EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE UNITED STATES OF AMERICA BY FINAL DECREE IN CONDEMNATION RECORDED JUNE 6, 1951 IN BOOK 1277, PAGE 70 OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

APN 751-020-002-3 (AFFECTS PARCEL 1)
APN 751-020-003-4 (AFFECTS PARCEL 2)
APN 751-020-006-7 (AFFECTS PARCEL 3)
APN 751-020-007-8 (AFFECTS PARCEL 4)

LAND USE DESCRIPTION:	ACREAGE:
EXISTING GROSS ACREAGE	619.1 AC.
PROPOSED PUBLIC RIGHT OF WAY DEDICATION (62ND AVENUE, HARRISON STREET & TYLER STREET)	14.8 AC.
PROPOSED C.V.W.D. WELL SITE (LOT "BX", "BY", "BZ", "CA" & "CB")	4.0 AC.
PROPOSED I.I.D. SUBSTATION (LOT "CC")	2.3 AC.
PROPOSED NET ACREAGE	598.0 AC.
PROPOSED EQUESTRIAN CENTER LOT (LOT 1)	211.5 AC.
PROPOSED HORSE PARK WORKFORCE HOUSING LOTS (LOTS 2 & 3)	38.0 AC.
PROPOSED COMMERCIAL LOTS (LOTS 4 & 5)	62.9 AC.
PROPOSED PRIVATE RESIDENTIAL LOTS: SINGLE FAMILY DETACHED (LOTS 6 - 115, 127 - 222, 249 - 284, 373 - 377, 416 - 426 & 455 - 467)	164.1 AC.
PROPOSED PRIVATE RESIDENTIAL LOTS: SINGLE FAMILY ATTACHED (LOTS 116 - 126, 223 - 248, 285 - 372, 378 - 415 & 427 - 454)	11.4 AC.
PROPOSED PRIVATE STREETS (STREET "A" THRU "AF")	41.6 AC.
PROPOSED PRIVATE OPEN SPACE LOTS (LOTS "A" THRU "BW")	68.5 AC.

EXISTING EASEMENT NOTES:

1	CENTERLINE OF 10' PIPELINE EASEMENT, RECORDED 3/22/1950, IN BOOK 1158, PAGE 39, O.R. (PLOTTED HEREON)
2	CENTERLINE OF POWER LINE EASEMENT, RECORDED 2/18/1965, AS INSTRUMENT NO. 18976, O.R. (PLOTTED HEREON)
3	CENTERLINE OF 10' POWER LINE EASEMENT, RECORDED 4/16/1951, BOOK 1277, PAGE 70, O.R. (PLOTTED HEREON)
4	50' PIPELINE EASEMENT, RECORDED 10/20/1958, IN BOOK 2350, PAGE 565-567, O.R. (PLOTTED HEREON)
5	50' PIPELINE EASEMENT, RECORDED 10/20/1958, IN BOOK 2350, PAGE 562-564, O.R. (PLOTTED HEREON)
6	25' PIPELINE EASEMENT, RECORDED 5/9/1957, IN BOOK 2085, PAGE 184-186, O.R. (PLOTTED HEREON)
7	GRANT DEED TO C.V.W.D. AND 25' DRAINAGE CHANNEL R/W, RECORDED 5/9/1957, IN BOOK 2085, PAGE 187-189, O.R. (PLOTTED HEREON)
8	95' POWER LINE EASEMENT, RECORDED 1/4/1989, AS INSTRUMENT NO. 1502, O.R. (PLOTTED HEREON)
9	25' PIPELINE EASEMENT, RECORDED 5/9/1957, IN BOOK 2085, PAGE 190-192, O.R. (PLOTTED HEREON)
10	GRANT DEED TO C.V.W.D. AND 25' DRAINAGE CHANNEL R/W, RECORDED 5/9/1957, IN BOOK 2085, PAGE 193-195, O.R. (PLOTTED HEREON)

EXISTING ZONING:	CONTROLLED DEVELOPMENT (W-2) / HEAVY AGRICULTURE 10-ACRE MIN. LOT (A-2-10)
PROPOSED ZONING:	THERMAL RANCH SPECIFIC PLAN
EXISTING GENERAL PLAN LAND USE:	AGRICULTURE
PROPOSED GENERAL PLAN LAND USE:	COMMUNITY DEVELOPMENT FOUNDATION - TC, CR, LDR, MDR, HDR

PUBLIC UTILITY PURVEYORS:

ELECTRIC:	IMPERIAL IRRIGATION DISTRICT	(800) 303-7756
GAS:	SOUTHERN CALIFORNIA GAS COMPANY	(800) 427-2200
TELEPHONE:	FRONTIER COMMUNICATIONS	(800) 921-8101
WATER:	COACHELLA VALLEY WATER DISTRICT	(760) 398-2651
CABLE:	FRONTIER COMMUNICATIONS	(800) 921-8101
SEWER:	COACHELLA VALLEY WATER DISTRICT	(760) 398-2651
USA:	UNDERGROUND SERVICE ALERT	(800) 227-2600

FEMA FLOOD ZONE DESIGNATION:

ZONE "A": WITHOUT BASE ELEVATION
ZONE "X": 0.2% ANNUAL CHANCE FLOOD & AREAS OF MINIMAL FLOOD HAZARD

AS SHOWN ON RIVERSIDE COUNTY, CALIFORNIA, FLOOD INSURANCE RATE MAP, COMMUNITY PANEL MAP NUMBER: 06065C2910H
EFFECTIVE DATE: MARCH 6, 2018.

LIQUEFACTION:	HIGH LIQUEFACTION ZONE
SCHOOL DISTRICT:	COACHELLA VALLEY UNIFIED
COUNTY SERVICE AREA:	125 - THERMAL ST LIGHTING
EXISTING SPECIFIC PLAN:	NONE
PROPOSED SPECIFIC PLAN:	THERMAL RANCH SP
NOTES:	1. THIS MAP INCLUDES THE ENTIRE CONTIGUOUS OWNERSHIP OF THE LAND DIVIDER.

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THE UNINCORPORATED AREA IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

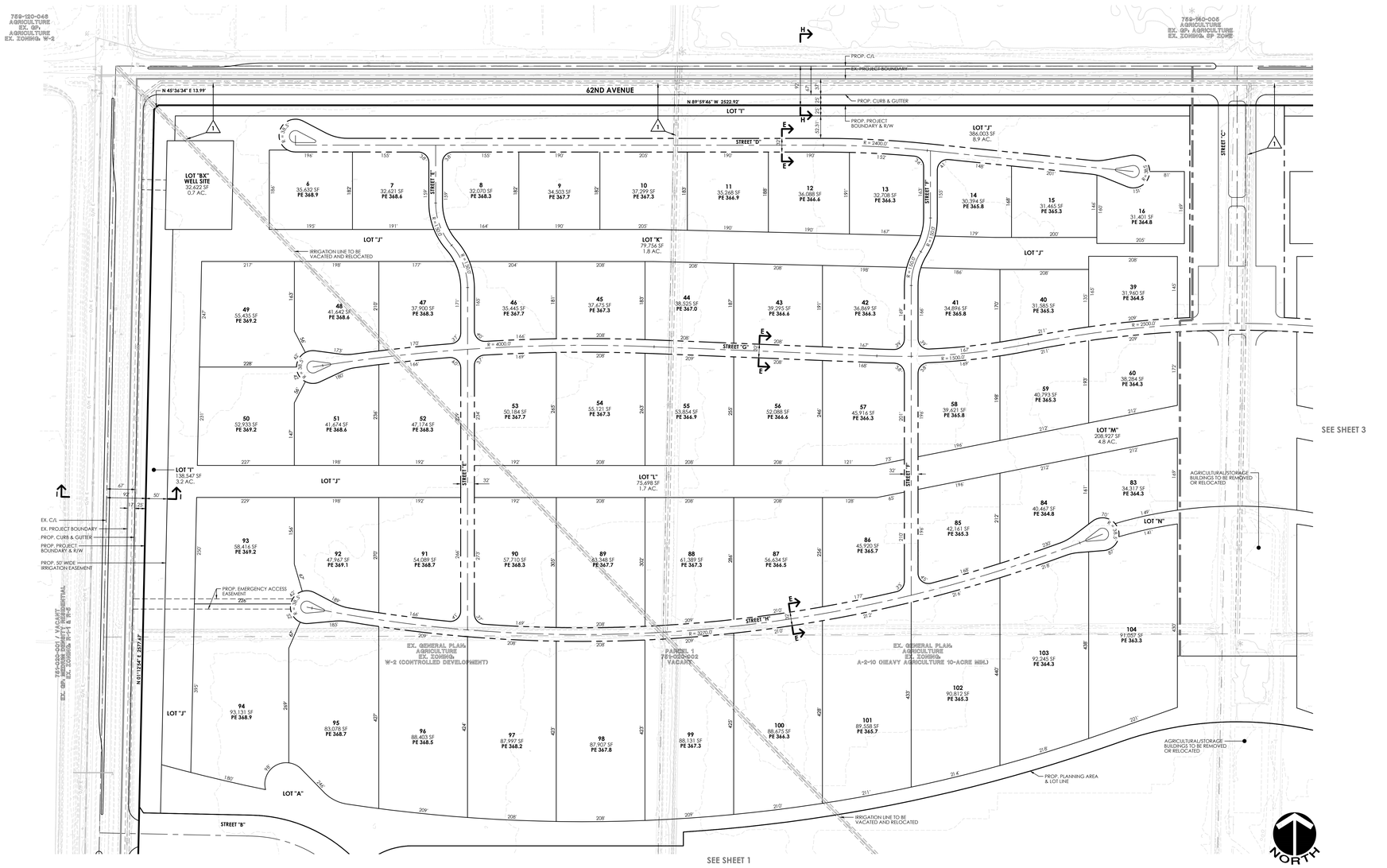
TENTATIVE TRACT MAP NO. 38578

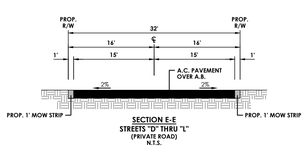
SCHEDULE A SUBDIVISION

EXHIBIT DATE: FEBRUARY 16, 2023

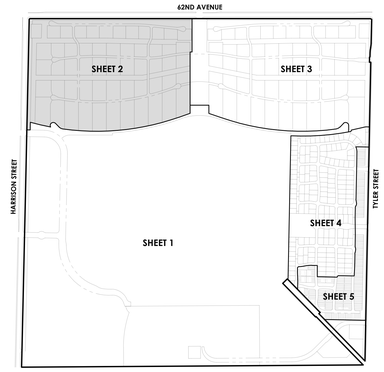
REVISIONS

NO.	DATE	DESCRIPTION





SECTION E-E
STREETS "D" THRU "L"
(PRIVATE ROAD)
N.T.S.



KEY TO MAP SHEETS
SCALE: 1" = 800'

NORTH

0' 100' 200' 300' 400'
SCALE 1"=100'

ABBREVIATIONS

(E)	EAST	NO.	NUMBER
(N)	NORTH	N.T.S.	NOT TO SCALE
(S)	SOUTH	O/H	OVERHEAD
(W)	WEST	OS/PP	OPEN SPACE / PARKS
A.C.	ASPHALT CONCRETE	PE	PAD ELEVATION
AC.	ACREAGE	PG.	PAGE
APN	ASSESSORS PARCEL NUMBER	P/L	PROPERTY LINE
BNDRY	BOUNDARY	PROP.	PROPOSED
C/L	CENTERLINE	P.U.E.	PUBLIC UTILITY EASEMENT
C&G	CURB AND GUTTER	R	RADIUS
E/P	EDGE OF PAVEMENT	R-L	LOW DENSITY (RESIDENTIAL)
ESMT.	EASEMENT	R/W	RIGHT OF WAY
EX.	EXISTING	SF	SQUARE FEET
MAX.	MAXIMUM	STD.	STANDARD
M.B.	MAP BOOK	TYP.	TYPICAL
MIN.	MINIMUM	UG	UNDERGROUND

LEGEND

679.3 EXISTING SPOT ELEVATIONS
EXISTING CONTOURS
EXISTING EASEMENT DELTA
EXISTING CABLE
EXISTING IRRIGATION DRAIN LINE
EXISTING EASEMENT
EXISTING ELECTRIC
EXISTING GAS
EXISTING IRRIGATION
EXISTING LOT LINE
EXISTING EDGE OF PAVEMENT
EXISTING TELEPHONE
EXISTING OVERHEAD TELEPHONE
EXISTING RIGHT OF WAY
EXISTING SEWER
EXISTING SEWER FORCE MAIN
EXISTING WATER
TENTATIVE TRACT MAP BOUNDARY
PROPOSED AND EXISTING CENTER LINE
PROPOSED CURB
PROPOSED EASEMENT
PROPOSED LOT LINE
PROPOSED RIGHT OF WAY

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THE UNINCORPORATED AREA IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

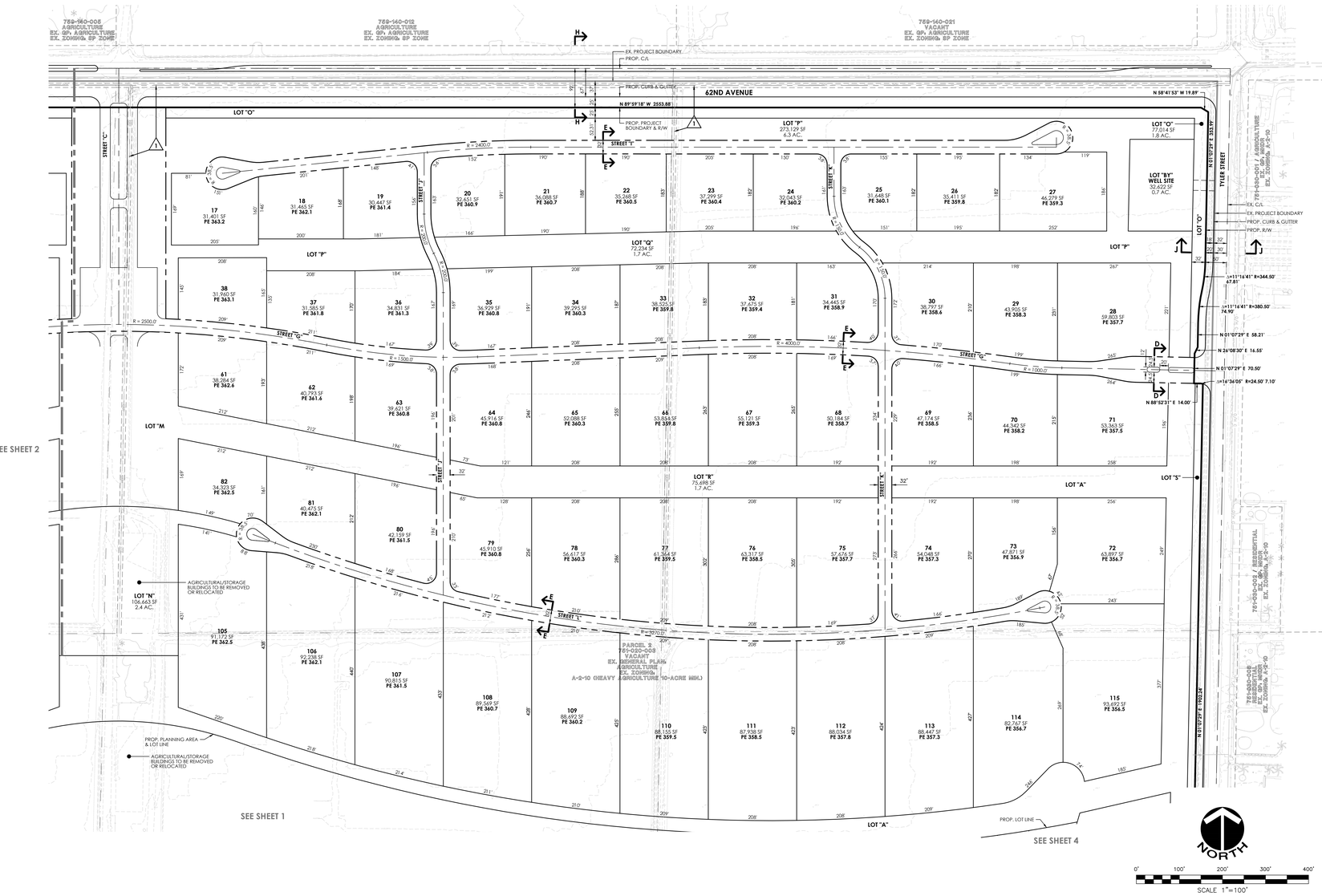
TENTATIVE TRACT MAP NO. 38578

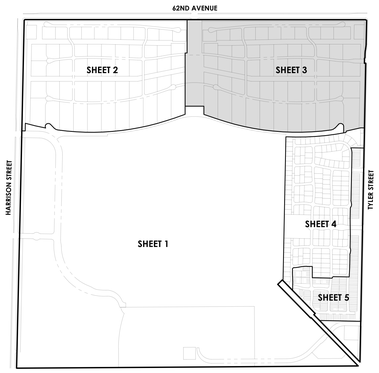
SCHEDULE A SUBDIVISION

EXHIBIT DATE: FEBRUARY 16, 2023

REVISIONS

NO.	DATE	DESCRIPTION

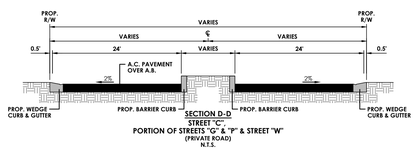




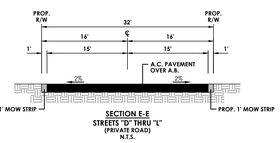
KEY TO MAP SHEETS
SCALE: 1" = 800'

NORTH

0' 100' 200' 300' 400'
SCALE 1"=100'



SECTION D-D
STREET "C",
PORTION OF STREETS "G" & "P" & STREET "W"
(PRIVATE ROAD)
N.T.S.



SECTION E-E
STREETS "D" THRU "L"
(PRIVATE ROAD)
N.T.S.

ABBREVIATIONS

(E)	EAST	NO.	NUMBER
(N)	NORTH	N.T.S.	NOT TO SCALE
(S)	SOUTH	O/H	OVERHEAD
(W)	WEST	OS/PP	OPEN SPACE / PARKS
A.C.	ASPHALT CONCRETE	PE	PAD ELEVATION
AC	ACREAGE	PG.	PAGE
APN	ASSESSORS PARCEL NUMBER	P/L	PROPERTY LINE
BNDRY	BOUNDARY	PROP.	PROPOSED
C/L	CENTERLINE	P.U.E.	PUBLIC UTILITY EASEMENT
C&G	CURB AND GUTTER	R	RADIUS
E/P	EDGE OF PAVEMENT	R-L	LOW DENSITY (RESIDENTIAL)
ESMT.	EASEMENT	R/W	RIGHT OF WAY
EX.	EXISTING	SF	SQUARE FEET
MAX.	MAXIMUM	STD.	STANDARD
M.B.	MAP BOOK	TYP.	TYPICAL
MIN.	MINIMUM	UG	UNDERGROUND

LEGEND

679.3	EXISTING SPOT ELEVATIONS
	EXISTING CONTOURS
A	EXISTING EASEMENT DELTA
C	EXISTING CABLE
DRN	EXISTING IRRIGATION DRAIN LINE
	EXISTING EASEMENT
E	EXISTING ELECTRIC
G	EXISTING GAS
IRR	EXISTING IRRIGATION
	EXISTING LOT LINE
	EXISTING EDGE OF PAVEMENT
T	EXISTING TELEPHONE
O/H T	EXISTING OVERHEAD TELEPHONE
R/W	EXISTING RIGHT OF WAY
S	EXISTING SEWER
FM	EXISTING SEWER FORCE MAIN
W	EXISTING WATER
	TENTATIVE TRACT MAP BOUNDARY
	PROPOSED AND EXISTING CENTER LINE
	PROPOSED CURB
	PROPOSED EASEMENT
	PROPOSED LOT LINE
	PROPOSED RIGHT OF WAY

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THE UNINCORPORATED AREA IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

TENTATIVE TRACT MAP NO. 38578

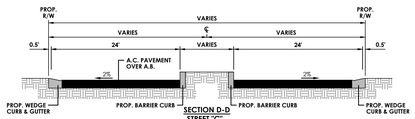
SCHEDULE A SUBDIVISION

EXHIBIT DATE: FEBRUARY 16, 2023

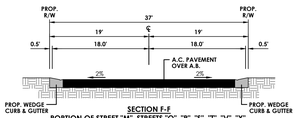
REVISIONS

NO.	DATE	DESCRIPTION

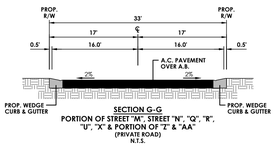
KEY TO MAP SHEETS
SCALE: 1" = 800'



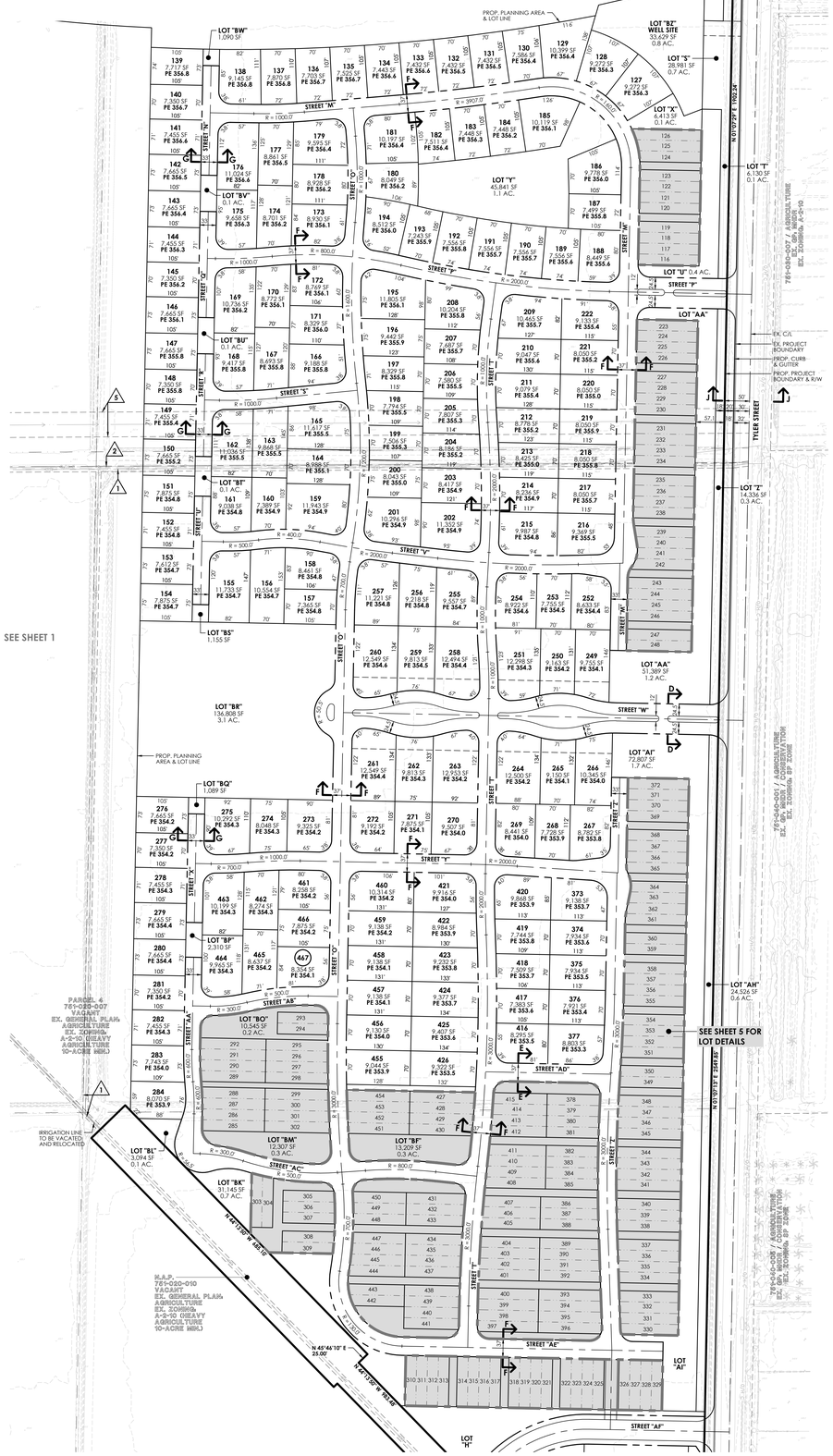
SECTION D-D
STREET "C"
PORTION OF STREETS "G" & "P" & STREET "W"
(PRIVATE ROAD)
N.T.S.



SECTION F-F
PORTION OF STREET "AF", STREETS "O", "P", "S", "T", "V", "Y", PORTION OF "Z", & "AA", STREET "AB", "AC", "AD", & "AE"
(PRIVATE ROAD)
N.T.S.



SECTION G-G
PORTION OF STREET "M", STREET "N", "Q", "R", "U", "X" & PORTION OF "Z" & "AA"
(PRIVATE ROAD)
N.T.S.



ABBREVIATIONS

(E)	EAST	NO.	NUMBER
(N)	NORTH	N.T.S.	NOT TO SCALE
(S)	SOUTH	O/H	OVERHEAD
(W)	WEST	OS/PP	OPEN SPACE / PARKS
A.C.	ASPHALT CONCRETE	PE	PAD ELEVATION
AC.	ACREAGE	PG.	PAGE
APN	ASSESSORS PARCEL NUMBER	P/L	PROPERTY LINE
BNDRY	BOUNDARY	PROP.	PROPOSED
C/L	CENTERLINE	P.U.E.	PUBLIC UTILITY EASEMENT
C&G	CURB AND GUTTER	R	RADIUS
E/P	EDGE OF PAVEMENT	R-L	LOW DENSITY (RESIDENTIAL)
ESMT.	EASEMENT	R/W	RIGHT OF WAY
EX.	EXISTING	SF	SQUARE FEET
MAX.	MAXIMUM	STD.	STANDARD
M.B.	MAP BOOK	TYP.	TYPICAL
MIN.	MINIMUM	UG	UNDERGROUND

LEGEND

- 679.3 EXISTING SPOT ELEVATIONS
- EXISTING CONTOURS
- EXISTING EASEMENT DELTA
- E EXISTING CABLE
- DRN EXISTING IRRIGATION DRAIN LINE
- EXISTING EASEMENT
- E EXISTING ELECTRIC
- G EXISTING GAS
- IRR EXISTING IRRIGATION
- EXISTING LOT LINE
- EXISTING EDGE OF PAVEMENT
- T EXISTING TELEPHONE
- O/H T EXISTING OVERHEAD TELEPHONE
- R/W EXISTING RIGHT OF WAY
- S EXISTING SEWER
- FM EXISTING SEWER FORCE MAIN
- W EXISTING WATER
- TENTATIVE TRACT MAP BOUNDARY
- PROPOSED AND EXISTING CENTER LINE
- PROPOSED CURB
- PROPOSED EASEMENT
- PROPOSED LOT LINE
- PROPOSED RIGHT OF WAY

NORTH
0' 100' 200' 300' 400'
SCALE 1"=100'

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THE UNINCORPORATED AREA IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

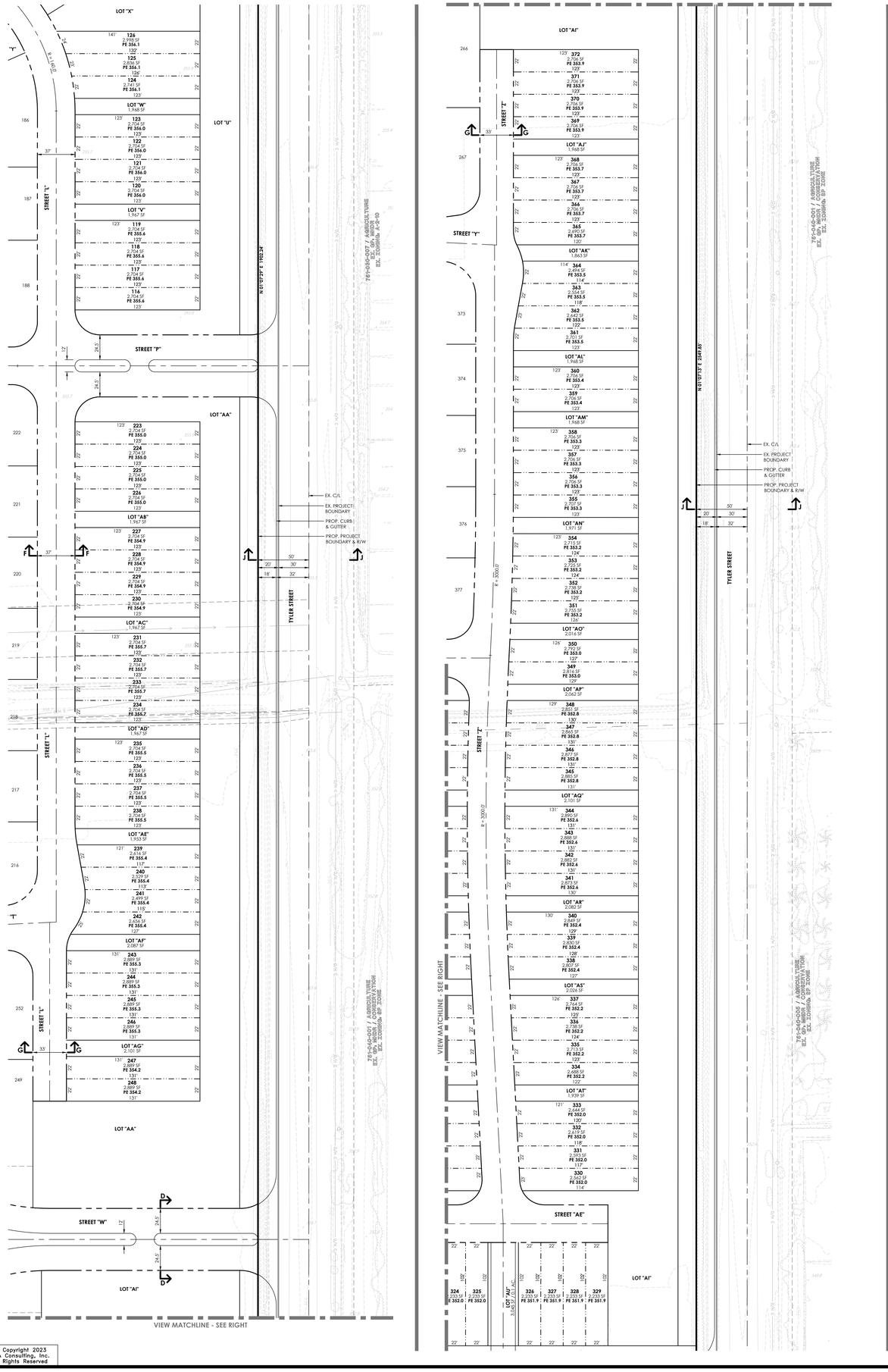
TENTATIVE TRACT MAP NO. 38578

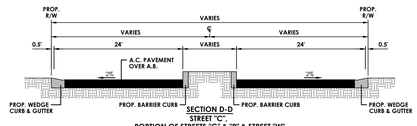
SCHEDULE A SUBDIVISION

EXHIBIT DATE: FEBRUARY 16, 2023

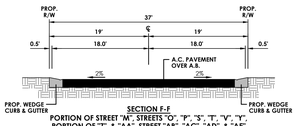
REVISIONS

NO.	DATE	DESCRIPTION

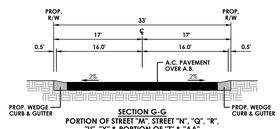




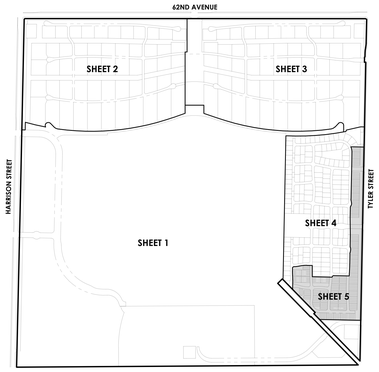
SECTION D-D
STREET "C",
PORTION OF STREETS "G" & "P" & STREET "W"
(PRIVATE ROAD)
N.T.S.



SECTION F-F
PORTION OF STREET "M", STREETS "O", "P", "S", "T", "V", "Y", PORTION OF "Z", & "AA", STREET "AB", "AC", "AD", & "AE"
(PRIVATE ROAD)
N.T.S.



SECTION G-G
PORTION OF STREET "M", STREET "N", "Q", "R", "U", "X" & PORTION OF "Z" & "AA"
(PRIVATE ROAD)
N.T.S.



KEY TO MAP SHEETS

SCALE: 1" = 800'

ABBREVIATIONS

(E)	EAST
(N)	NORTH
(S)	SOUTH
(W)	WEST
A.C.	ASPHALT CONCRETE
AC	ACREAGE
APN	ASSESSORS PARCEL NUMBER
BNDRY	BOUNDARY
C/L	CENTERLINE
C&G	CURB AND GUTTER
E/P	EDGE OF PAVEMENT
ESMT.	EASEMENT
EX.	EXISTING
MAX.	MAXIMUM
M.B.	MAP BOOK
MIN.	MINIMUM
NO.	NUMBER
N.T.S.	NOT TO SCALE
O/H	OVERHEAD
OS/PP	OPEN SPACE / PARKS
PE	PAD ELEVATION
PG.	PAGE
P/L	PROPERTY LINE
PROP.	PROPOSED
P.U.E.	PUBLIC UTILITY EASEMENT
R	RADIUS
R-L	LOW DENSITY (RESIDENTIAL)
R/W	RIGHT OF WAY
SF	SQUARE FEET
STD.	STANDARD
TYP.	TYPICAL
UG	UNDERGROUND

LEGEND

679.3	EXISTING SPOT ELEVATIONS
	EXISTING CONTOURS
4	EXISTING EASEMENT DELTA
C	EXISTING CABLE
DRN	EXISTING IRRIGATION DRAIN LINE
E	EXISTING EASEMENT
E	EXISTING ELECTRIC
G	EXISTING GAS
IRR	EXISTING IRRIGATION
	EXISTING LOT LINE
	EXISTING EDGE OF PAVEMENT
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DESERT EQUESTRIAN HOLDING

THERMAL RANCH

THERMAL, CALIFORNIA

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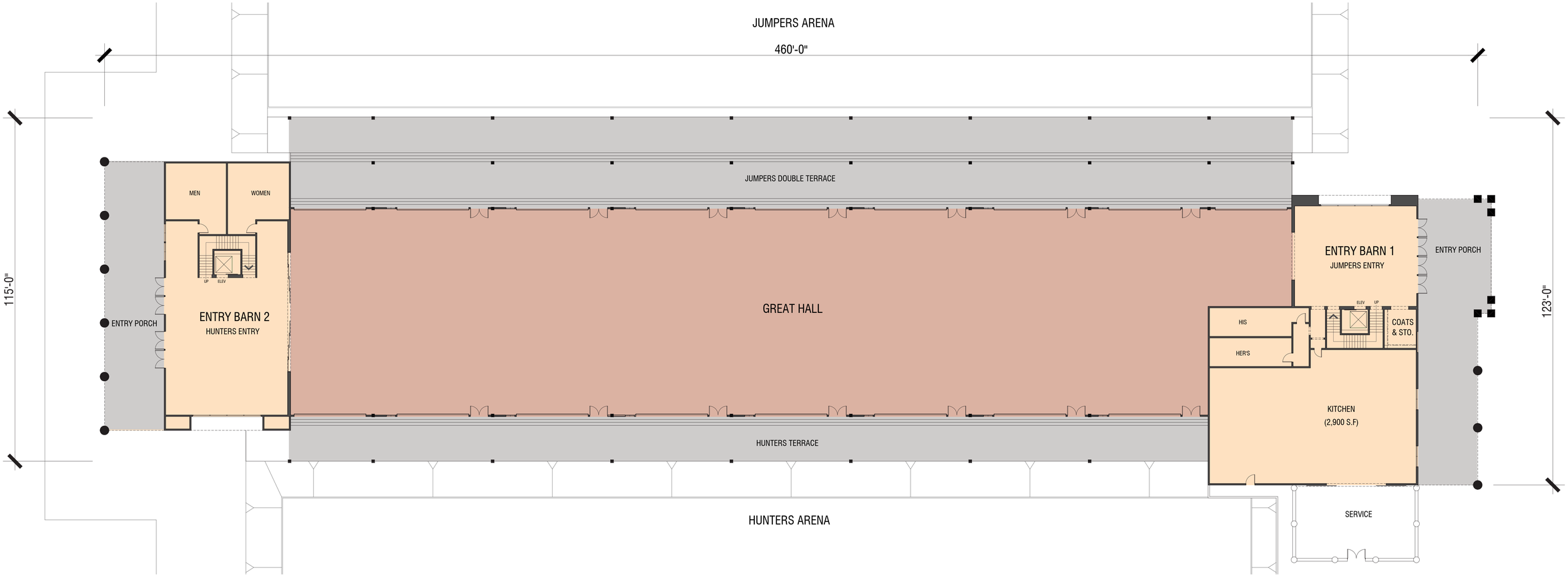
02-16-2023



HUNTERS	ENTRY BARN 2
FIRST LEVEL	3698 SQ. FT.
SECOND LEVEL	3452 SQ. FT.
TOTAL	7150 SQ. FT.
ENTRY PORCH	1800 SQ. FT.
BALCONY	1800 SQ. FT.
LOGGIA	2003 SQ. FT.
SUB- TOTAL	12753 SQ. FT.

GREAT HALL	
GREAT HALL (ENCLOSED)	22441 SQ. FT.
JUMPERS TERRACE	10199 SQ. FT.
HUNTERS TERRACE	4610 SQ. FT.
SUB- TOTAL	37251 SQ. FT.

0 8 16 32

SCALE: 1/16" = 1'-0"

FIRST FLOOR PLAN

65395 SQ. FT.

JUMPERS	ENTRY BARN 1
FIRST LEVEL	5709 SQ. FT.
SECOND LEVEL	3769 SQ. FT.
TOTAL	9478 SQ. FT.
ENTRY PORCH	2089 SQ. FT.
BALCONY	1150 SQ. FT.
LOGGIA	2674 SQ. FT.
SUB- TOTAL	15391 SQ. FT.

BUILDING SUMMARY (A/C)	
ENTRY BARN 1	9478 SQ. FT.
ENTRY BARN 2	7150 SQ. FT.
GREAT HALL	22441 SQ. FT.
SUB- TOTAL	39070 SQ. FT.
BUILDING SUMMARY - OVERALL	
ENTRY BARN 1	15391 SQ. FT.
ENTRY BARN 2	12753 SQ. FT.
GREAT HALL	37251 SQ. FT.
GRAND- TOTAL	65395 SQ. FT.

GRAND VIP BARN

EQUESTRIAN CENTER AT THERMAL RANCH

THERMAL, CALIFORNIA

DESERT EQUESTRIAN HOLDING LLC

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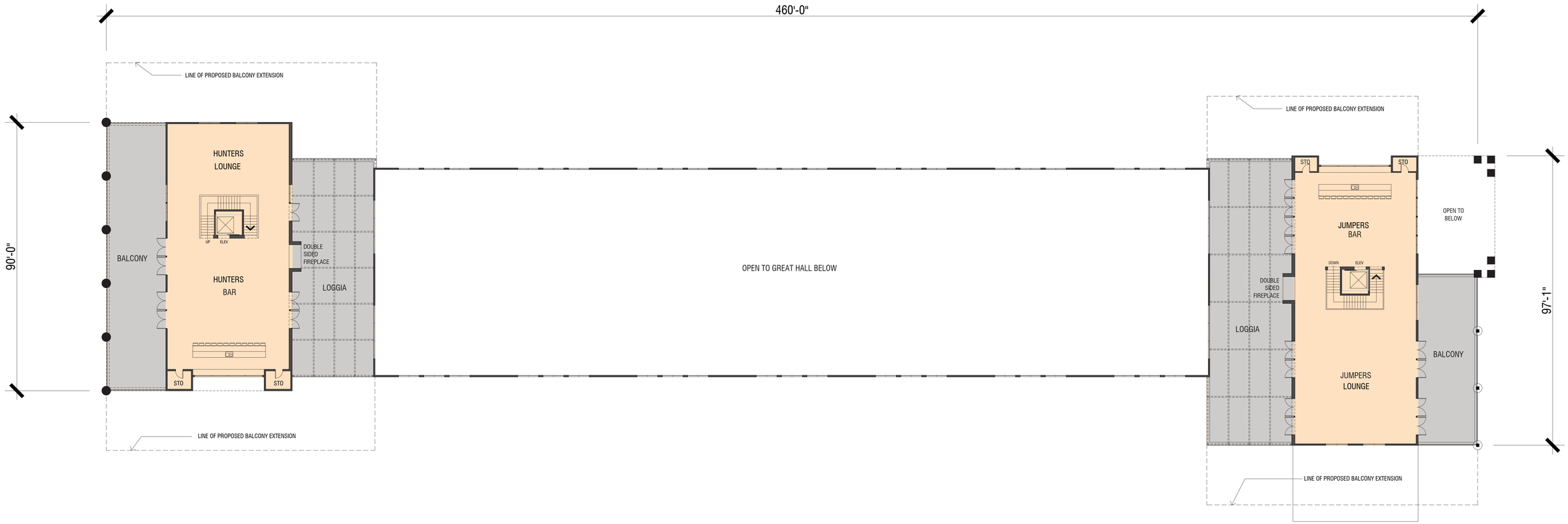

HUNTERS	ENTRY BARN 2
FIRST LEVEL	3698 SQ. FT.
SECOND LEVEL	3452 SQ. FT.
TOTAL	7150 SQ. FT.
ENTRY PORCH	1800 SQ. FT.
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GREAT HALL	
GREAT HALL (ENCLOSED)	22441 SQ. FT.
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HUNTERS TERRACE	4610 SQ. FT.
SUB- TOTAL	37251 SQ. FT.

0 8 16 32

SCALE: 1/16" = 1'-0"

SECOND FLOOR PLAN

JUMPERS	ENTRY BARN 1
FIRST LEVEL	5709 SQ. FT.
SECOND LEVEL	3769 SQ. FT.
TOTAL	9478 SQ. FT.
ENTRY PORCH	2089 SQ. FT.
BALCONY	1150 SQ. FT.
LOGGIA	2674 SQ. FT.
SUB- TOTAL	15391 SQ. FT.

BUILDING SUMMARY (A/C)	
ENTRY BARN 1	9478 SQ. FT.
ENTRY BARN 2	7150 SQ. FT.
GREAT HALL	22441 SQ. FT.
SUB- TOTAL	39070 SQ. FT.
BUILDING SUMMARY - OVERALL	
ENTRY BARN 1	15391 SQ. FT.
ENTRY BARN 2	12753 SQ. FT.
GREAT HALL	37251 SQ. FT.
GRAND- TOTAL	65395 SQ. FT.

GRAND VIP BARN

EQUESTRIAN CENTER AT THERMAL RANCH

THERMAL, CALIFORNIA

DESERT EQUESTRIAN HOLDING LLC

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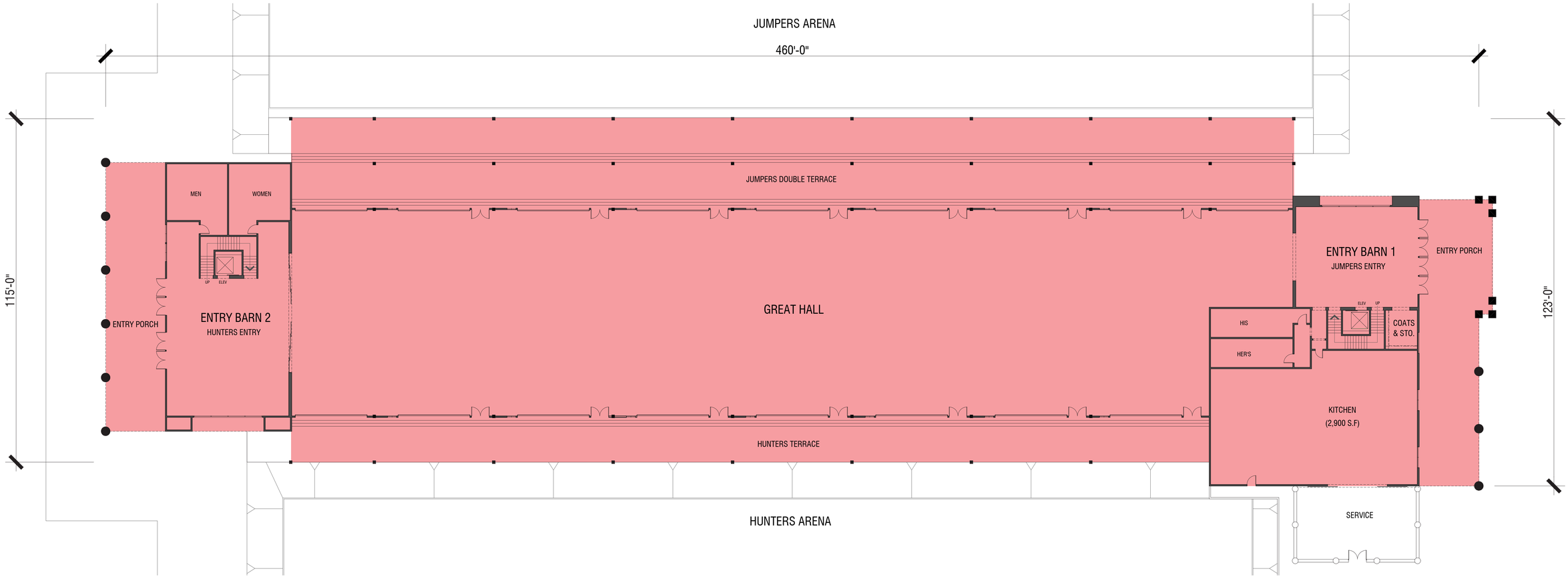

0 8 16 32

SCALE: 1/16" = 1'-0"

BUILDING FOOTPRINT = 51,620 S.F.

GRAND VIP BARN

EQUESTRIAN CENTER AT THERMAL RANCH

THERMAL, CALIFORNIA

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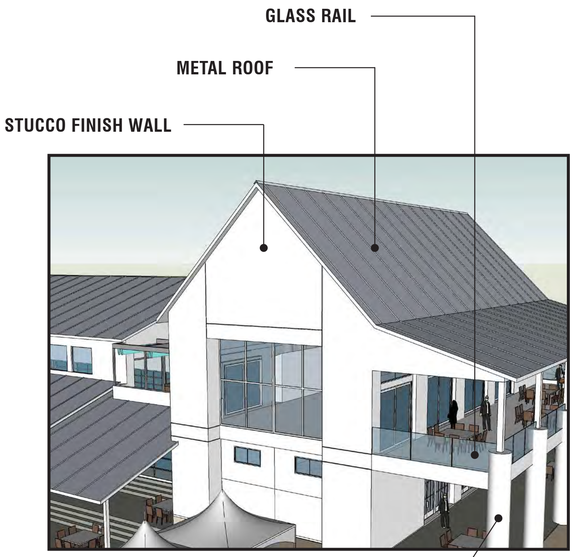
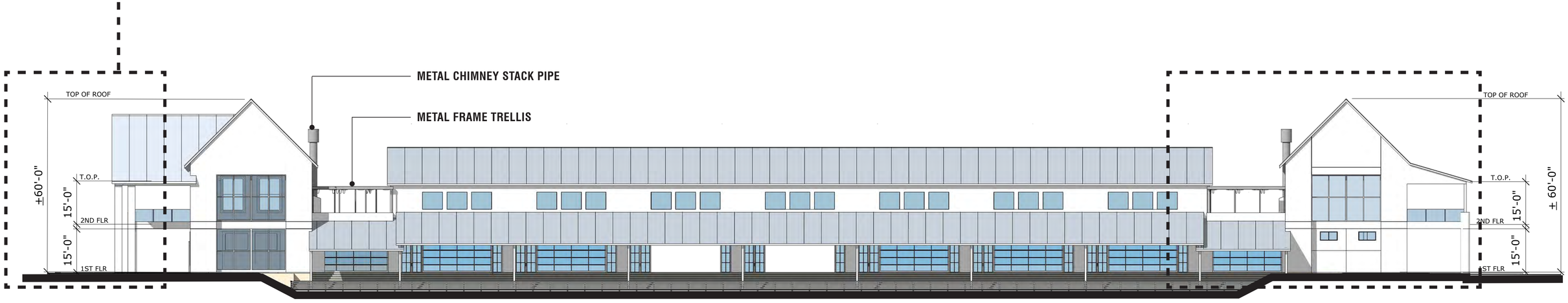
SIDE ELEVATION - ENTRY BARN 1

0 8 16 32





JUMPERS SIDE ELEVATION

0 8 16 32

GRAND VIP BARN

EQUESTRIAN CENTER AT THERMAL RANCH

THERMAL, CALIFORNIA

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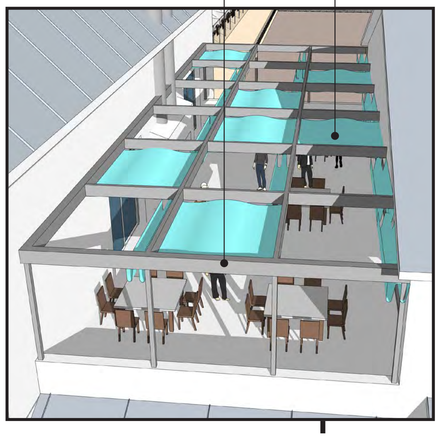
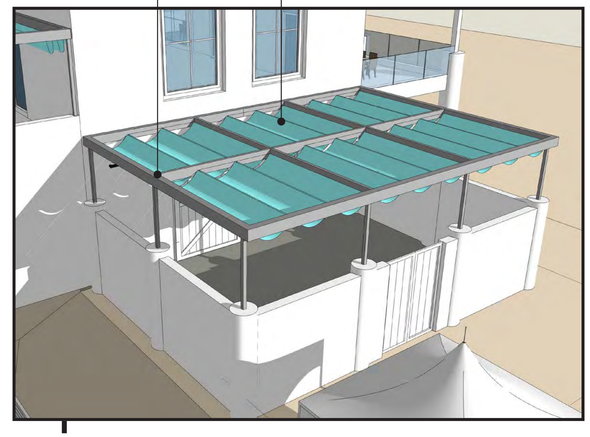


SIDE ELEVATION - ENTRY BARN 2

0 8 16 32



HUNTERS SIDE ELEVATION

0 8 16 32

GRAND VIP BARN

EQUESTRIAN CENTER AT THERMAL RANCH

THERMAL, CALIFORNIA

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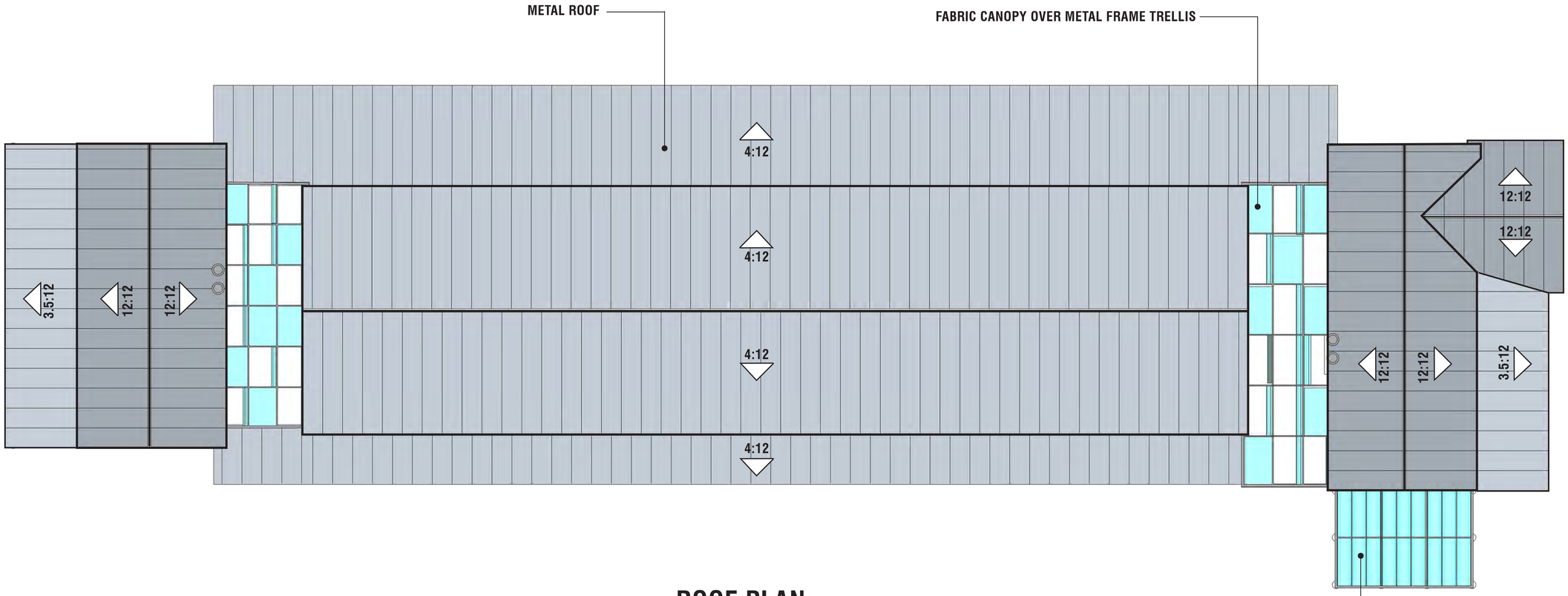

ROOF PLAN

0 8 16 32

GRAND VIP BARN

EQUESTRIAN CENTER AT THERMAL RANCH

THERMAL, CALIFORNIA

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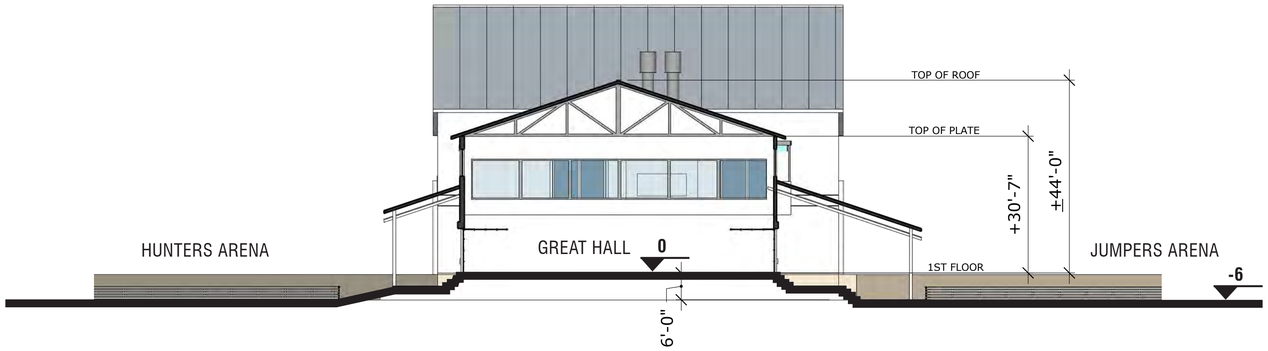
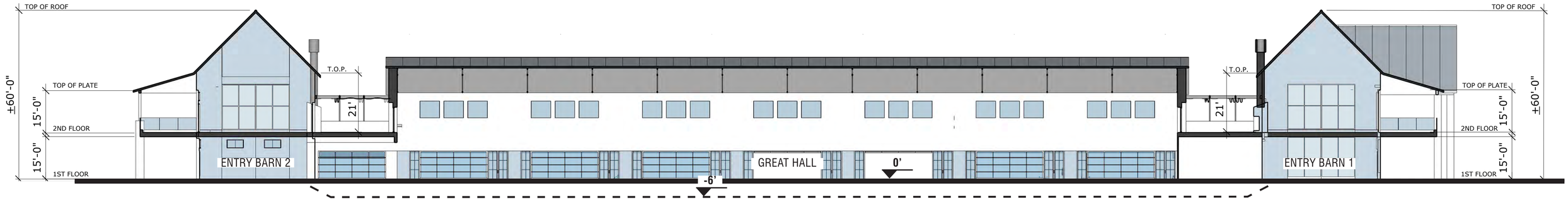


CROSS SECTION

0 8 16 32



LONGITUDINAL SECTION

0 8 16 32

GRAND VIP BARN

EQUESTRIAN CENTER AT THERMAL RANCH

THERMAL, CALIFORNIA

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PERSPECTIVE - VIEWING JUMPERS ARENA AND ENTRY BARN 2

PERSPECTIVE - VIEWING HUNTERS ARENA AND ENTRY BARN 1

GRAND VIP BARN

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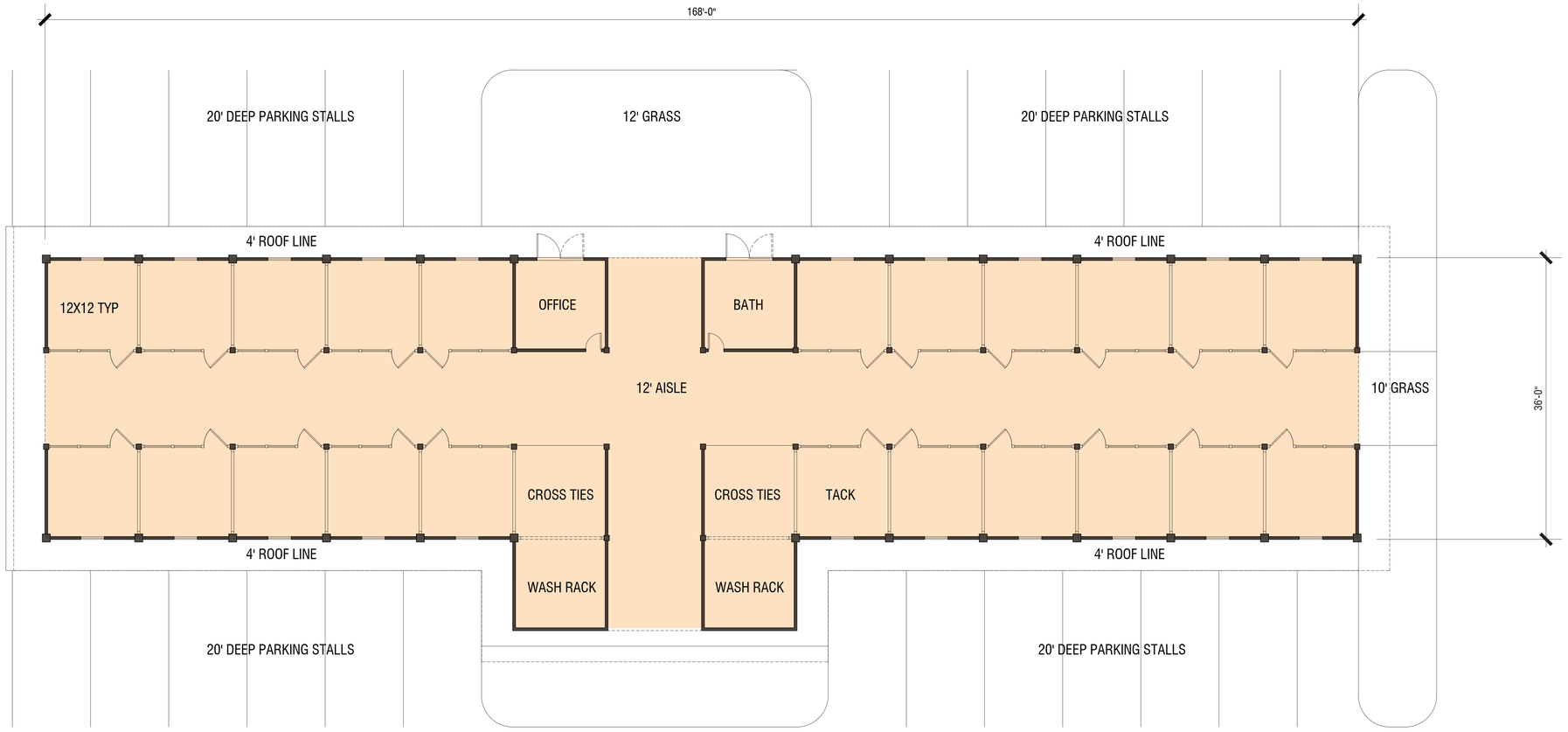

0 4 8 16

SCALE: 1/8" = 1'-0"

6472 SQ. FT.

FLOOR PLAN

PRIVATE BARN 1 (TYPICAL)

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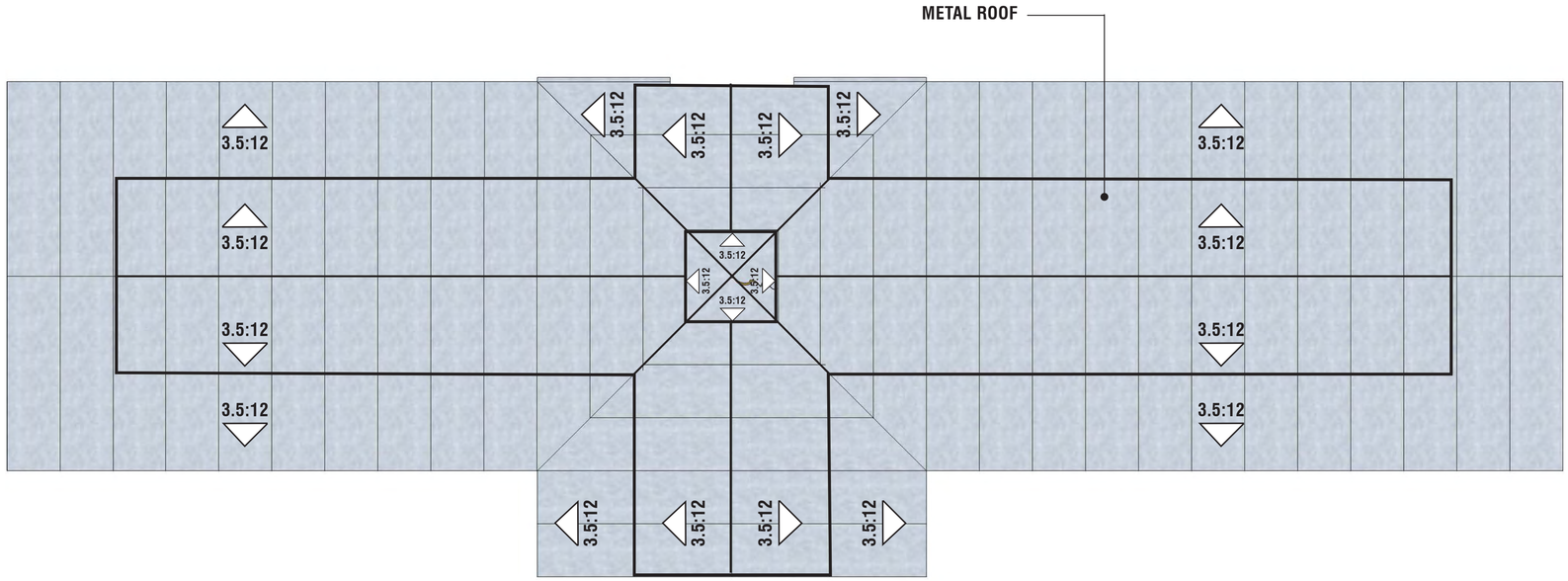
ARCHITECTS . PLANNERS . DESIGNERS

WHA.

ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO



ROOF PLAN

0 4 8 16

PRIVATE BARN 1 (TYPICAL)

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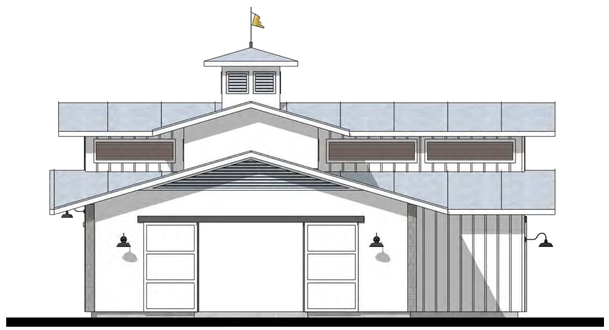
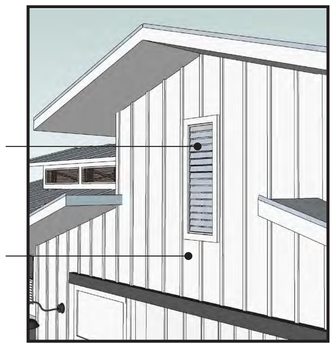
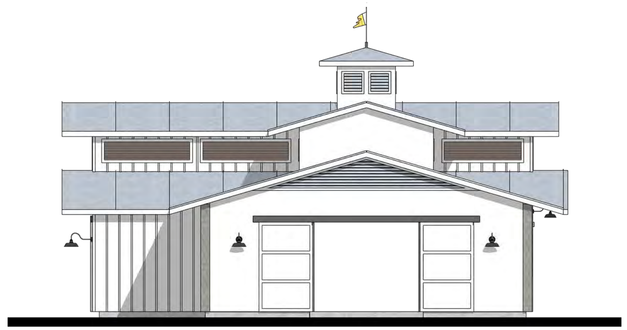


LEFT ELEVATION

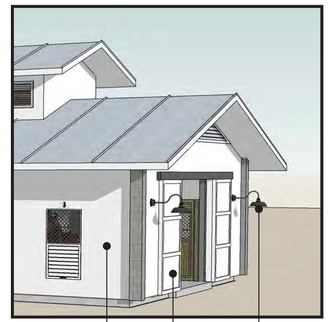
0 4 8 16

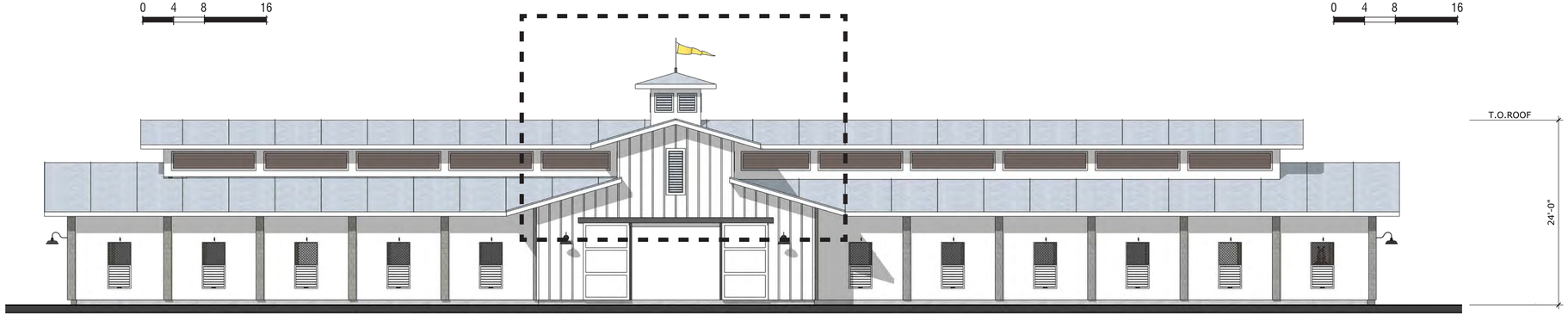




RIGHT ELEVATION

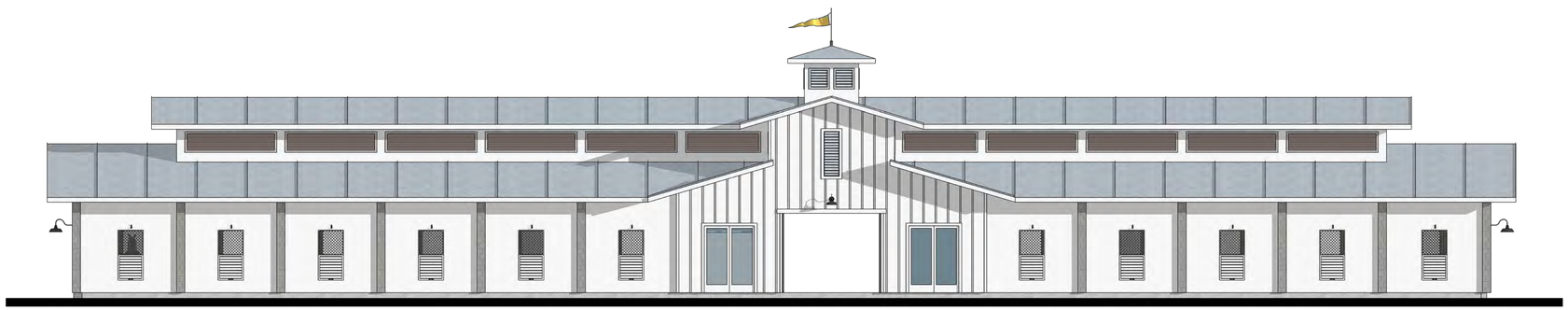
0 4 8 16





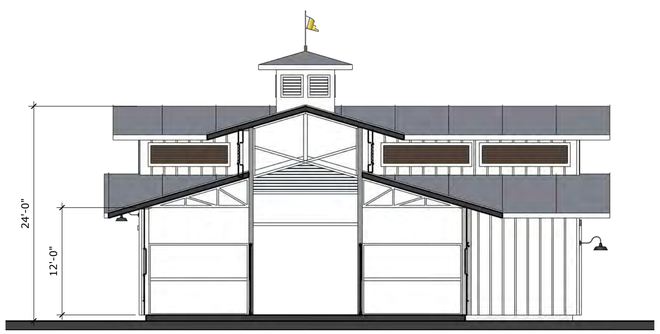
FRONT ELEVATION

0 4 8 16



REAR ELEVATION

0 4 8 16



CROSS SECTION

0 4 8 16

PRIVATE BARN 1 (TYPICAL)

DESERT EQUESTRIAN HOLDING LLC

EQUESTRIAN CENTER AT THERMAL RANCH

THERMAL, CALIFORNIA

COUNTY SUBMITTAL

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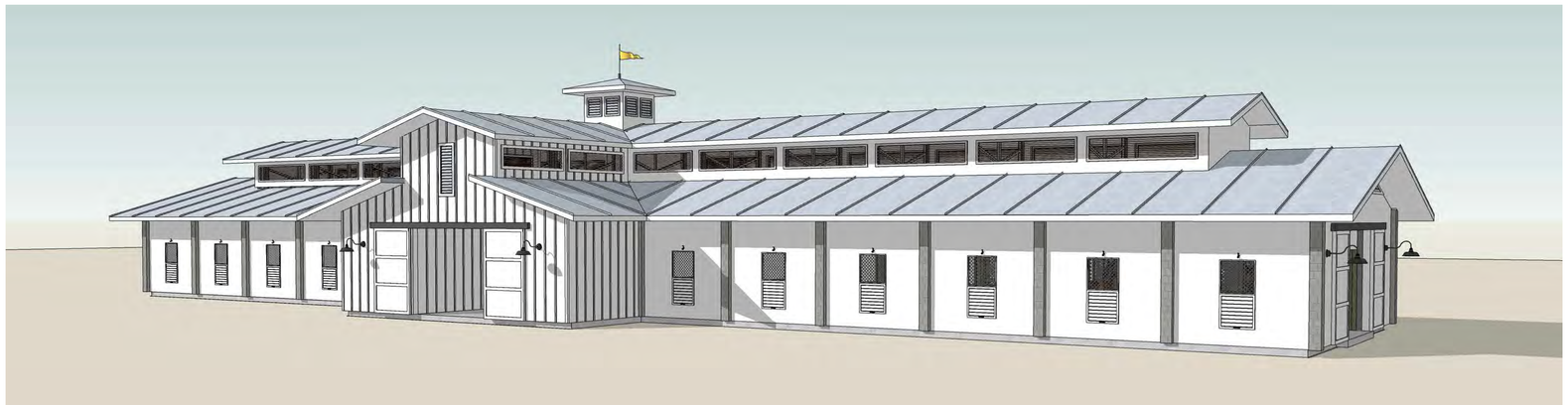
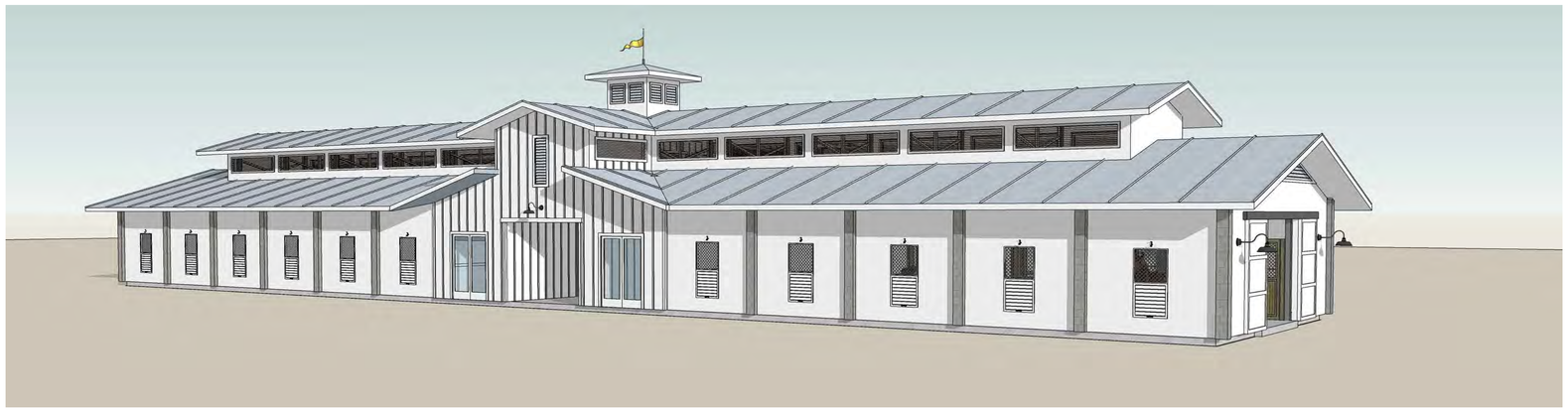
ARCHITECTS . PLANNERS . DESIGNERS
WHA.
ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO



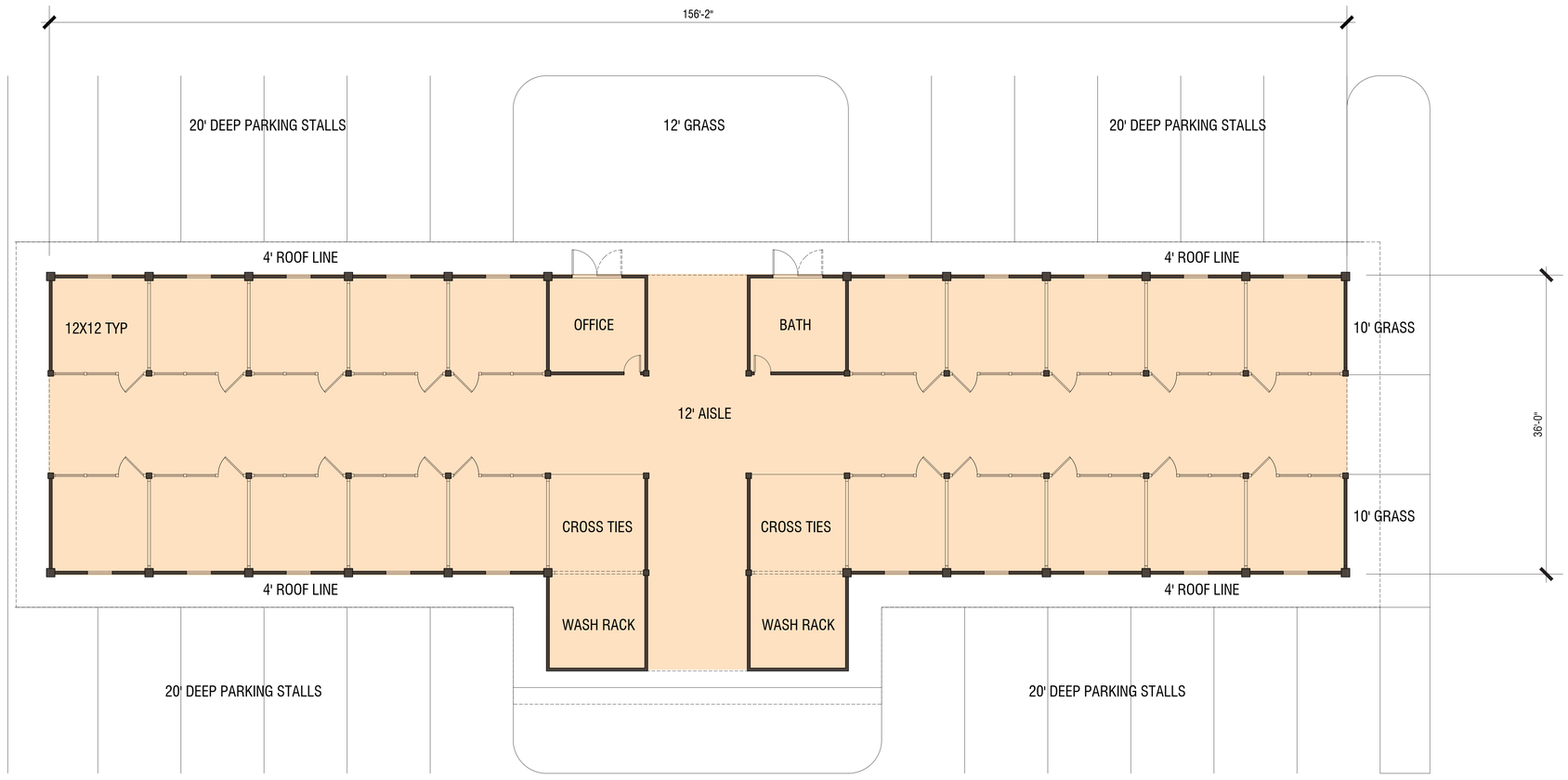
PERSPECTIVE - FRONT VIEW



PERSPECTIVE - REAR VIEW

PRIVATE BARN 1 (TYPICAL)

© 2022 WILLIAM HEZMALHALCH ARCHITECTS, INC. DBA WHA.



0 4 8 16

SCALE: 1/8" = 1'-0"

6046 SQ. FT.

FLOOR PLAN

PRIVATE BARN 2 (TYPICAL)

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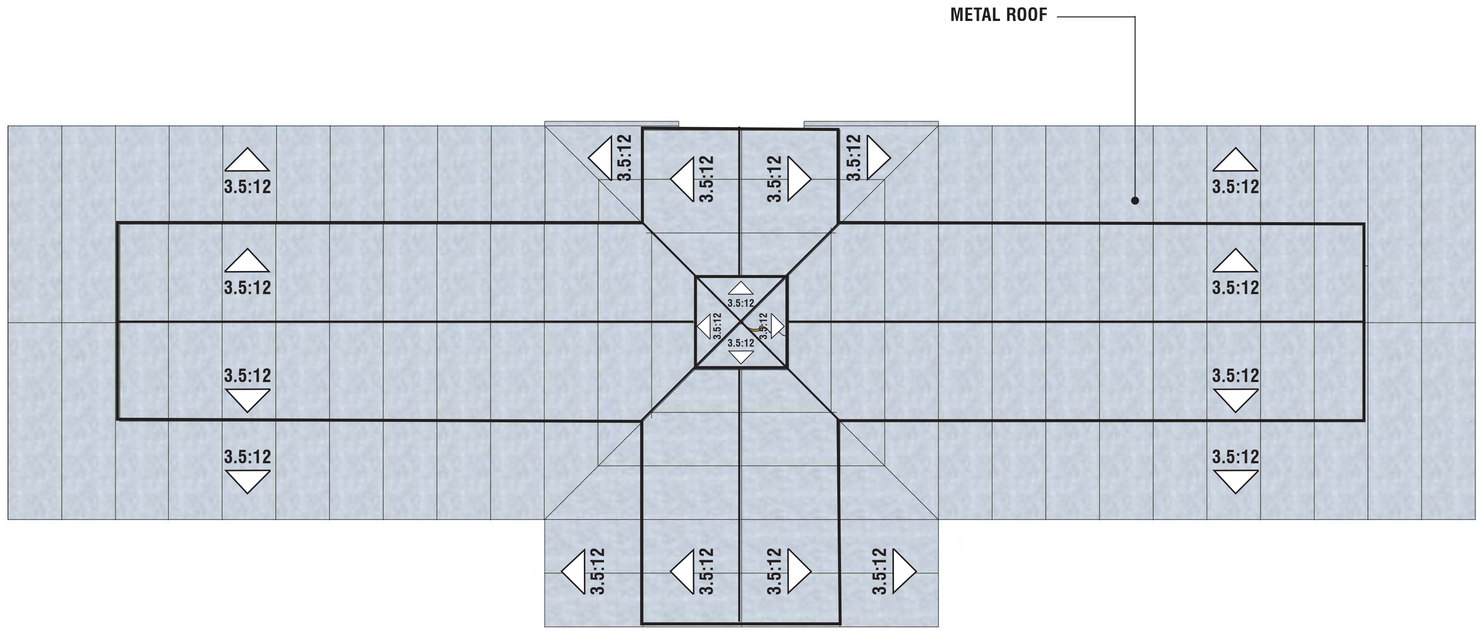
ARCHITECTS . PLANNERS . DESIGNERS

WHA.

ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO



ROOF PLAN

PRIVATE BARN 2 (TYPICAL)

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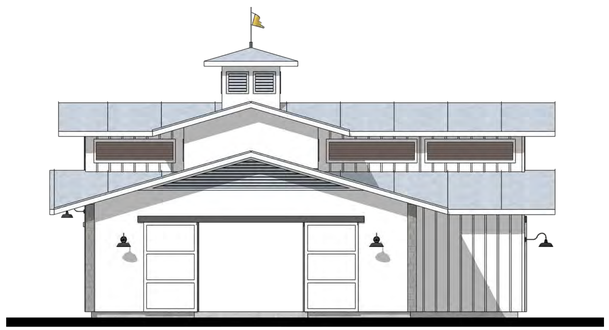
ARCHITECTS . PLANNERS . DESIGNERS

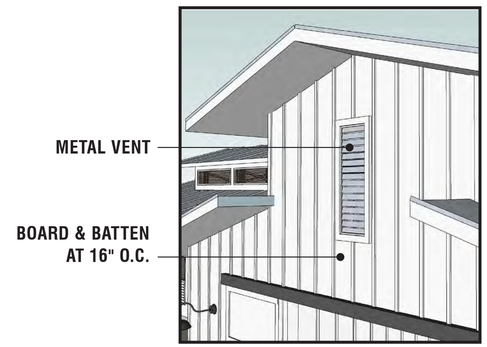
WHA.

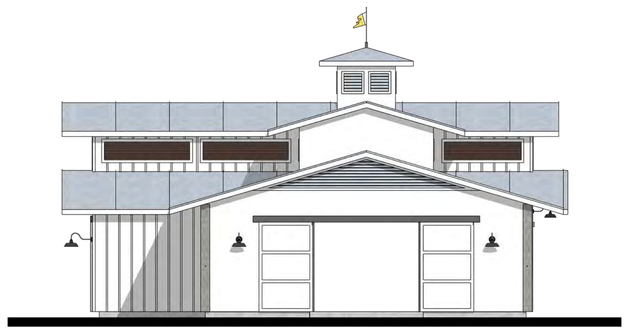
ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO



LEFT ELEVATION

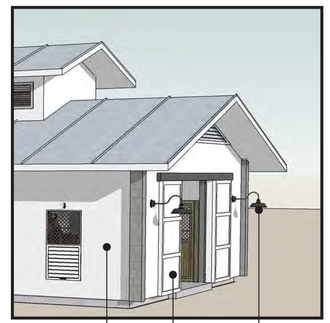
0 4 8 16

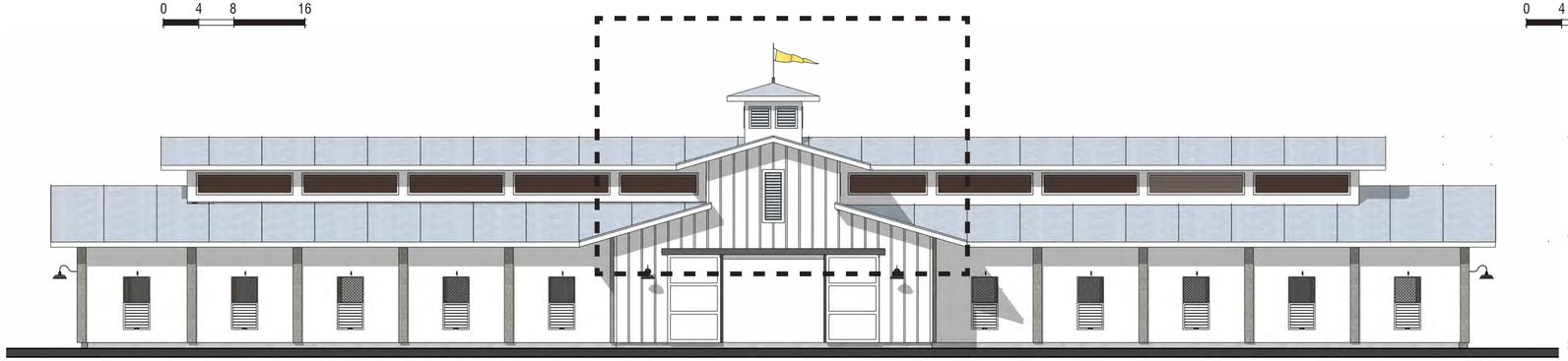




RIGHT ELEVATION

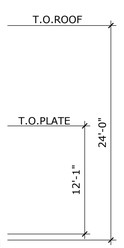
0 4 8 16

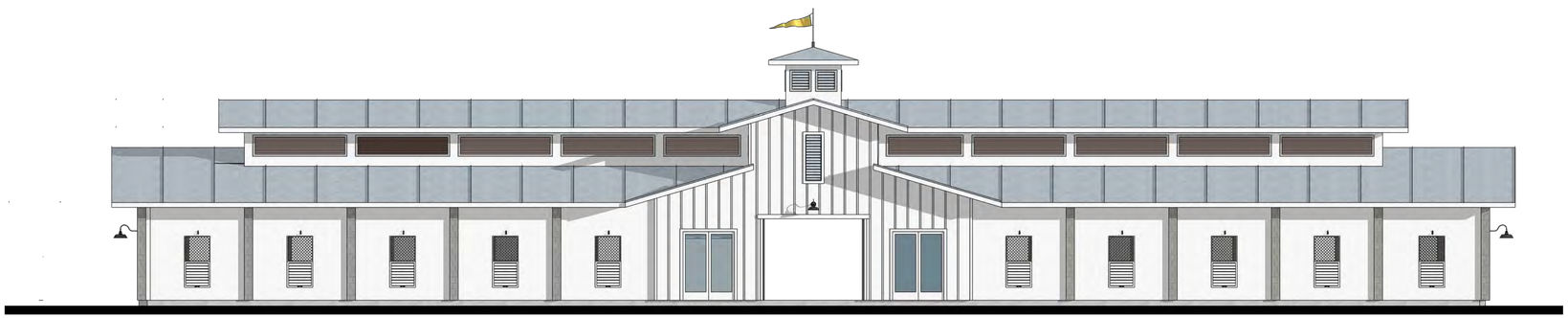




FRONT ELEVATION

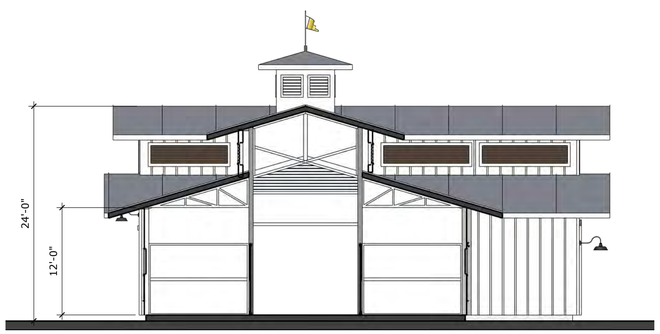
0 4 8 16





REAR ELEVATION

0 4 8 16



CROSS SECTION

PRIVATE BARN 2 (TYPICAL)

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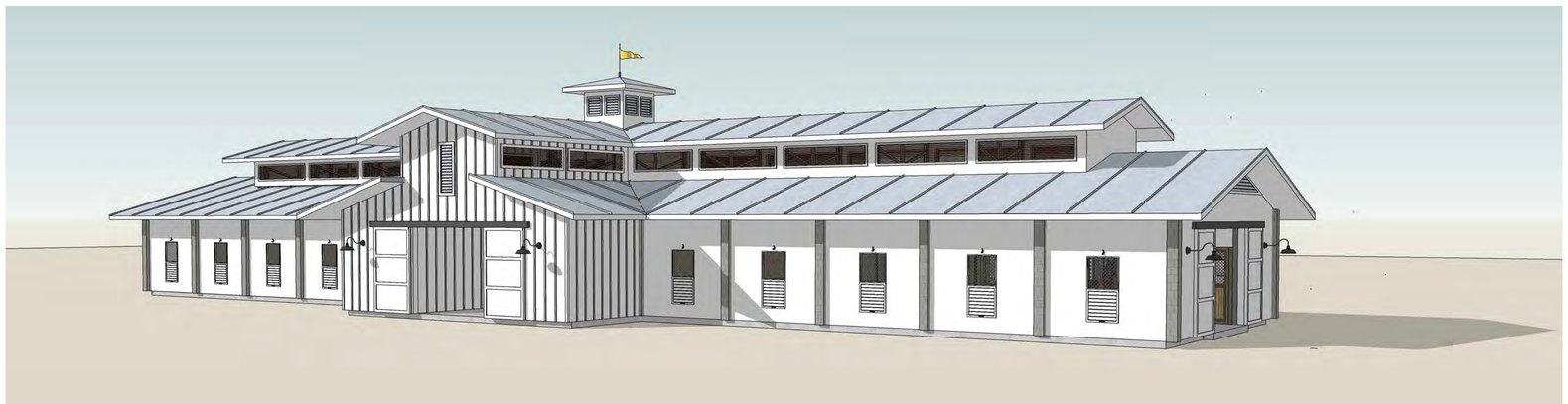
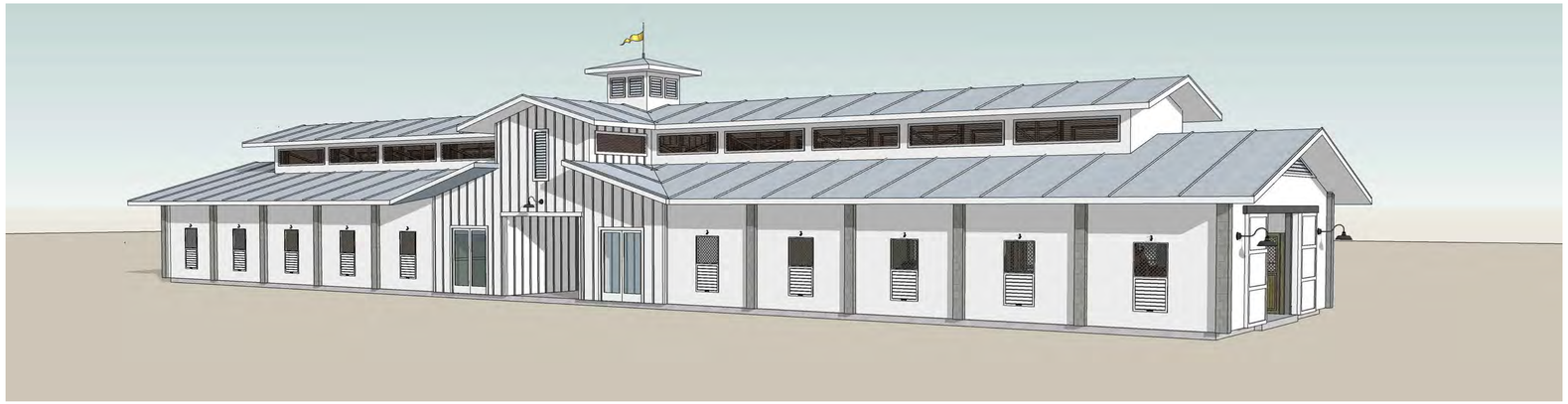


PERSPECTIVE - FRONT VIEW



PERSPECTIVE - REAR VIEW

PRIVATE BARN 2 (TYPICAL)

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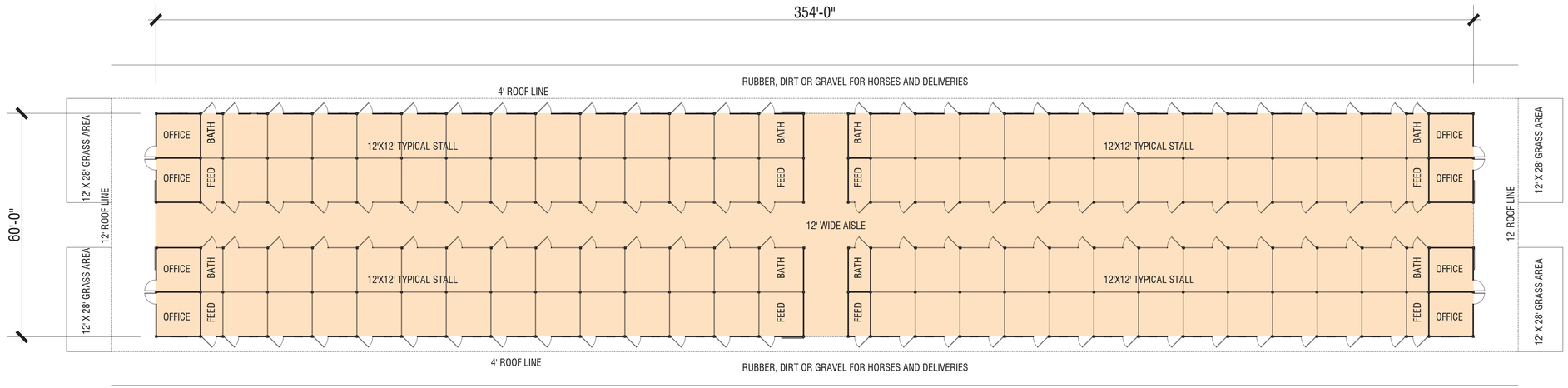
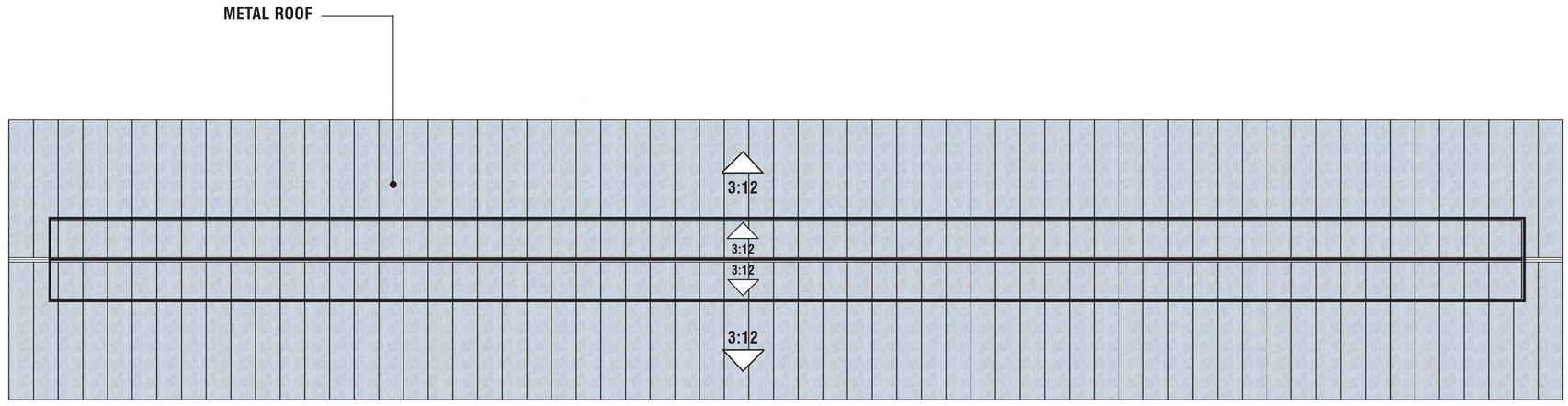


21240 SQ. FT.

FLOOR PLAN

0 8 16 32



ROOF PLAN

0 8 16 32

THE LARGE BARN (TYPICAL)

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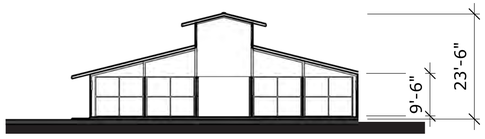
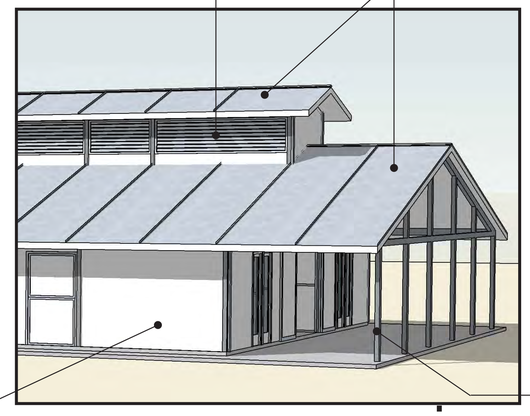


CROSS SECTION

0 8 16 32

LEFT SIDE ELEVATION

0 8 16 32



RIGHT SIDE ELEVATION

0 8 16 32

FRONT ELEVATION

0 8 16 32

REAR ELEVATION

0 8 16 32

THE LARGE BARN (TYPICAL)

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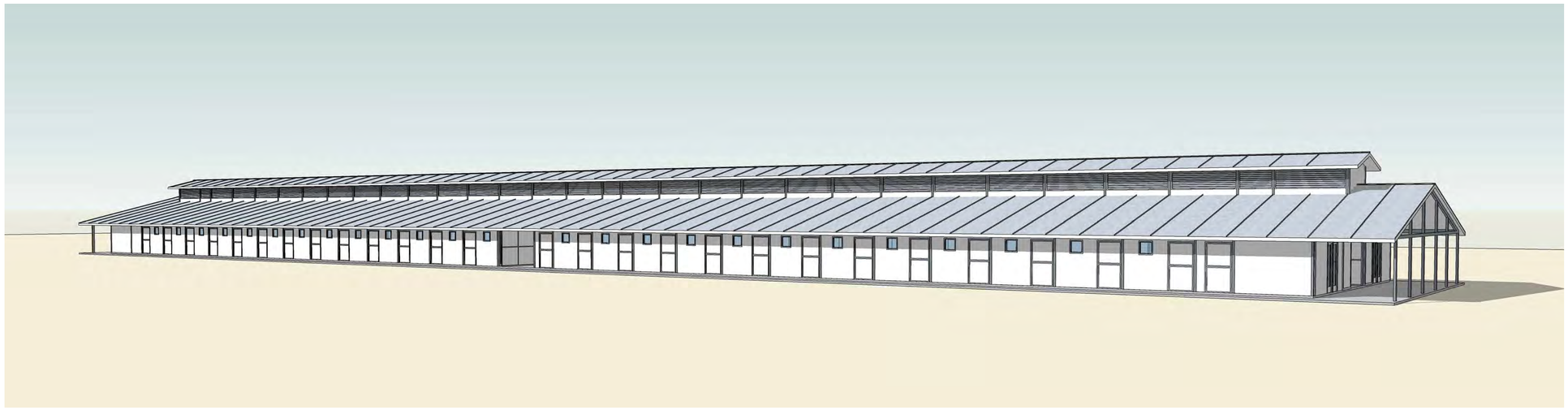
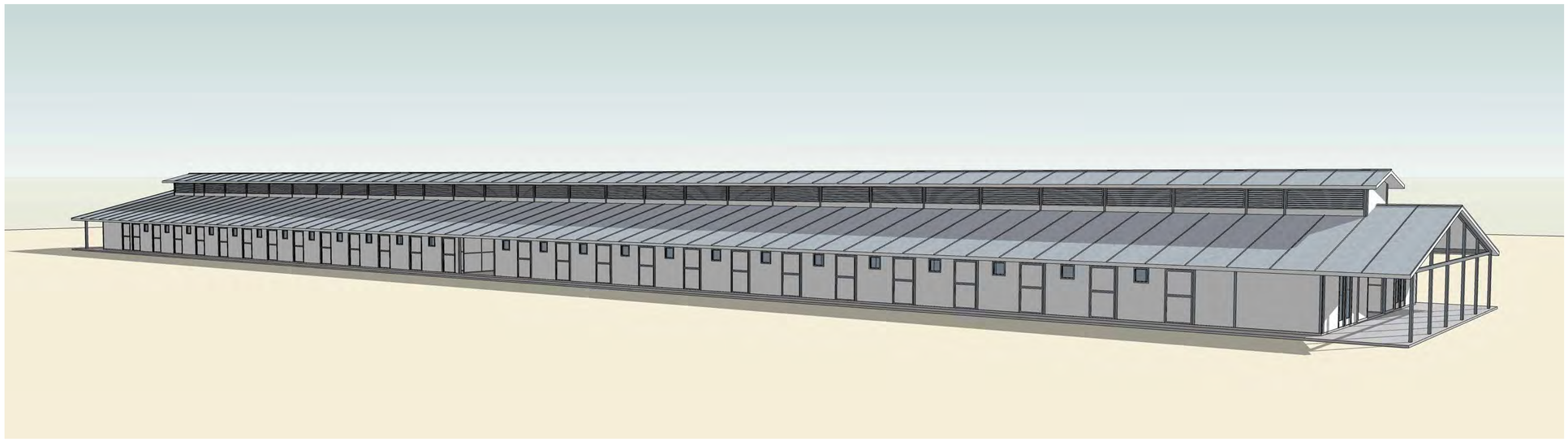


PERSPECTIVE - FRONT VIEW



PERSPECTIVE - REAR VIEW

THE LARGE BARN (TYPICAL)

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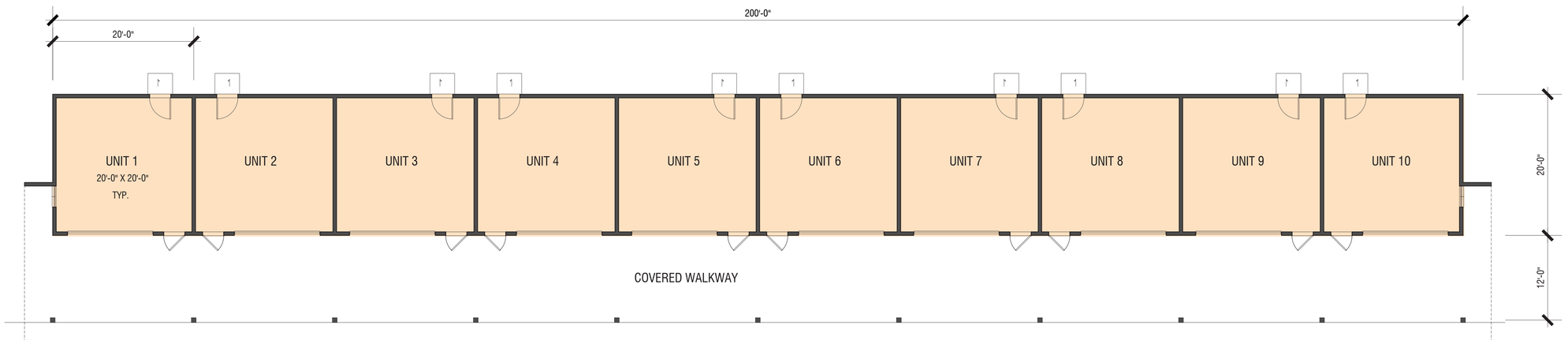
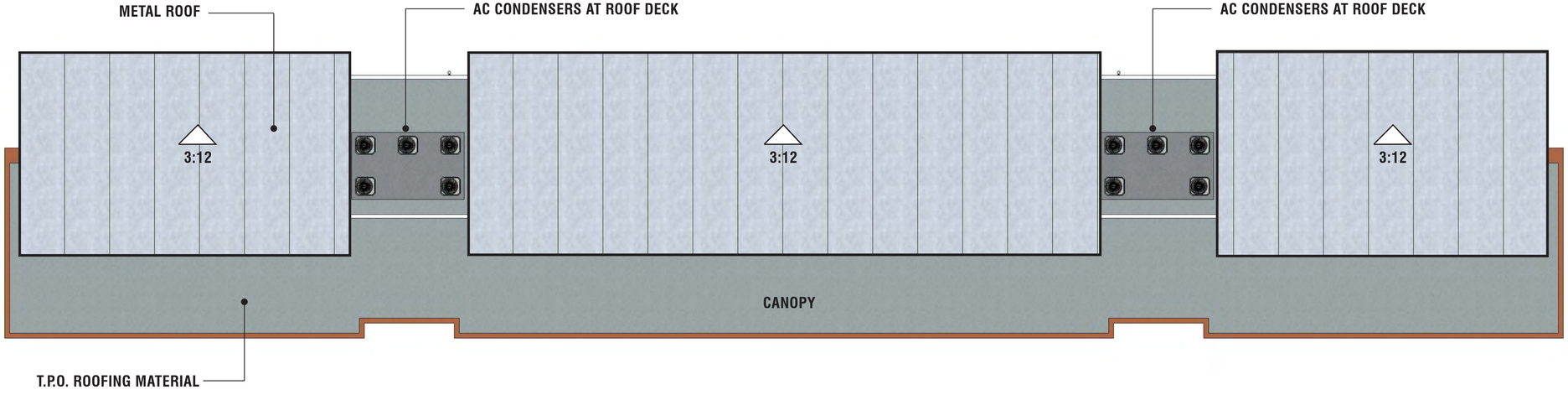


4000 SQ. FT.

FLOOR PLAN

0 4 8 16



ROOF PLAN

0 4 8 16

RETAIL BUILDING

EQUESTRIAN CENTER AT THERMAL RANCH

THERMAL, CALIFORNIA

DESERT EQUESTRIAN HOLDING LLC

COUNTY SUBMITTAL

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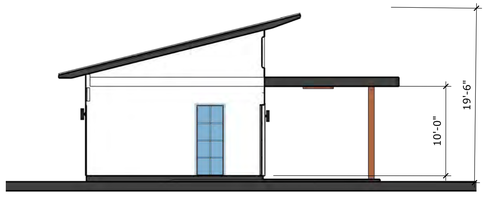
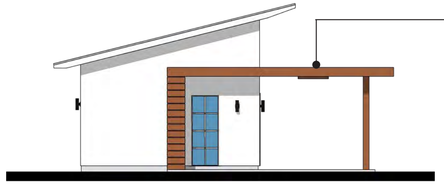
ARCHITECTS . PLANNERS . DESIGNERS
WHA.
ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO



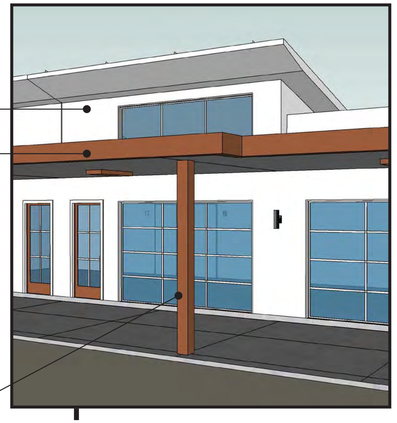
CROSS SECTION

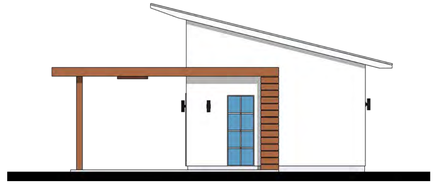
0 4 8 16



LEFT ELEVATION

0 4 8 16



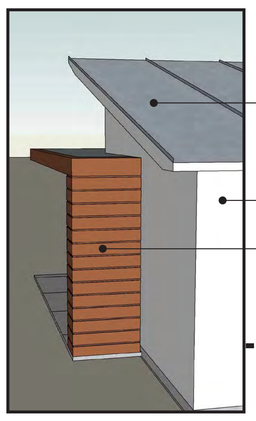


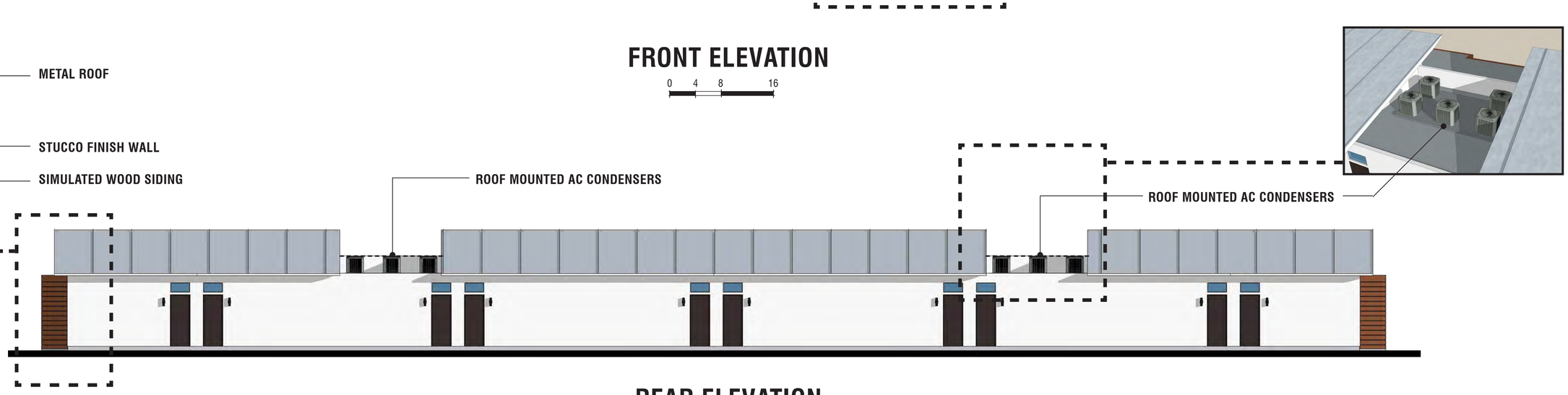
RIGHT ELEVATION

0 4 8 16

FRONT ELEVATION

0 4 8 16





REAR ELEVATION

0 4 8 16

RETAIL BUILDING

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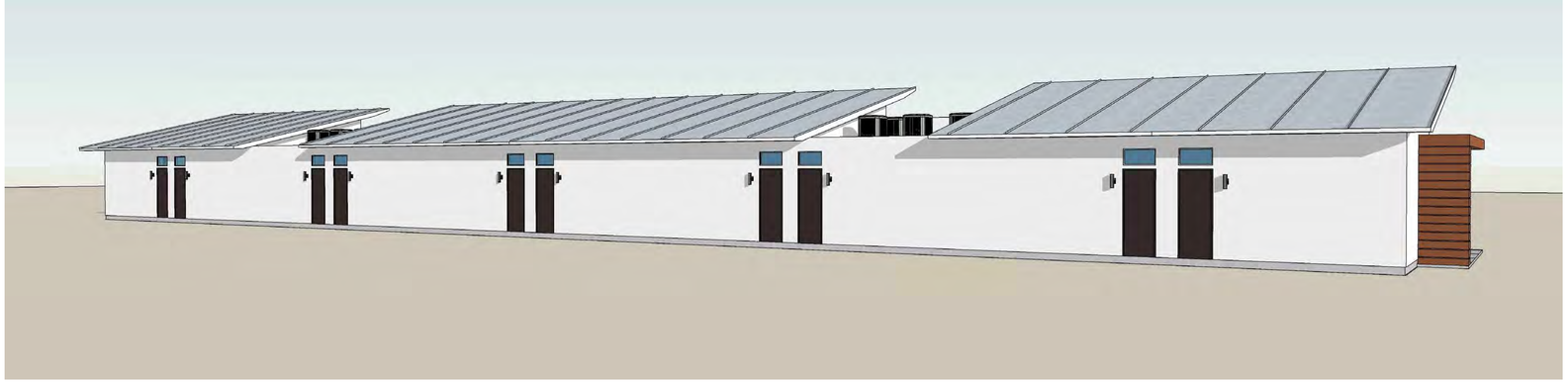
ARCHITECTS . PLANNERS . DESIGNERS

WHA.

ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO

PERSPECTIVE - FRONT VIEW



PERSPECTIVE - REAR VIEW

RETAIL BUILDING

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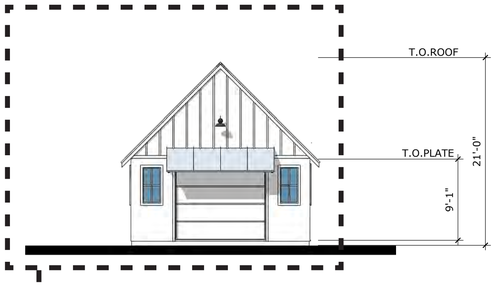
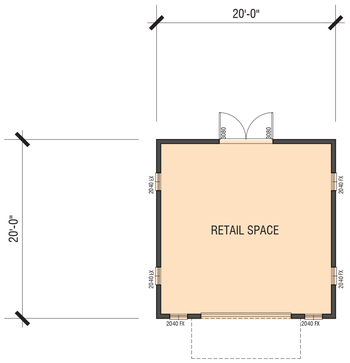


FRONT ELEVATION

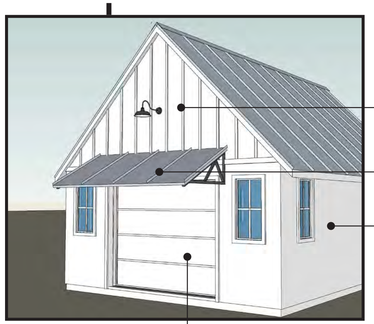
0 4 8 16



FLOOR PLAN

0 4 8 16

400 SQ. FT.



BOARD AND BATTEN AT 16" O.C.

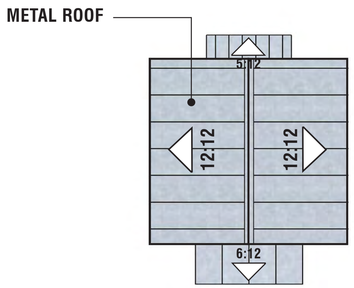
METAL CANOPY

STUCCO FINISH WALL

ROLL-UP GARAGE DOOR

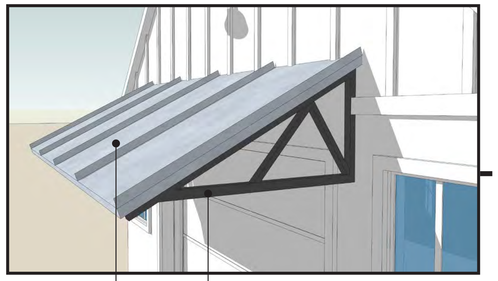
REAR ELEVATION

0 4 8 16



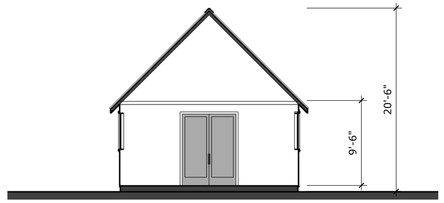
ROOF PLAN

0 4 8 16



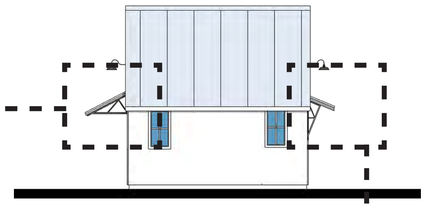
METAL BRACKET

METAL CANOPY



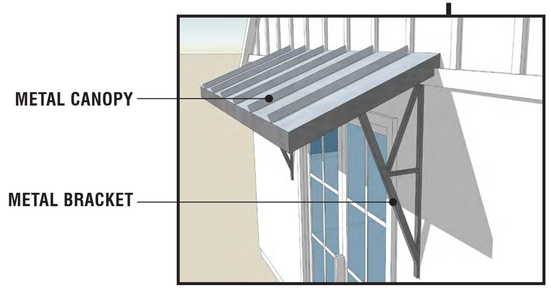
SECTION

0 4 8 16



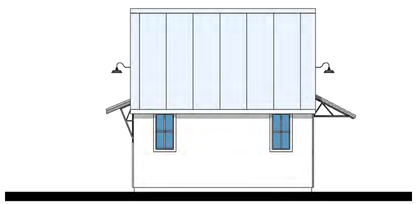
RIGHT ELEVATION

0 4 8 16



METAL CANOPY

METAL BRACKET



LEFT ELEVATION

0 4 8 16

20X20 RETAIL BARN

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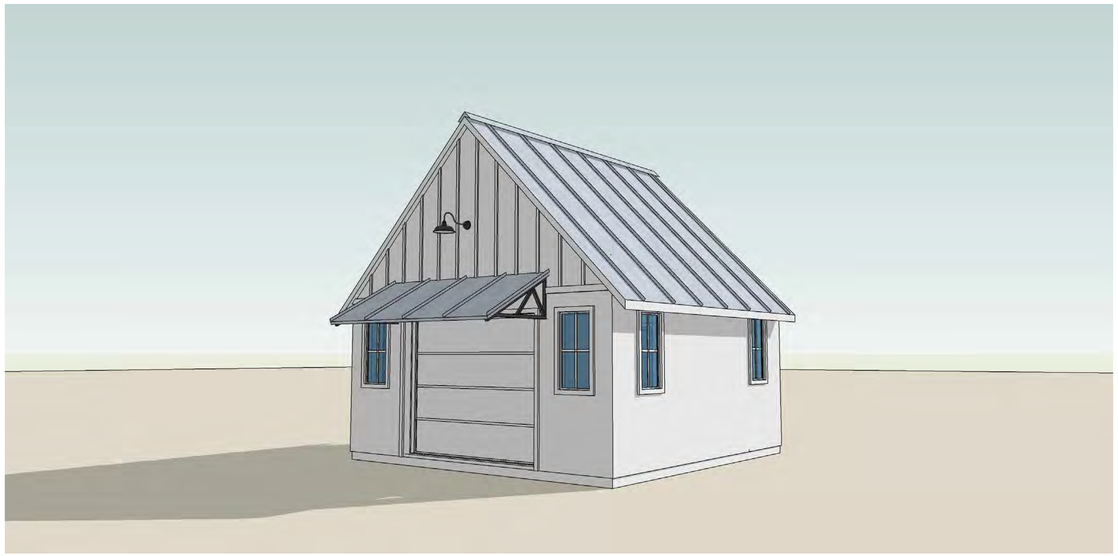
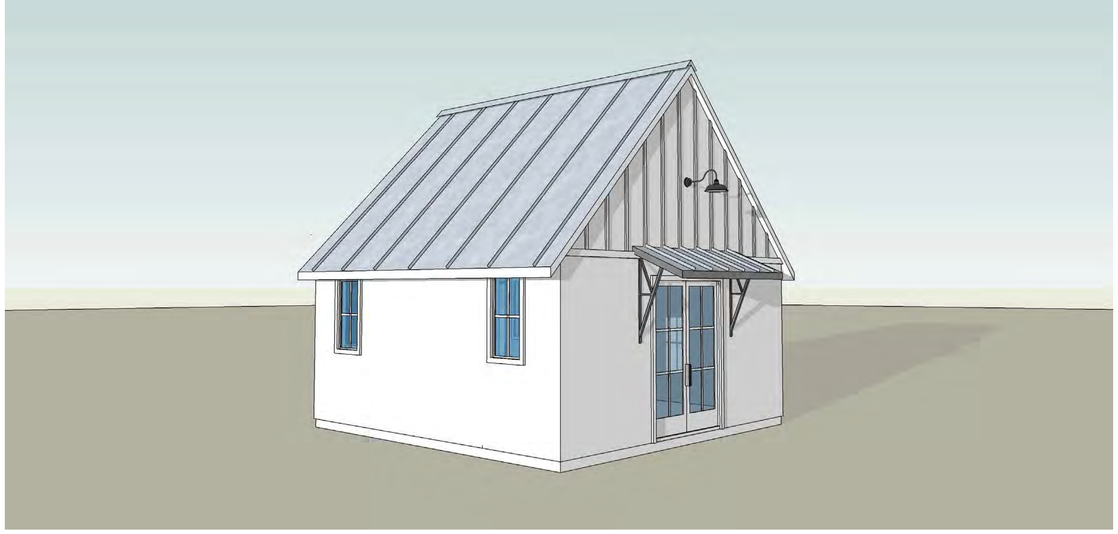


PERSPECTIVE - FRONT VIEW



PERSPECTIVE - REAR VIEW

20X20 RETAIL BARN

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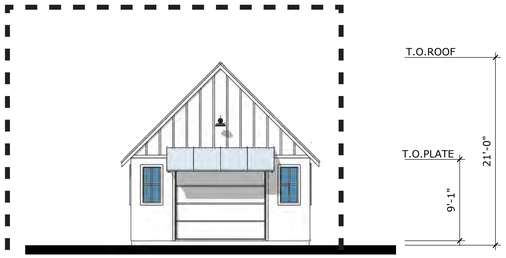
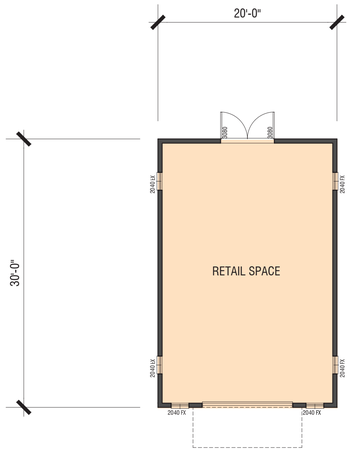


FRONT ELEVATION

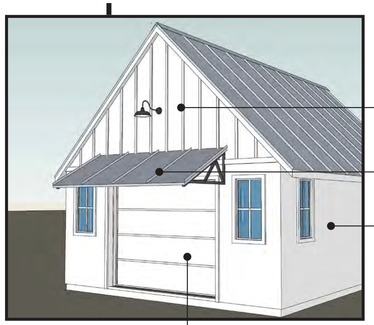
0 4 8 16



FLOOR PLAN

0 4 8 16

400 SQ. FT.

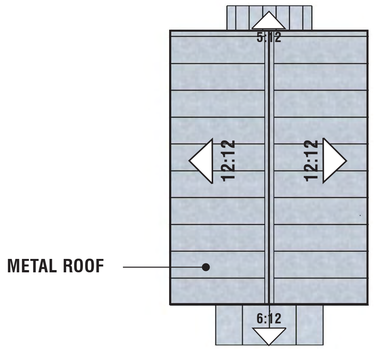


BOARD AND BATTEN AT 16" O.C.

METAL CANOPY

STUCCO FINISH WALL

ROLL-UP GARAGE DOOR



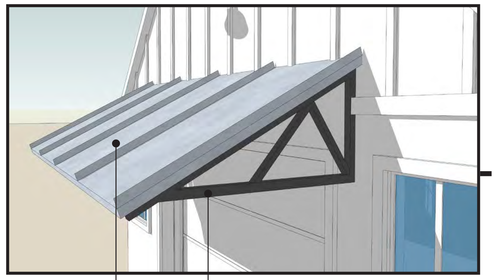
METAL ROOF

ROOF PLAN

0 4 8 16

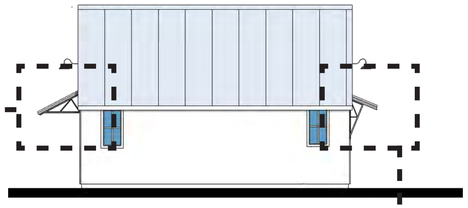
REAR ELEVATION

0 4 8 16



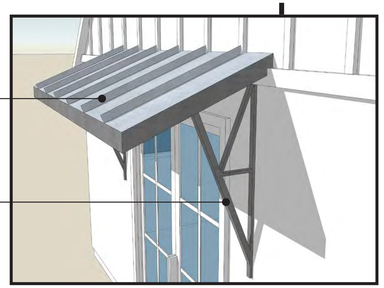
METAL BRACKET

METAL CANOPY



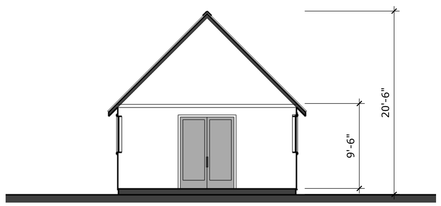
RIGHT ELEVATION

0 4 8 16



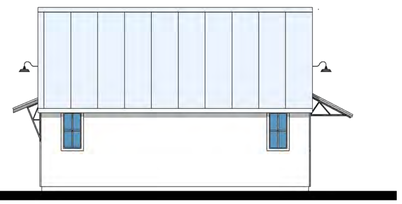
METAL CANOPY

METAL BRACKET



SECTION

0 4 8 16



LEFT ELEVATION

0 4 8 16

20X30 RETAIL BARN

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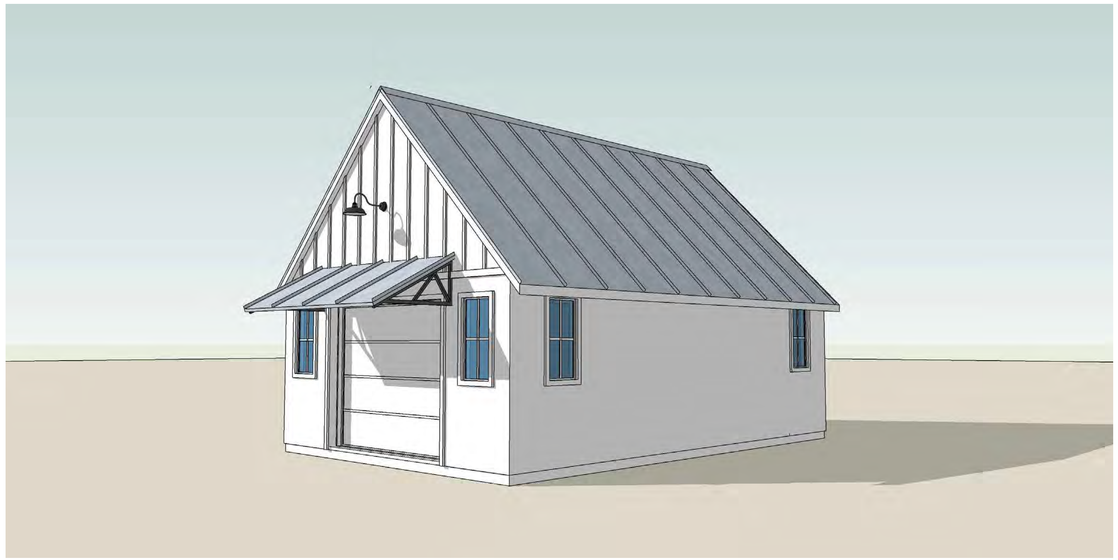
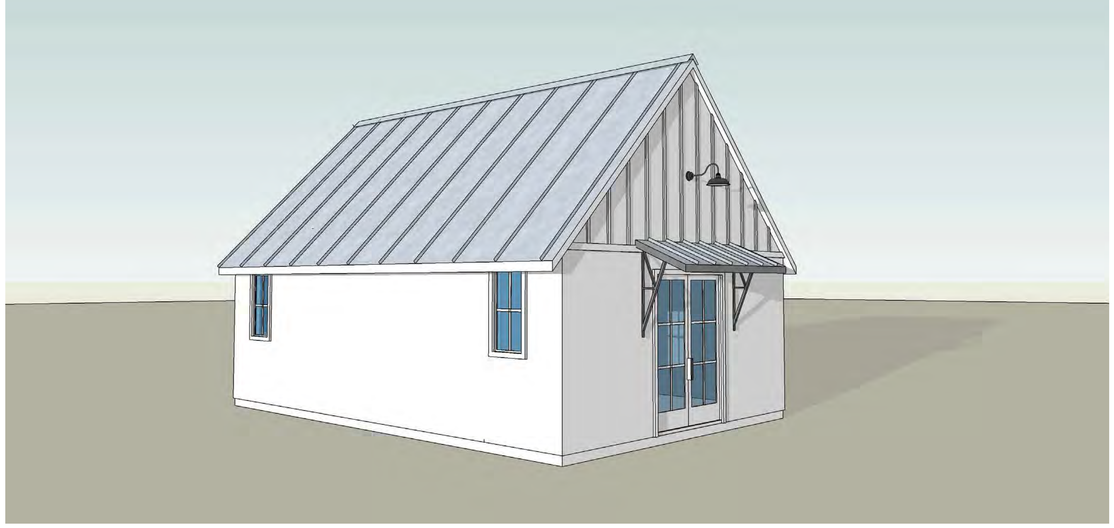
ARCHITECTS . PLANNERS . DESIGNERS

WHA.

ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO



PERSPECTIVE - FRONT VIEW



PERSPECTIVE - REAR VIEW

20X30 RETAIL BARN

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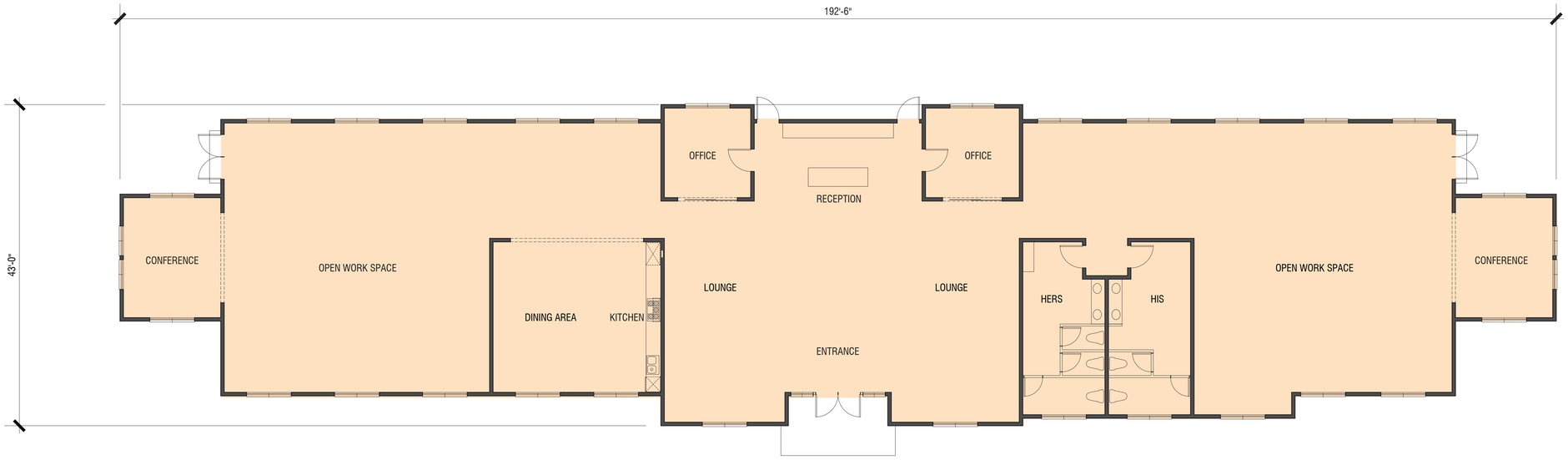
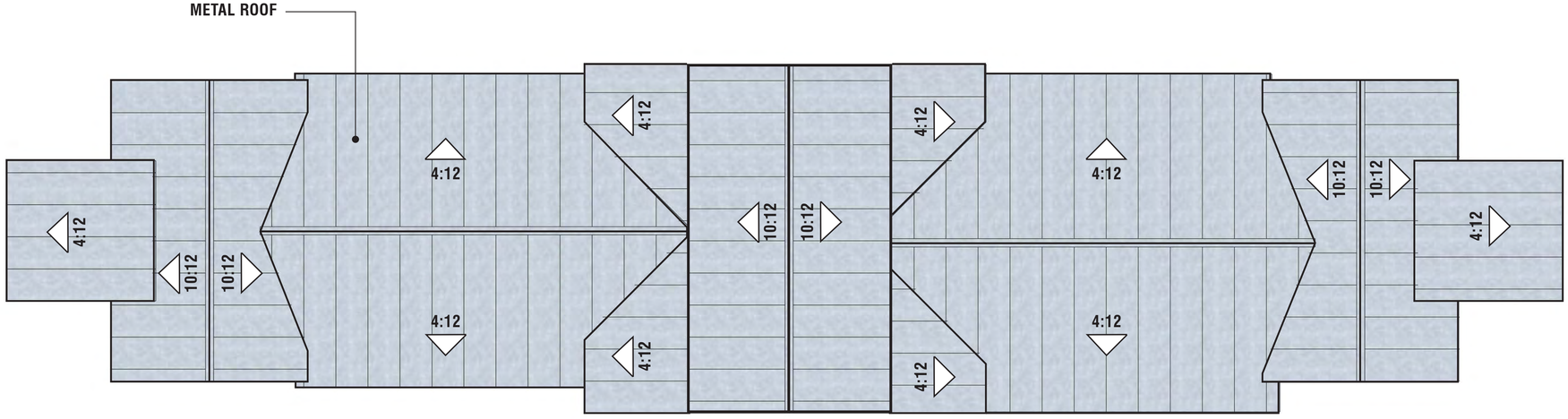


6885 SQ. FT.

FLOOR PLAN

0 4 8 16



ROOF PLAN

0 4 8 16

OFFICE BUILDING

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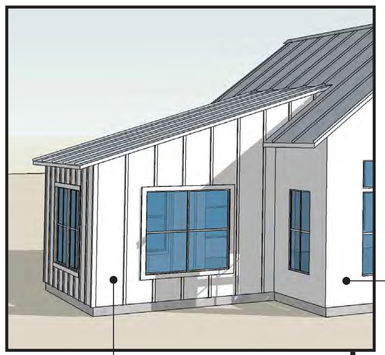
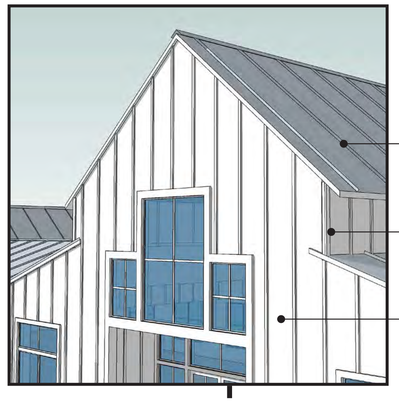


STUCCO FINISH WALL

BOARD AND BATTEN
AT 16" O.C.

LEFT ELEVATION

0 4 8 16



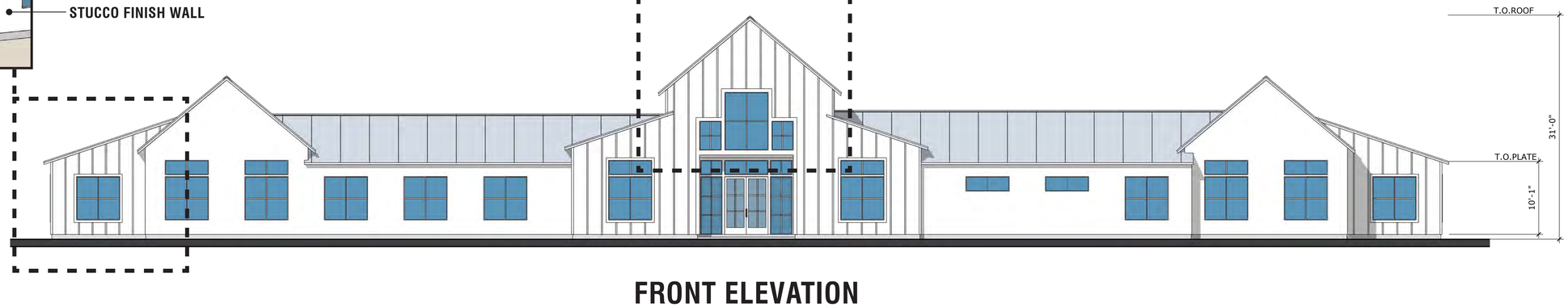
METAL ROOF

TRIM

BOARD AND BATTEN
AT 16" O.C.

RIGHT ELEVATION

0 4 8 16

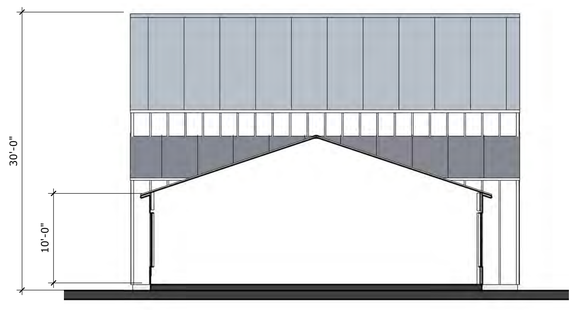


FRONT ELEVATION

0 4 8 16

REAR ELEVATION

0 4 8 16



CROSS SECTION

0 4 8 16

OFFICE BUILDING

EQUESTRIAN CENTER AT THERMAL RANCH

THERMAL, CALIFORNIA

DESERT EQUESTRIAN HOLDING LLC

COUNTY SUBMITTAL

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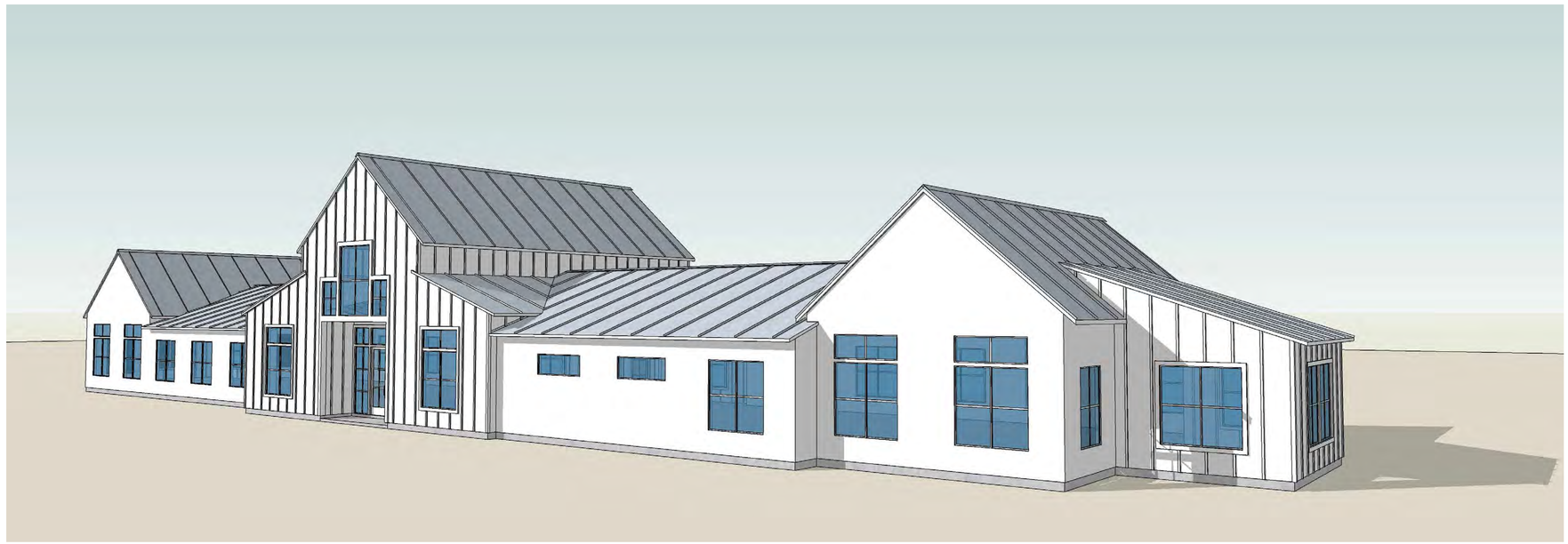

PERSPECTIVE - FRONT VIEW

PERSPECTIVE - REAR VIEW

OFFICE BUILDING

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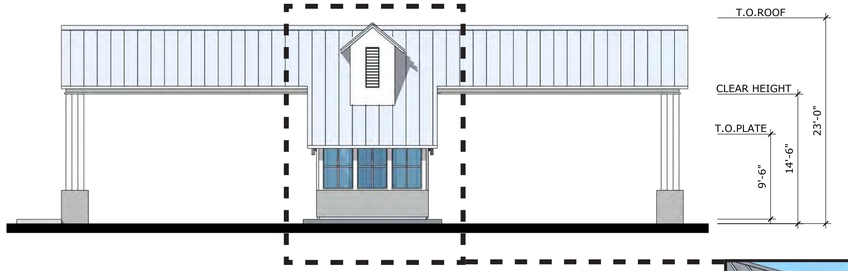
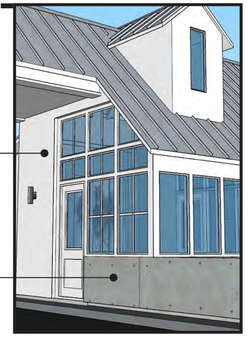
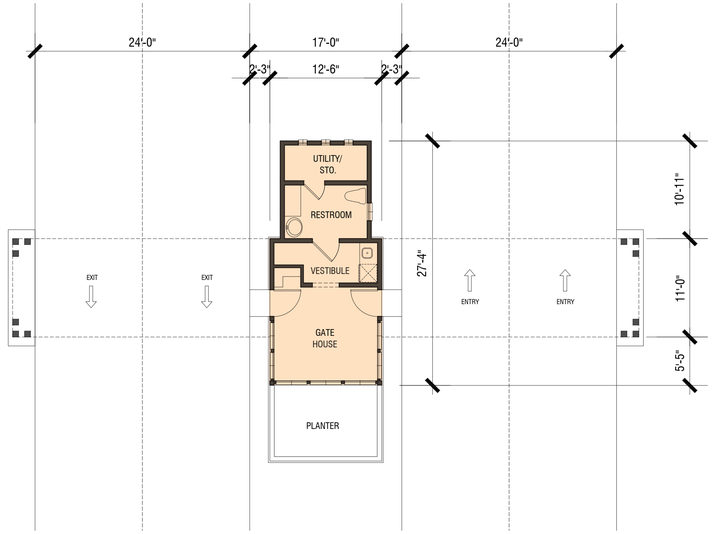


FRONT ELEVATION

0 4 8 16

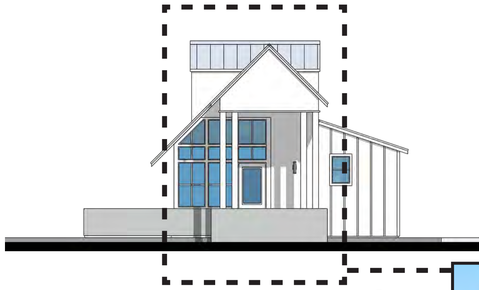




316 SQ. FT.

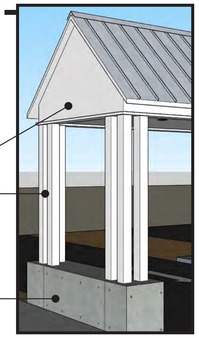
FLOOR PLAN

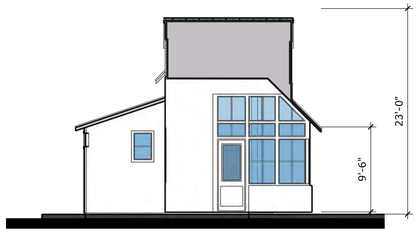
0 4 8 16



RIGHT ELEVATION

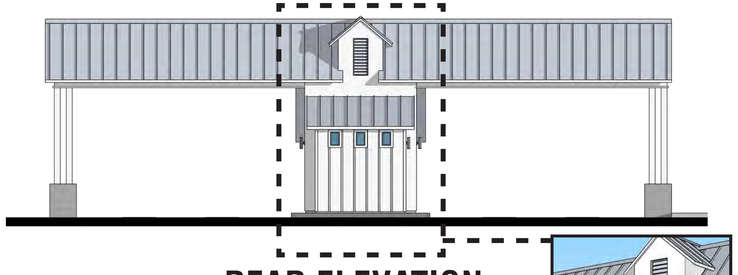
0 4 8 16





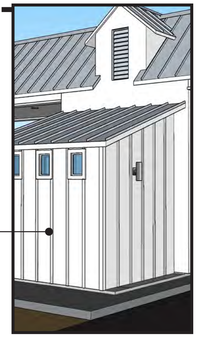
CROSS SECTION

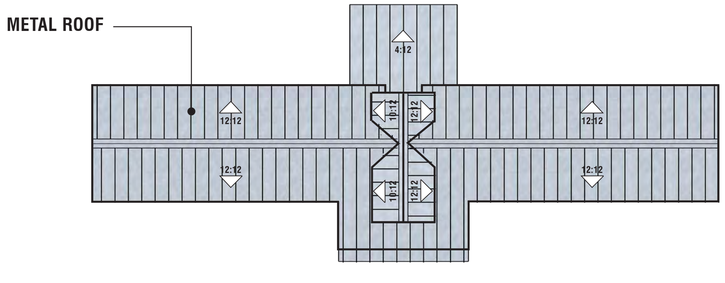
0 4 8 16



REAR ELEVATION

0 4 8 16





ROOF PLAN

0 4 8 16

LEFT ELEVATION

0 4 8 16

PRIMARY ENTRY GATE HOUSE

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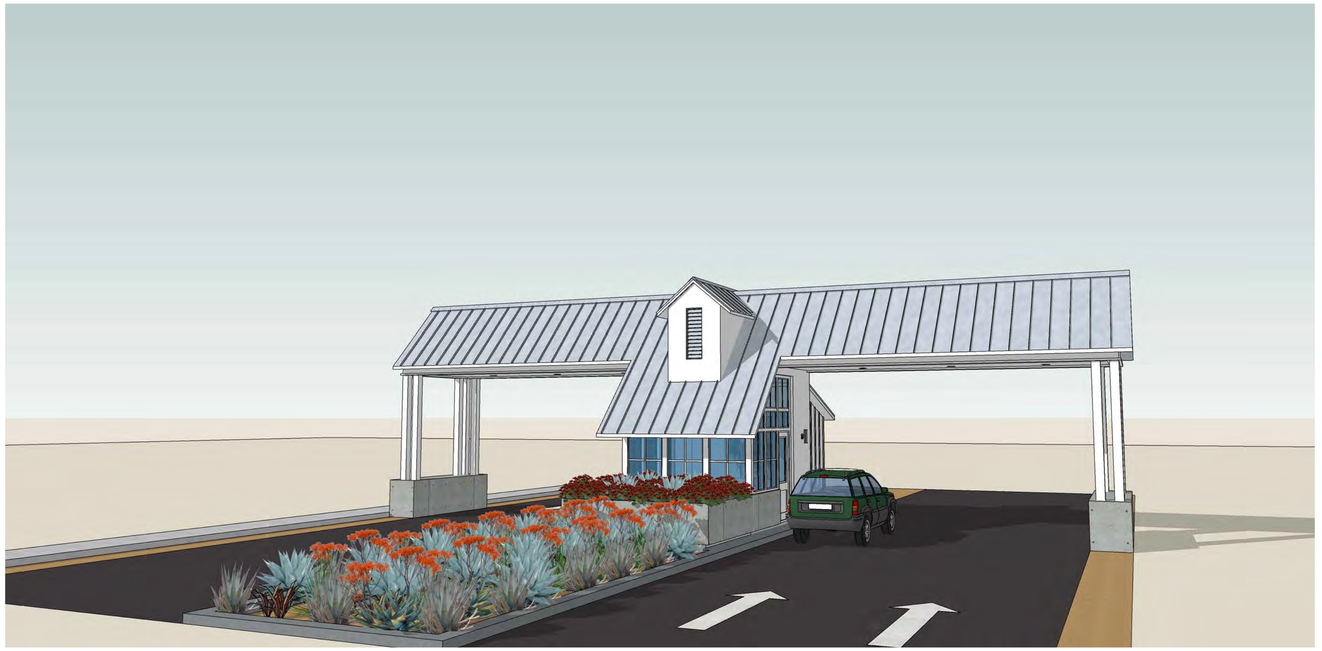

PERSPECTIVE - FRONT VIEW

PERSPECTIVE - REAR VIEW

PRIMARY ENTRY GATE HOUSE

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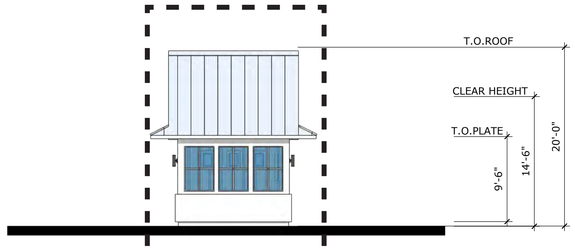
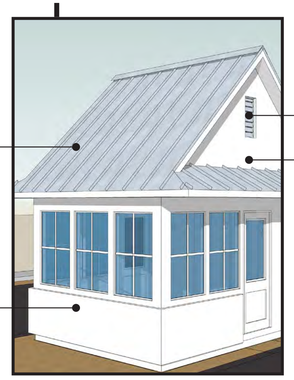
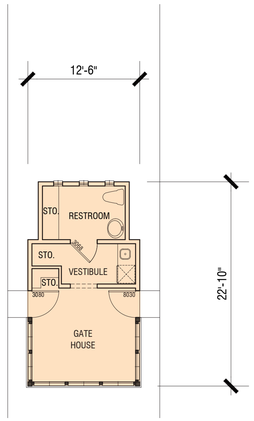


FRONT ELEVATION

0 4 8 16





270 SQ. FT.

FLOOR PLAN

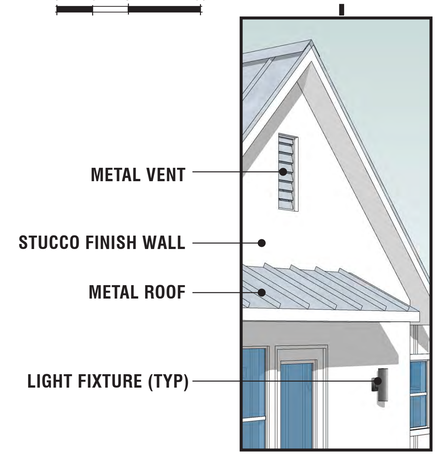
0 4 8 16

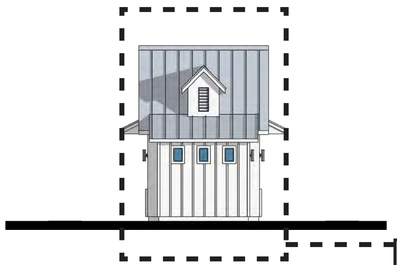
SECTION

0 4 8 16

RIGHT ELEVATION

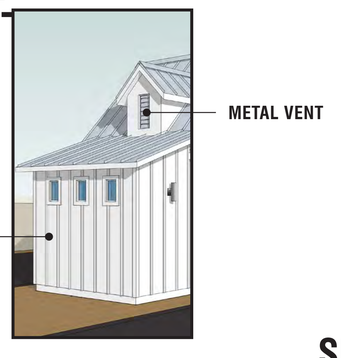
0 4 8 16

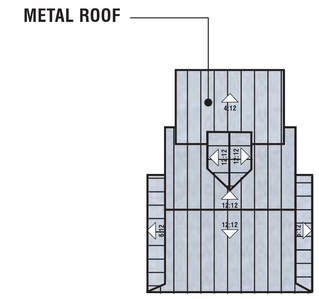




REAR ELEVATION

0 4 8 16





ROOF PLAN

0 4 8 16

LEFT ELEVATION

0 4 8 16

SECONDARY ENTRY GATE HOUSE

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PERSPECTIVE - FRONT VIEW

PERSPECTIVE - REAR VIEW

SECONDARY ENTRY GATE HOUSE

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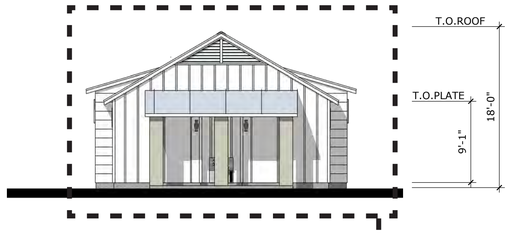
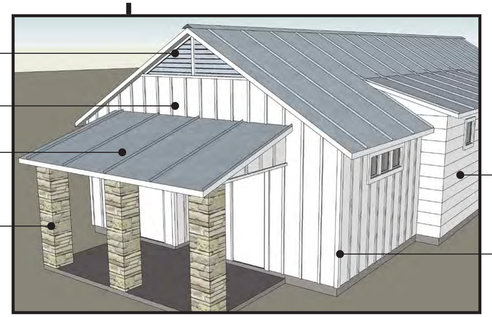
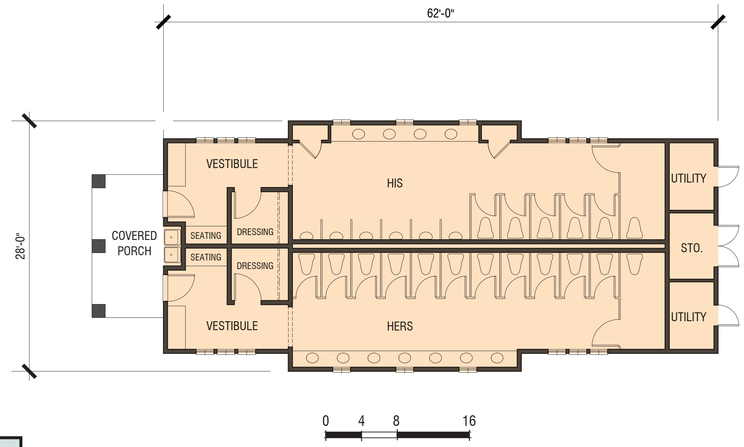


FRONT ELEVATION

0 4 8 16

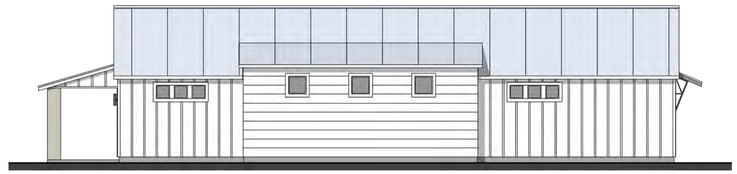




0 4 8 16

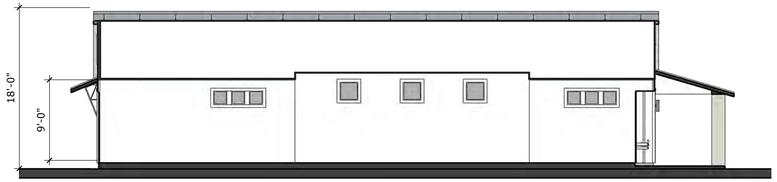
FLOOR PLAN

1592 SQ. FT.



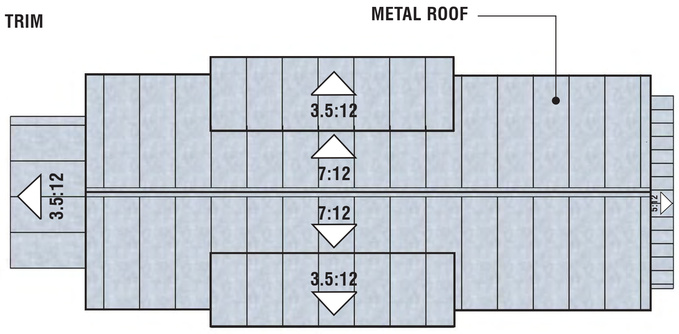
RIGHT ELEVATION

0 4 8 16



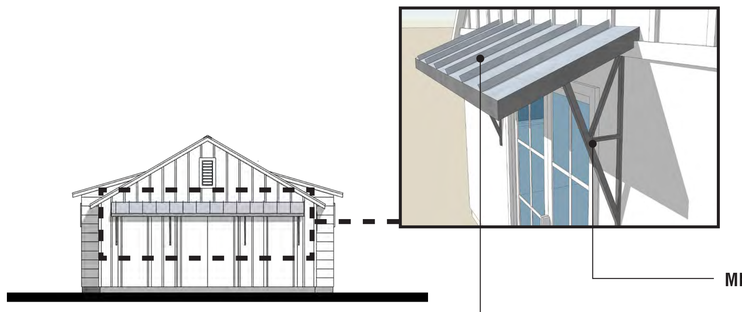
SECTION

0 4 8 16



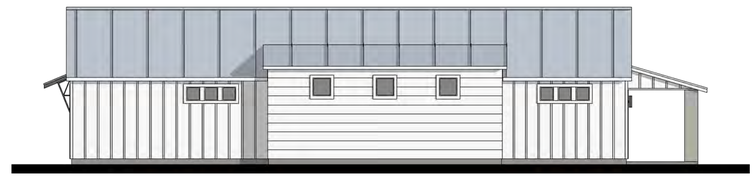
ROOF PLAN

0 4 8 16



REAR ELEVATION

0 4 8 16



LEFT ELEVATION

0 4 8 16

LARGE RESTROOM

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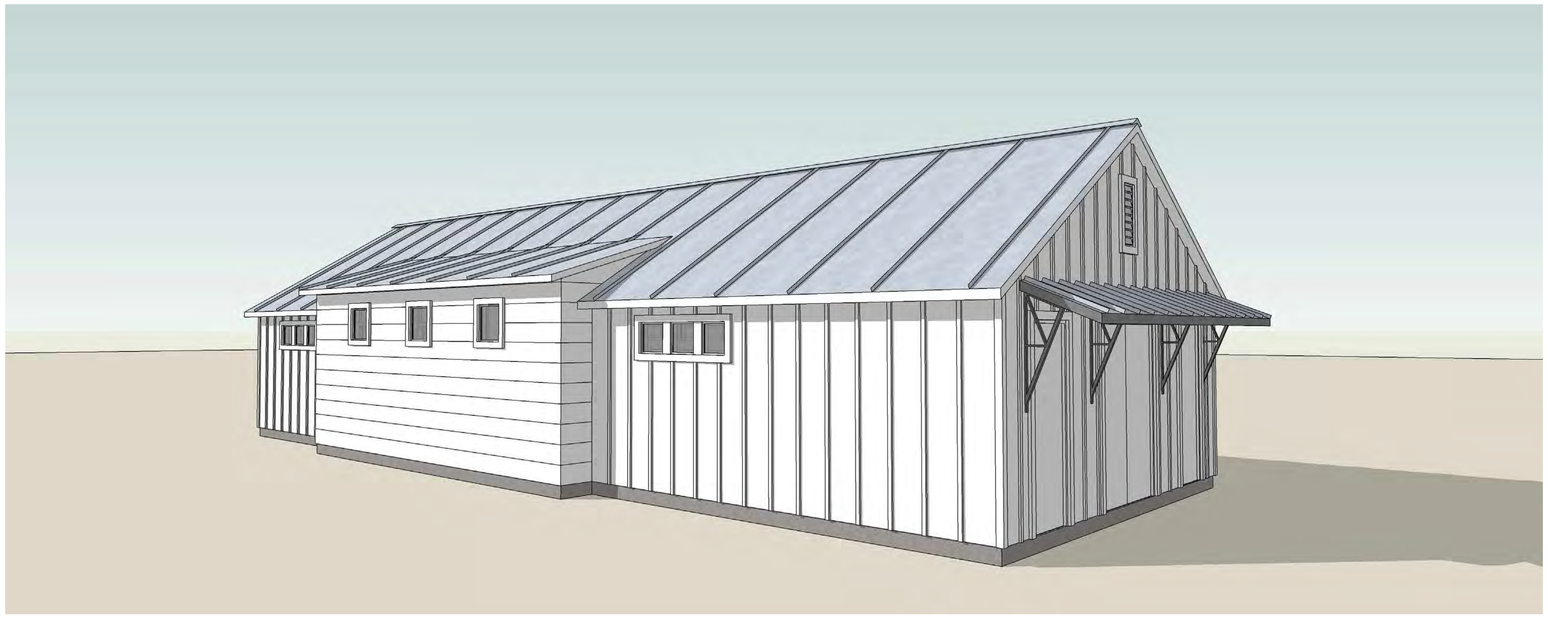
ARCHITECTS . PLANNERS . DESIGNERS

WHA.

ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO

PERSPECTIVE - FRONT VIEW



PERSPECTIVE - REAR VIEW

LARGE RESTROOM

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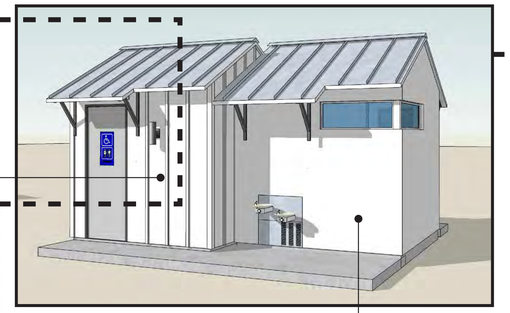
FLOOR PLAN

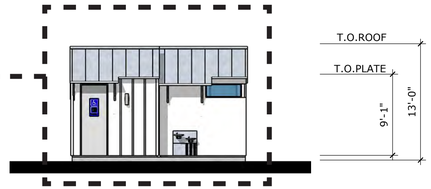
0 4 8 16

FRONT ELEVATION

0 4 8 16

ONE STALL (OPTION)



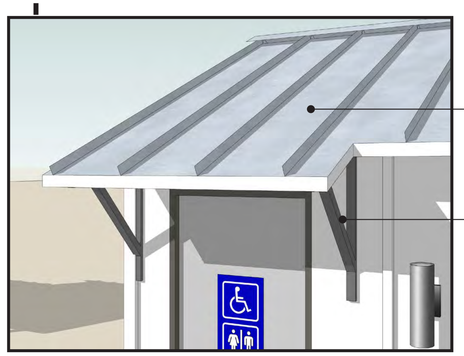


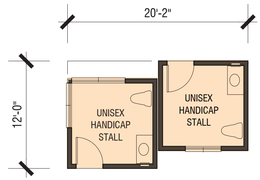
FRONT ELEVATION

0 4 8 16

RIGHT ELEVATION

0 4 8 16

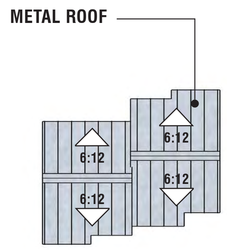




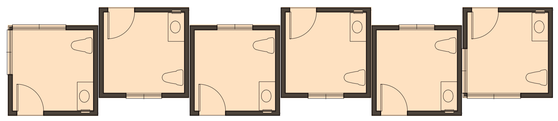
FLOOR PLAN

0 4 8 16

200 S.F.



ROOF PLAN



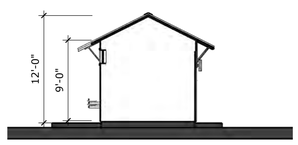
FLOOR PLAN

0 4 8 16

FRONT ELEVATION

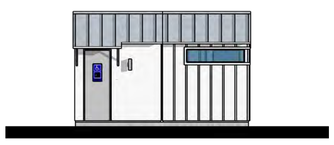
0 4 8 16

SIX STALLS (OPTION)



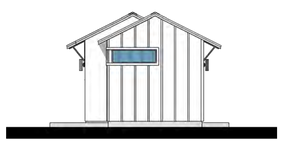
SECTION

0 4 8 16



REAR ELEVATION

0 4 8 16



LEFT ELEVATION

0 4 8 16

TWO STALLS (STANDARD)

SMALL RESTROOM

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ARCHITECTS . PLANNERS . DESIGNERS
WHA.
ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO

PERSPECTIVE - TWO STALLS (STANDARD)

PERSPECTIVE - ONE STALL (OPTION)

PERSPECTIVE - SIX STALLS (OPTION)

SMALL RESTROOM

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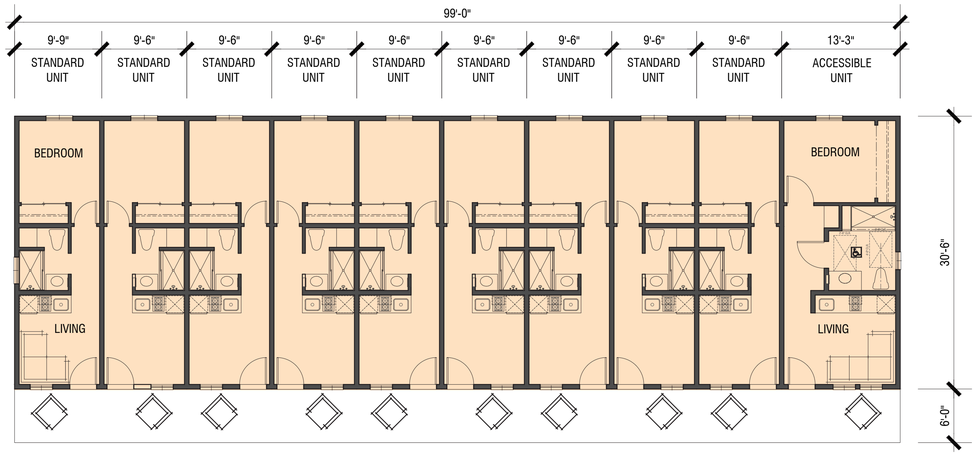


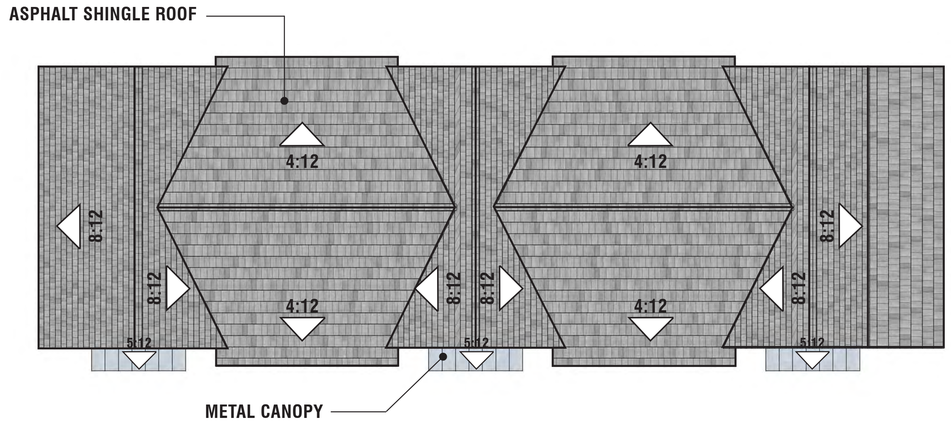
3020 SQ. FT.

FLOOR PLAN

0 4 8 16

FLOOR AREA TABLE	
FLOOR AREA	3020 SQ. FT.
STANDARD UNIT	300 SQ. FT.
ACCESSIBLE UNIT	400 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION



ROOF PLAN

0 4 8 16

WORKFORCE HOUSING

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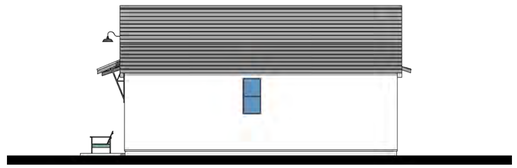
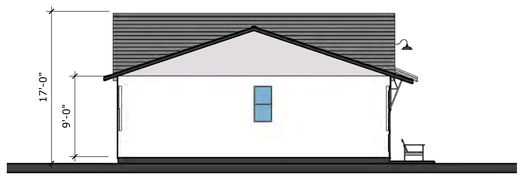
FRONT ELEVATION

0 4 8 16



RIGHT ELEVATION

0 4 8 16



SECTION

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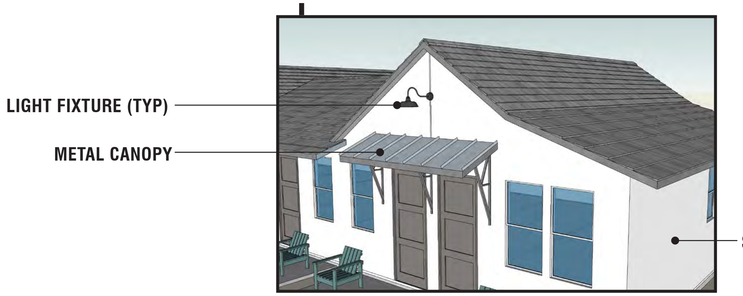
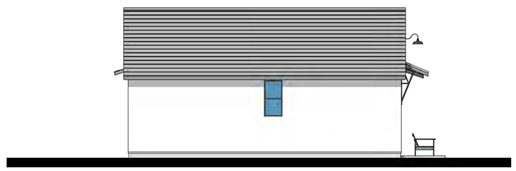


REAR ELEVATION

0 4 8 16



LEFT ELEVATION

0 4 8 16

WORKFORCE HOUSING

EQUESTRIAN CENTER AT THERMAL RANCH

THERMAL, CALIFORNIA

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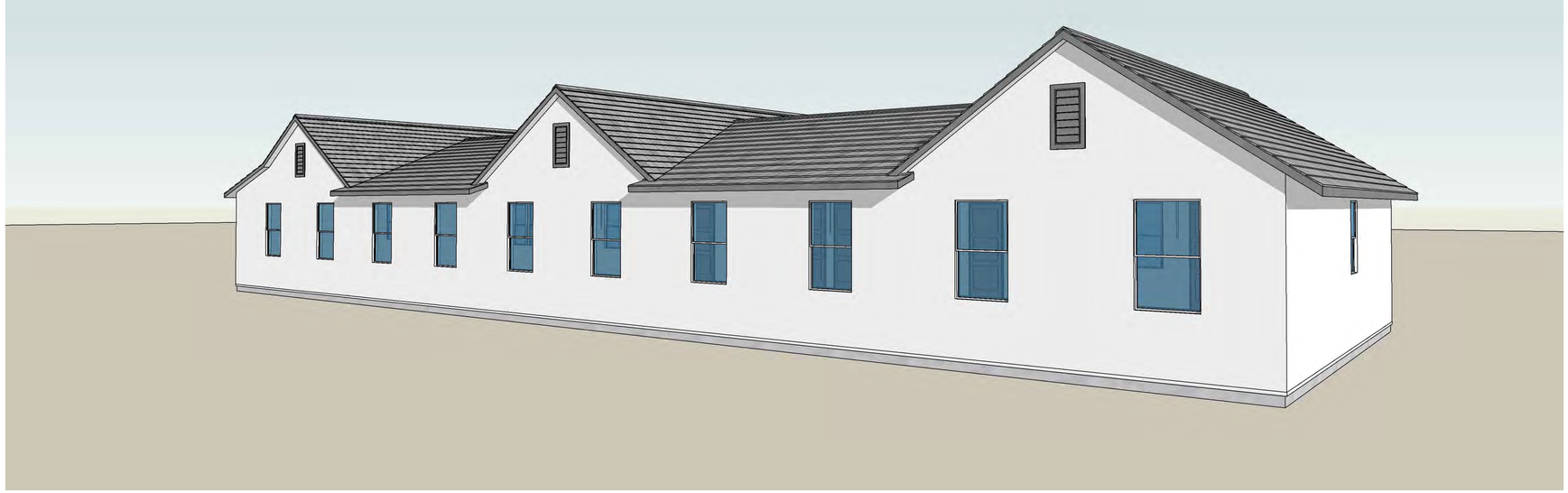
WHA.
ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO

PERSPECTIVE - FRONT VIEW



PERSPECTIVE - REAR VIEW

WORKFORCE HOUSING

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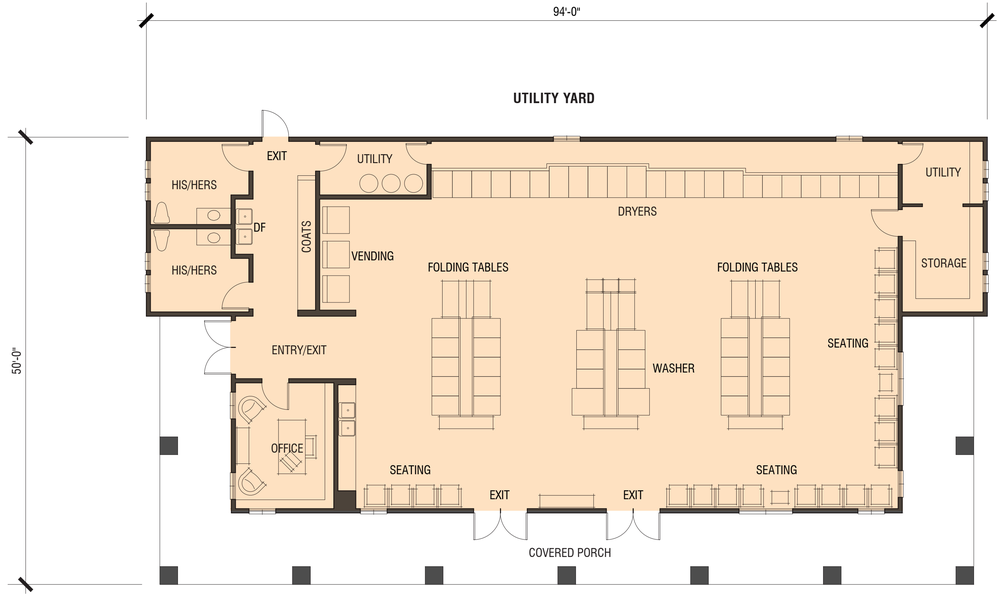
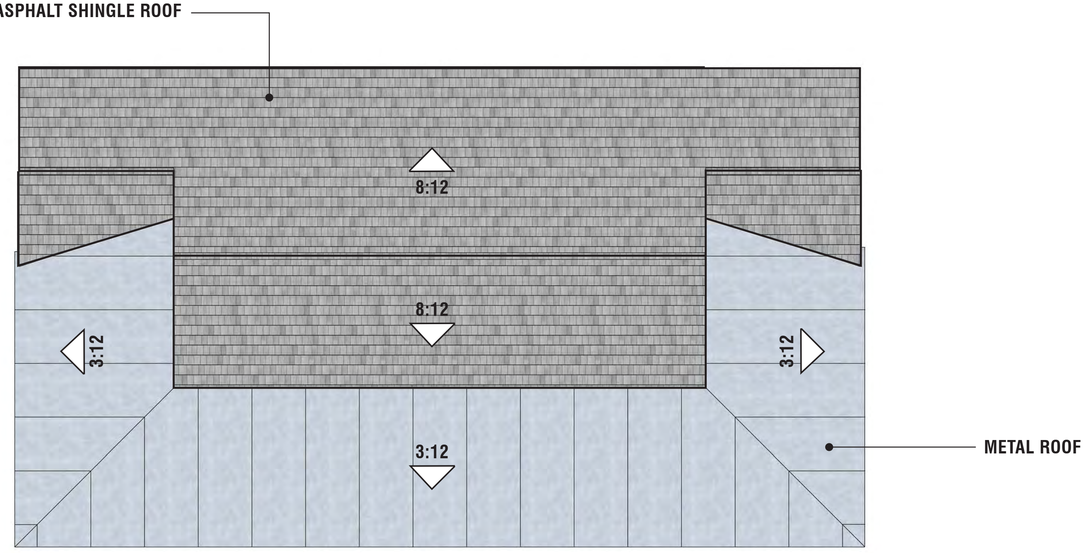


3530 SQ. FT.

FLOOR PLAN

0 4 8 16



ROOF PLAN

LAUNDRY BUILDING

EQUESTRIAN CENTER AT THERMAL RANCH

THERMAL, CALIFORNIA

DESERT EQUESTRIAN HOLDING LLC

COUNTY SUBMITTAL

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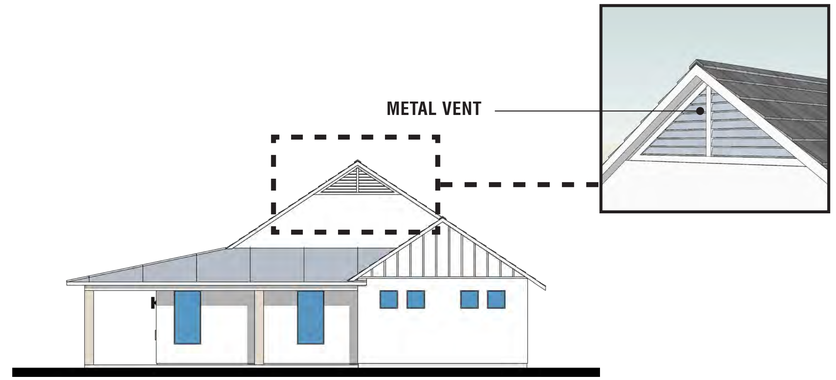
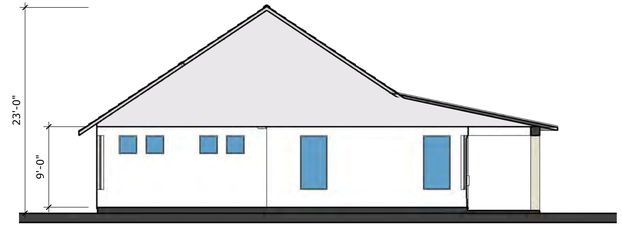
FRONT ELEVATION

0 4 8 16



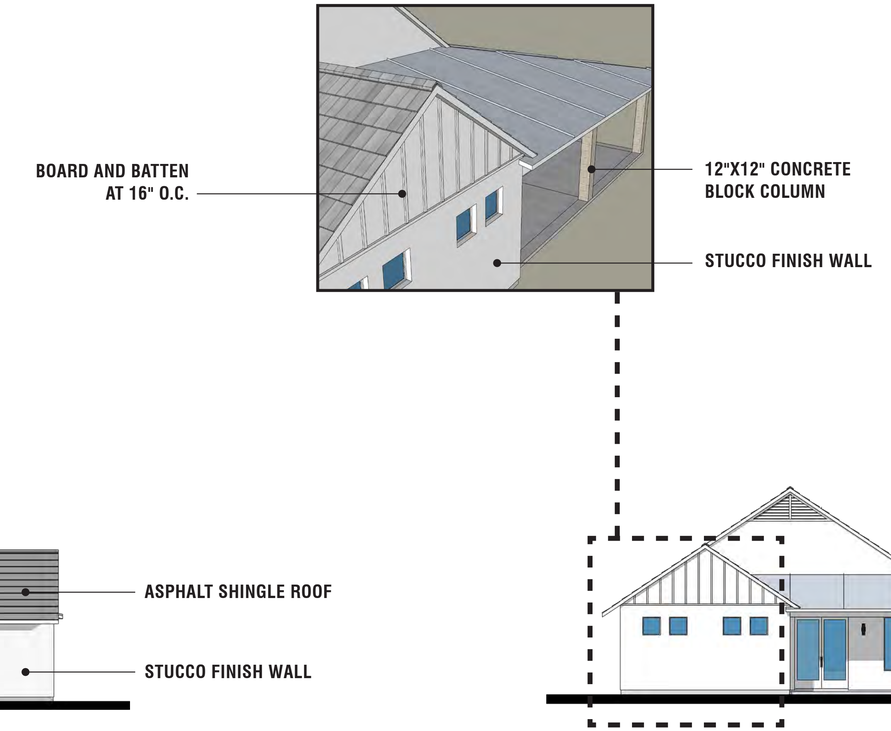
RIGHT ELEVATION

0 4 8 16



SECTION

0 4 8 16



REAR ELEVATION

0 4 8 16

LEFT ELEVATION

0 4 8 16

LAUNDRY BUILDING

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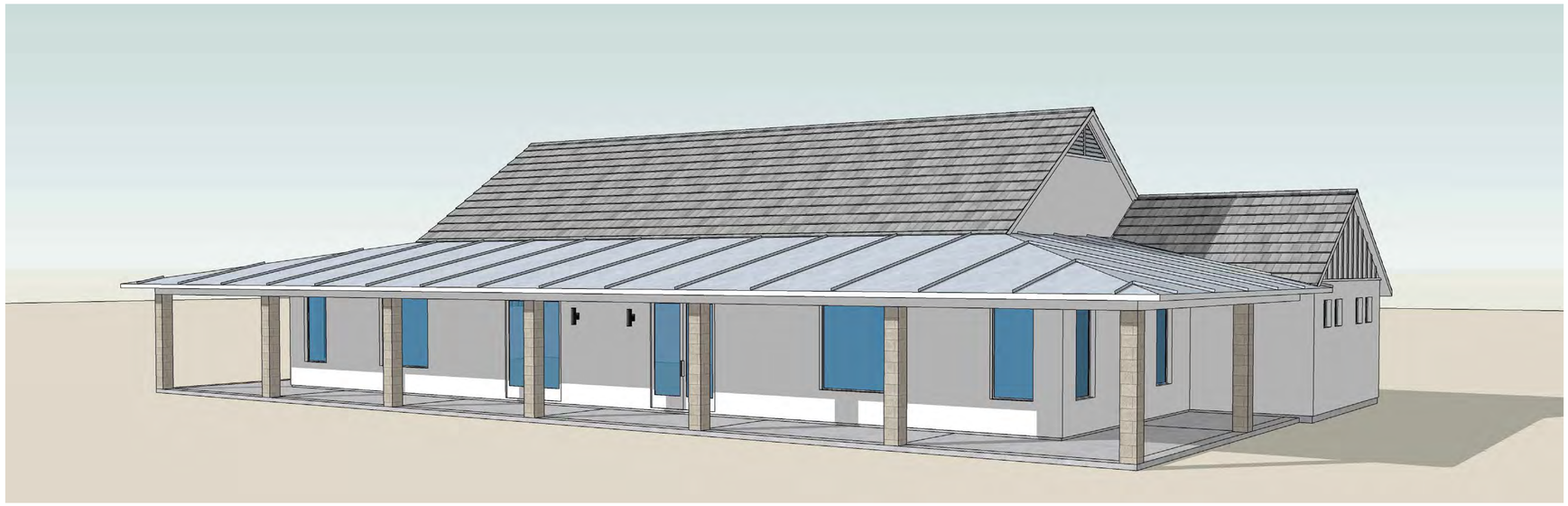

PERSPECTIVE - FRONT VIEW

PERSPECTIVE - REAR VIEW

LAUNDRY BUILDING

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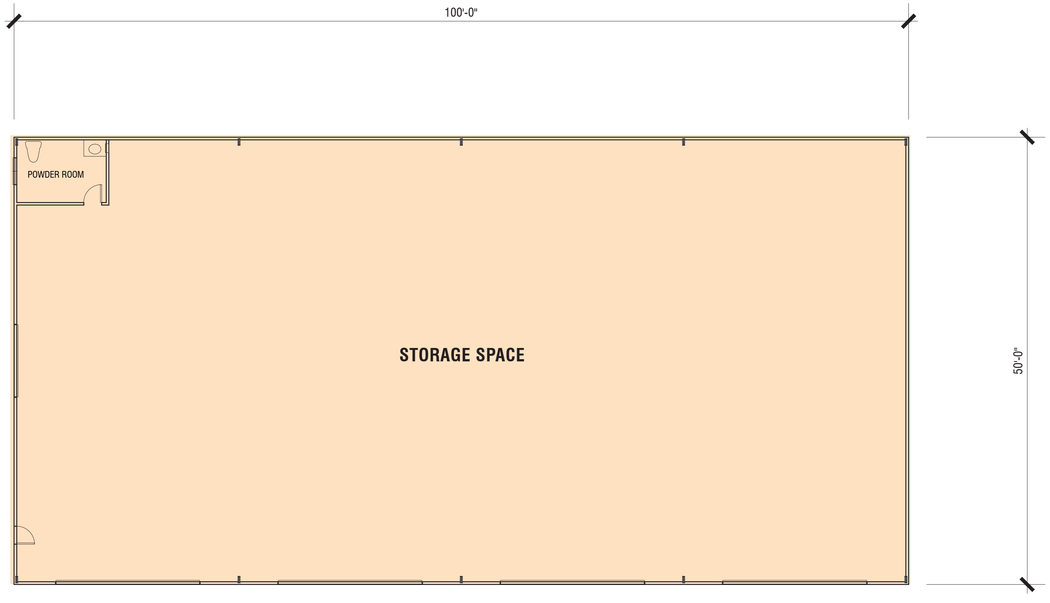
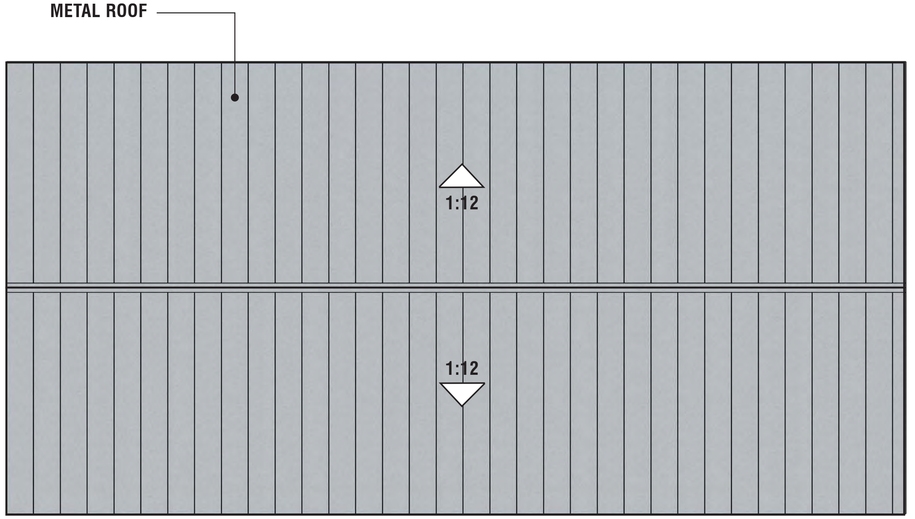


5000 SQ. FT.

FLOOR PLAN

0 4 8 16



ROOF PLAN

0 4 8 16

SECTION

0 4 8 16

50X100 STORAGE BARN

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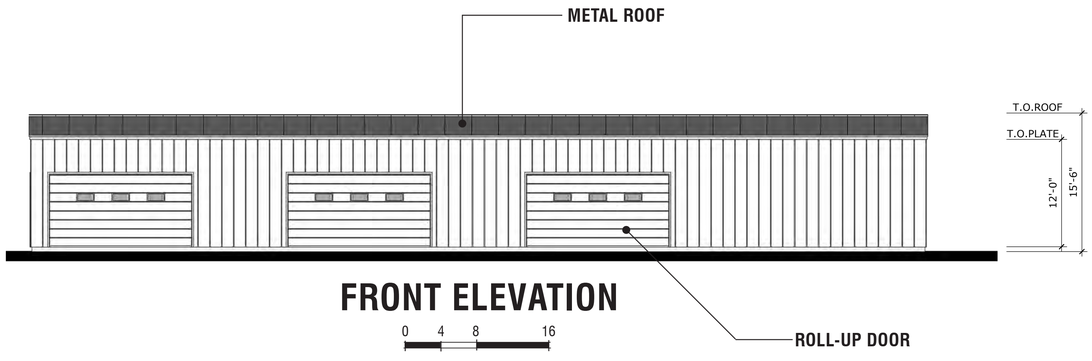
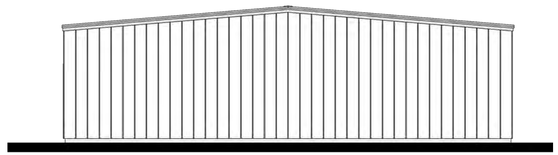


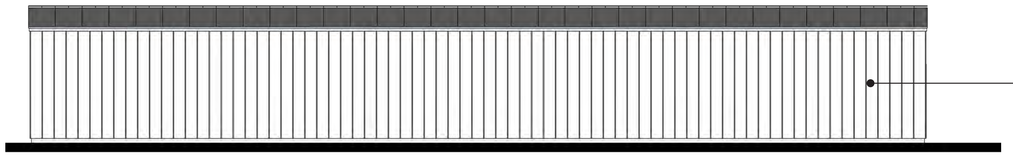
FRONT ELEVATION

0 4 8 16



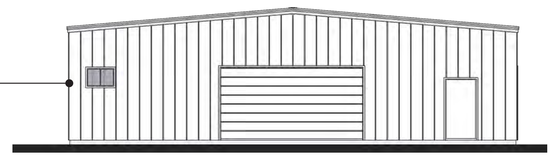
RIGHT ELEVATION

0 4 8 16



REAR ELEVATION

0 4 8 16



LEFT ELEVATION

0 4 8 16

50X100 STORAGE BARN

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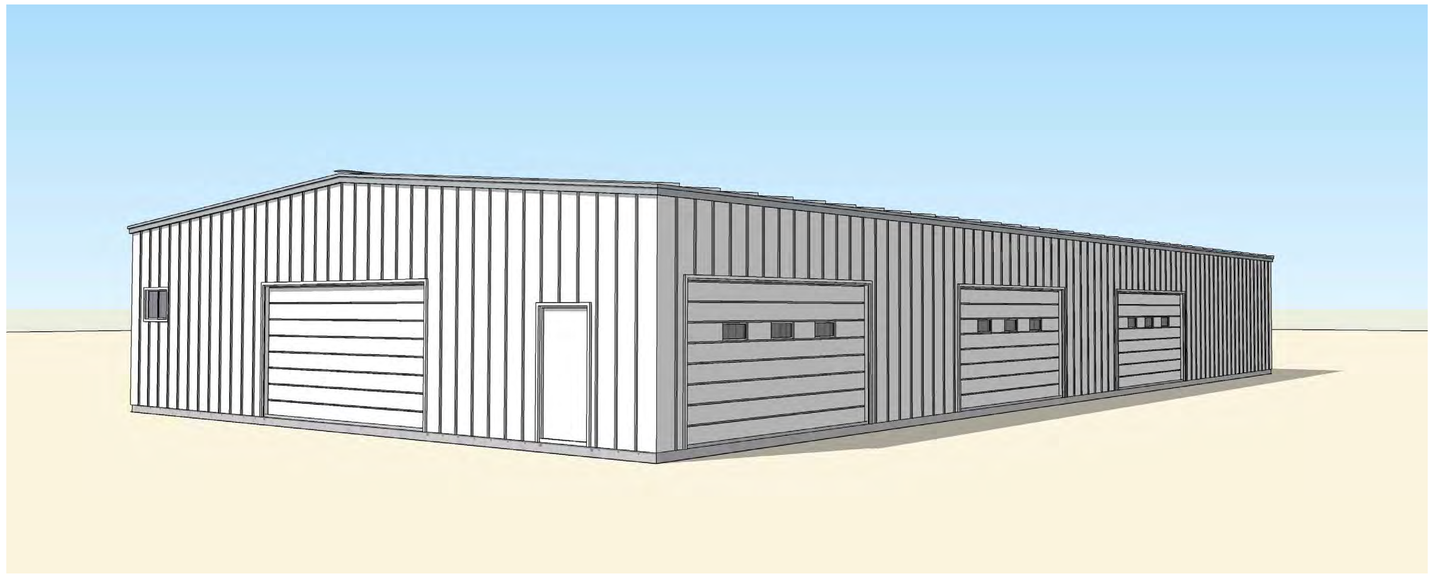
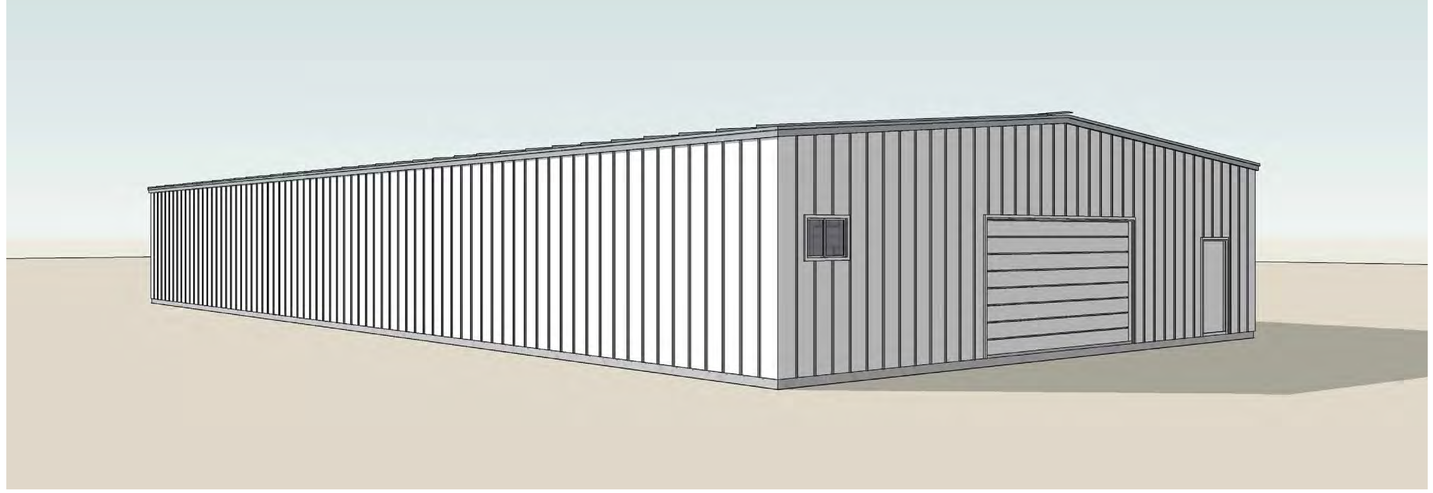


PERSPECTIVE - FRONT VIEW



PERSPECTIVE - REAR VIEW

50X100 STORAGE BARN

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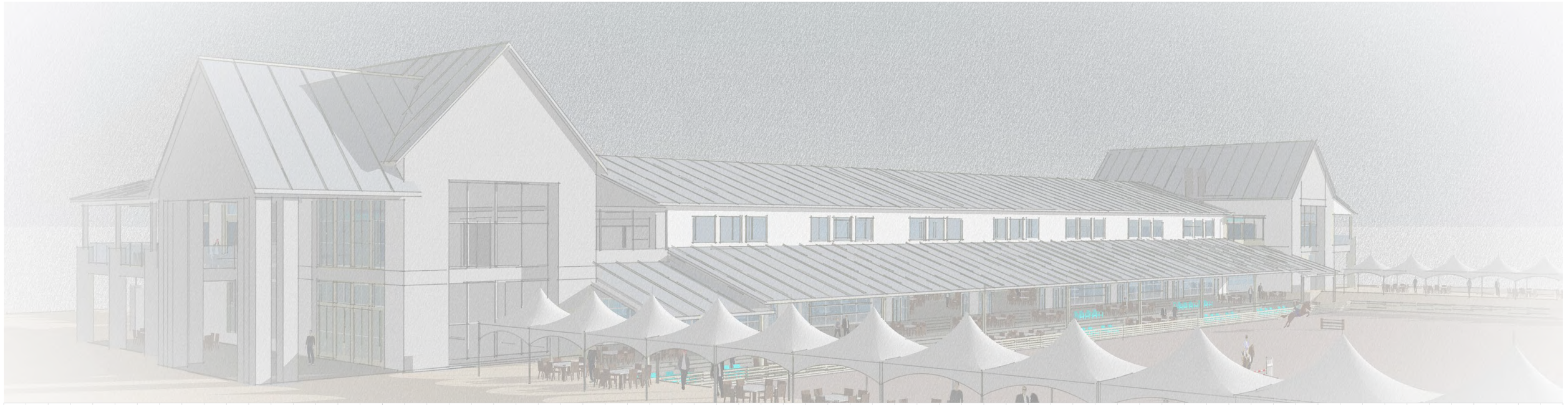
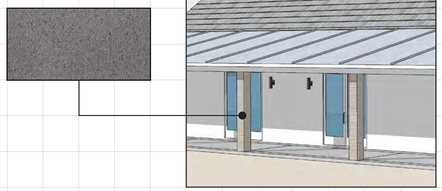
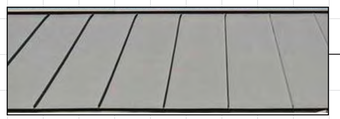




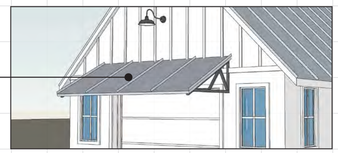
CONCRETE BLOCK COLUMN @ LAUNDRY BLDG.

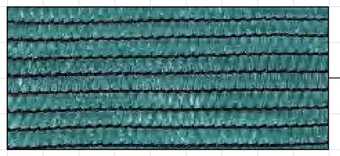
ASPHALT SHINGLE ROOFING

PRECAST CONCRTE BASE @ PRIMARY ENTRY GATE

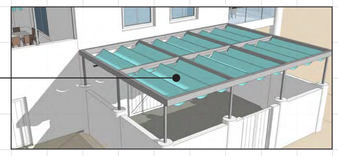


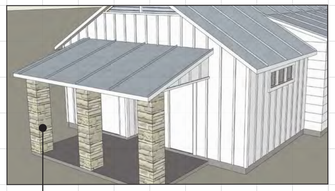
METAL ROOFING



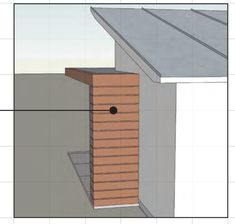


CANOPY FABRIC @ VIP BARN

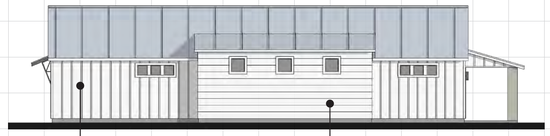




STONE VENEER @ LARGE RESTROOM



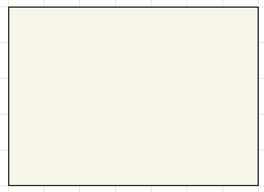
SIMULATED WOOD SIDING @ RETAIL BLDG.



PAINTED BOARD & BATTEN SIDING

PAINTED HORIZONTAL SIDING

16/20 STUCCO TEXTURE



STUCCO & PAINTED SIDING CLR.

CONCEPTUAL COLORS AND MATERIALS

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Wildlife Hazard Site Visit and Wildlife Hazard Management Plan

Thermal Ranch Project
Thermal, California
July 2022 (Revised March 2023)

Prepared by:

Russell P. DeFusco, PhD, USAF (ret)
BASH Incorporated
5010 Lanagan Street
Colorado Springs, CO 80919
(719) 200-2252
BirdmanRuss@aol.com

BASH INCORPORATED

EXECUTIVE SUMMARY:

The proposed Thermal Ranch Project is located on 622± acres of land between 62nd Avenue to the north, 64th Avenue to the south, Harrison Street to the west, and Tyler Street to the east in Thermal, California. It lies approximately 6,400 feet SSW of the nearest runway of the Jacqueline Cochrane Regional Airport in the unincorporated area of Thermal, Riverside County, California. The project proposal includes low, medium, and high density residential housing. It also proposes inclusion of horse stables, grazing, and training areas, commercial space, and a resort hotel. The County of Riverside Planning Department issues permits for such sites. The Riverside County Airport Land Use Commission requires an evaluation of final plans to determine if any hazards to aviation could be caused by wildlife that may be attracted to such sites and recommendations for mitigation to minimize those hazards. Dr. DeFusco of BASH Inc. was contracted by Wood Environment and Infrastructure Solutions Inc. (now WSP as of this revision), a Division of the John Wood Group to conduct a Wildlife Hazard Site Visit and develop recommendations for a Wildlife Hazard Management Plan in the manner described by the Federal Aviation Administration to ensure aviation hazards are minimized for nearby flight operations.

Surveys of the property and surrounding areas were conducted in July 2022 to determine baseline habitat features as well as bird and other wildlife presence and their relative abundance. Species present in the area and their legal status were determined. Results indicated that mitigation measures in the horse holding, training, and feeding areas, development landscaping plans, miniature golf course, and any proposed water features would decrease potential attractiveness at the site. Mitigation measures directed at any wildlife would further diminish the potential attractiveness of the site. The measures herein recommended include a comprehensive landscape plan, physical design of any potential water bodies, trash management, no wildlife feeding policies, and active harassment of birds or other wildlife using a variety of acoustic, visual, biological, and other dispersal techniques. Each of these are detailed for inclusion in a comprehensive, integrated Wildlife Hazard Management Plan for the property. Implementation of the plan by trained and equipped personnel as recommended will ensure bird and other wildlife risks to nearby aviation operations will be minimized at the project site.

Wildlife Hazard Site Visit and Wildlife Hazard Management Plan
Thermal Ranch Project
Thermal, California
July 2022 (Revised March 2023)

Introduction

The proposed Thermal Ranch Project is located on 622 acres of land between 62nd Avenue to the north, 64th Avenue to the south, Harrison Street to the west, and Tyler Street to the east in Thermal, California. It lies approximately 6,400 feet SSW of the nearest runway of the Jacqueline Cochrane Regional Airport (FAA identifier TRM) in the unincorporated area of Thermal, Riverside County, California. Because of its proximity to the airport and associated airspace, any issues that could affect the safety of flight from the airport must be addressed. The potential risks presented by wildlife with development of the site require consideration. The Thermal Ranch Project lies within the Airport Influence Area (AIA) of TRM. Advisory guidance (see ALUC 2004; 2018, CALTRANS 2011, FAA 2020) and requirements of the permitting agency identify certain land uses such as waterbodies, agriculture, and other attractants that may be best suited outside the influence area. The Riverside County Airport Land Use Commission (RC ALUC) issues conditions that must be met for land uses that may adversely affect flight safety and must be consistent with the Jacqueline Cochran Regional Airport Land Use Plan. The County of Riverside Planning Department ultimately issues permits for development of such sites.

Dr. Russell DeFusco of BASH Incorporated was contracted by Wood Environment and Infrastructure Solutions, Inc. (Wood; now WSP), a Division of the John Wood Group to conduct a Wildlife Hazard Site Visit (WHSV) and develop recommendations for a Wildlife Hazard Management Plan (WHMP) in the manner described by the Federal Aviation Administration (FAA) to ensure aviation hazards are minimized for nearby flight operations. The FAA requires anyone working on such projects on or in the vicinity of airports to be fully Qualified Airport Wildlife Biologists (QAWB) as specified in FAA Advisory Circular (FAA AC) 150/5200-36B "*Qualifications for Wildlife Biologists Conducting Wildlife Hazard Assessments and Training Curriculums for Airport Personnel Involved in Controlling Wildlife Hazards on Airports*" (FAA 2019). Dr. DeFusco is fully qualified under these provisions.

This document also follows those guidelines as established in FAA AC 150/5200-38: "*Protocol for the Conduct and Review of Wildlife Hazard Site Visits, Wildlife Hazard Assessments, and Wildlife Hazard Management Plans*" (FAA 2018). A full 12-month Wildlife Hazard Assessment was completed by the Jaqueline Cochrane Regional Airport under the same guidelines (TRM 2017). It is unknown whether the Thermal Ranch Project underwent a similar assessment during the time it was originally proposed. The purpose of this latest assessment is to determine if the project could attract potentially hazardous wildlife that could adversely affect flight safety to nearby aircraft operations and to assist the developers in the

implementation of wildlife management plan to ensure any potential hazards are mitigated.

1. **Thermal Ranch Project Site and Plans:** The Thermal Ranch Project covers approximately 622 acres of agricultural land that was plowed and being partially irrigated, but no crops were present during the July 2022 WHSV. Several large, open-sided buildings were present near the center of the property, presumably for the storage and transport of hay crops when present, though were empty during the visit, but otherwise no permanent infrastructure was present on the site (see Figure 1). Development plans include a private residential community of permanent and vacation homes and numerous other facilities including the horse park, commercial areas, and a resort hotel (see Figure 2). Residential areas range from large, detached estate homes and lots, smaller detached homes and lots, more densely developed condominiums, a modular unit area, and a recreational vehicle park. Clubhouses and pools are proposed adjacent to housing areas. A small miniature golf course is also proposed for the commercial area. A significant proportion of the property is dedicated to equestrian facilities. Those range from numerous barns and stables, grassy riding areas, warmup, training and competition rings, and a covered arena.

Figure 1. Thermal Ranch Project Site; View to East from Intersection of 62nd Avenue and Harrison Street. (Source: BASH Inc).

Figure 2. Thermal Ranch Project Land Use Plan. (Provided by Terra Nova Planning and Research, Inc).

Legend					
— — —	Project Boundary				
①	Horse Park	Ⓐ	Grand Entry	Ⓗ	Private Barns
②	Estate Lots	Ⓑ	Gathering/Dining Commons	Ⓘ	Pasture
③	Neighborhoods	Ⓒ	Competition Rings	Ⓙ	Grass Field
④	Horse Park Workforce Housing	Ⓓ	Warmup/Jumper Rings	Ⓚ	Back of House
⑤	Hotel/Resort	Ⓔ	Common Barns	Ⓛ	Office
⑥	Commercial	Ⓕ	Parking	Ⓜ	CVWD Well Site
		Ⓖ	Staging Area	Ⓝ	Potential Substation

Note: This exhibit illustrates one possible development scenario. Other site development concepts are allowed subject to the standards and guidelines of this Specific Plan.

Source: MSA Consulting, Inc., 02.09.2023

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02.09.23

TERRA NOVA® PLANNING & RESEARCH, INC.

Thermal Ranch Specific Plan
EIR Notice of Preparation
Conceptual Development Plan
Thermal, California

Exhibit 6

The nearest edge of the property lies approximately one mile south of the Jaqueline Cochrane Regional Airport with the furthest edge just over two miles from the airport boundary (see Figure 3). It must be emphasized that these distances are only approximate and no specific survey data was provided to precisely determine distances during the preparation of this report. It is also important to note that the FAA separation criteria guidelines apply not from the airport boundary, but specifically from its Air Operations Area (AOA). The AOA is defined as any surface where aircraft operate to include runways, taxiways, and parking ramps. FAA guidelines prohibit certain land uses within 10,000 feet of the AOA for airports supporting jet aircraft and further recommend restrictions anywhere within five miles for land uses that may cause hazardous wildlife to cross approach, departure, or circling airspace near airports. These specifications are detailed in FAA AC 150/5200-33C "*Hazardous Wildlife on or Near Airports*" (FAA 2020).

The Riverside County Airport Land Use Commission (RC ALUC) establishes land use restrictions within certain zones surrounding airports and generally follow FAA guidelines in this respect. The "*Riverside County Airport Land Use Compatibility Plan*" (RC ALUC 2004) specifies county-wide policies for land uses surrounding airports and delineates compatibility zones with restrictions around each of the airports in the county. The Thermal Ranch Project property lies almost entirely within Zone D with a smaller segment in the southwest corner of the property in Zone E (see Figure 4). The southwest corner may be outside the FAA 10,000 foot separation zone restriction for certain land uses, but still lies well within the 5 mile buffer that requires evaluation. Restrictions are summarized in Table 2 of the RC ALUC document (Figure 5) and includes "Hazards to Flight" in note 9 that covers the potential attraction of birds as a land use compatibility issue within all zones. Because the entire property lies within the designated zones, some wildlife mitigation may be necessary to ensure no adverse effects on flight safety at the nearby airport and to meet ALUC and FAA requirements. It should also be noted that there are non-wildlife related restrictions, such as height requirements and human density limits within these zones that are also specified, and it is presumed that these have been addressed, but are outside the scope of this report.

Figure 3. Jaqueline Cochrane Regional Airport Proximity Map. (Source: Wood/PLC).

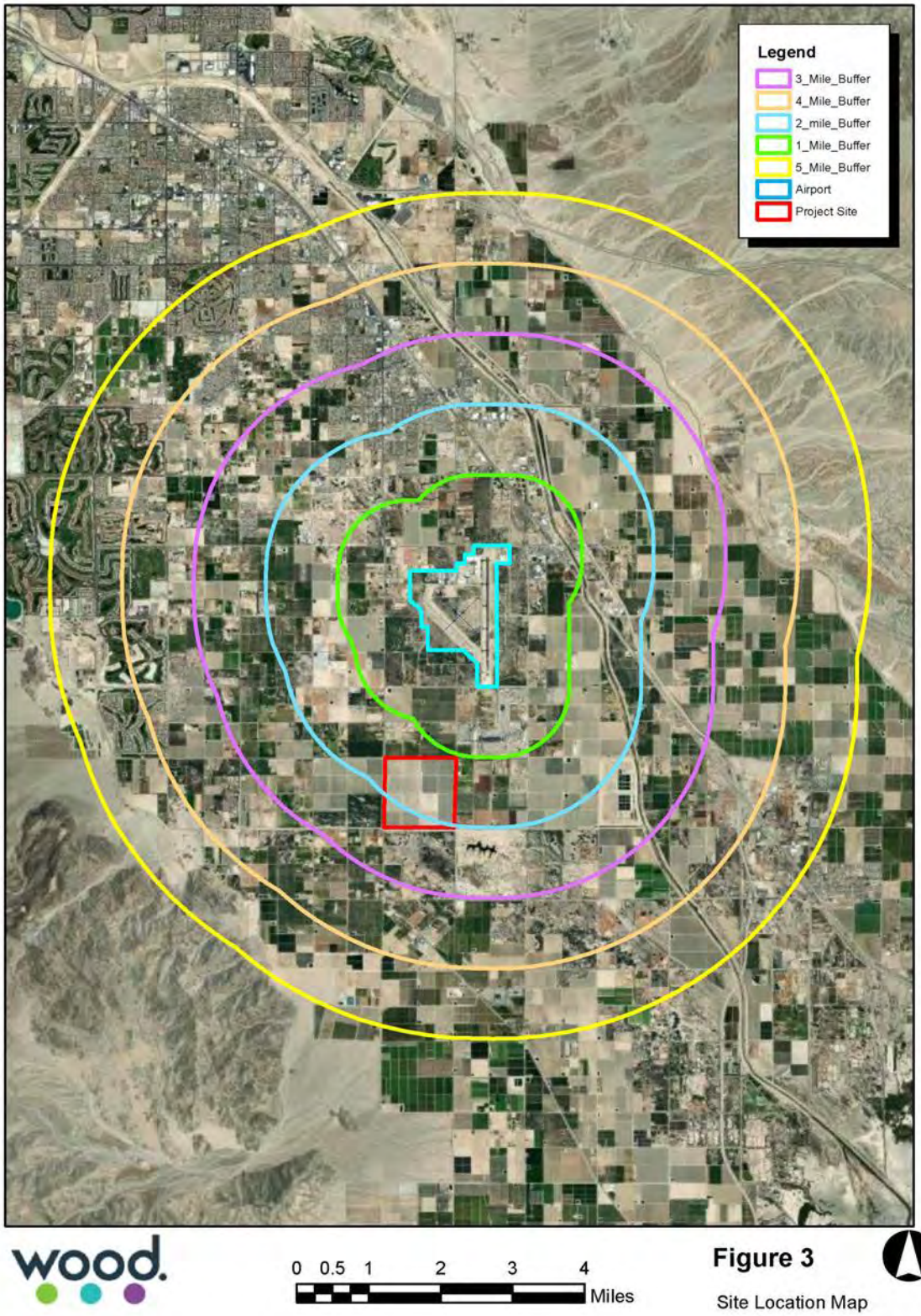


Figure 4. Jaqueline Cochrane Regional Airport Land Use Compatibility Zones. (Source: RC ALUC 2004)

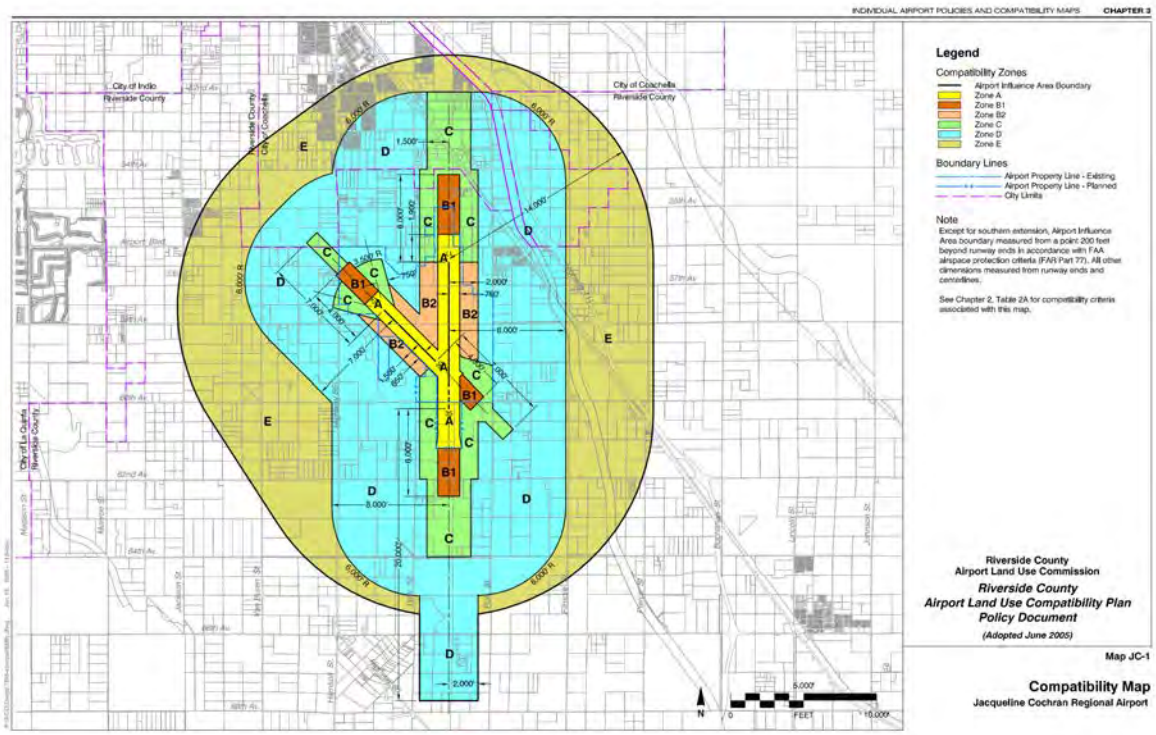


Figure 5. Jaqueline Cochrane Regional Airport Land Use Compatibility Zone restrictions (Source: RC ALUC 2004).

Zone	Locations	Maximum Densities / Intensities: Residential (d.u./ac) [1]	Other Uses (people/ac) [2]: Average [6]	Single Acre [7]	with Bonus [8]	Req'd Open Land [3]	Additional Criteria: Prohibited Uses [4]	Other Development Conditions [5]
A	Runway Protection Zone and within Building Restriction Line	0	0	0	0	All Remaining	› All structures except ones with location set by aeronautical function › Assemblages of people › Objects exceeding FAR Part 77 height limits › Storage of hazardous materials › Hazards to flight [9]	› Avigation easement dedication
B1	Inner Approach/ Departure Zone	0.05 (average parcel size ≥20.0 ac.)	25	50	65	30%	› Children's schools, day care centers, libraries › Hospitals, nursing homes › Places of worship › Bldgs with >2 aboveground habitable floors › Highly noise-sensitive outdoor nonresidential uses [10] › Aboveground bulk storage of hazardous materials [11] › Critical community infrastructure facilities [12] › Hazards to flight [9]	› Locate structures maximum distance from extended runway centerline › Minimum NLR of 25 dB in residences (including mobile homes) and office buildings [13] › Airspace review required for objects >35 feet tall [14] › Avigation easement dedication
B2	Adjacent to Runway	0.1 (average parcel size ≥10.0 ac.)	100	200	260	No Req't	Same as Zone B1	› Locate structures maximum distance from runway › Minimum NLR of 25 dB in residences (including mobile homes) and office buildings [13] › Airspace review required for objects >35 feet tall [14] › Avigation easement dedication
C	Extended Approach/ Departure Zone	0.2 (average parcel size ≥5.0 ac.)	75	150	195	20%	› Children's schools, day care centers, libraries › Hospitals, nursing homes › Bldgs with >3 aboveground habitable floors › Highly noise-sensitive outdoor nonresidential uses [10] › Hazards to flight [9]	› Minimum NLR of 20 dB in residences (including mobile homes) and office buildings [13] › Airspace review required for objects >70 feet tall [15] › Deed notice required
D	Primary Traffic Patterns and Runway Buffer Area	**(1)** ≤0.2 (average parcel size ≥5.0 ac.) *or* [16] **(2)** ≥5.0 (average parcel size ≤0.2 ac.)	100	300	390	10%	› Highly noise-sensitive outdoor nonresidential uses [10] › Hazards to flight [9]	› Airspace review required for objects >70 feet tall [15] › Children's schools, hospitals, nursing homes discouraged [17] › Deed notice required
E	Other Airport Environs	No Limit	No Limit [18]			No Req't	› Hazards to flight [9]	› Airspace review required for objects >100 feet tall [15] › Major spectator-oriented sports stadiums, amphitheaters, concert halls discouraged beneath principal flight tracks [18]
*	Height Review Overlay	Same as Underlying Compatibility Zone				Not Applicable	Same as Underlying Compatibility Zone	› Airspace review required for objects >35 feet tall [14] › Avigation easement dedication

See Chapter 3 for airport-specific additions or exceptions to these policies

Table 2A

NOTES:

[1] Residential development must not contain more than the indicated number of dwelling units (excluding secondary units) per gross acre. Clustering of units is encouraged. See Policy 4.2.5 for limitations. Gross acreage includes the property at issue plus a share of adjacent roads and any adjacent, permanently dedicated, open lands. Mixed-use development in which residential uses are proposed to be located in conjunction with nonresidential uses in the same or adjoining buildings on the same site shall be treated as nonresidential development. See Policy 3.1.3(d).

[2] Usage intensity calculations shall include all people (e.g., employees, customers/visitors, etc.) who may be on the property at a single point in time, whether indoors or outside.

[3] Open land requirements are intended to be applied with respect to an entire zone. This is typically accomplished as part of a community general plan or a specific plan, but may also apply to large (10 acres or more) development projects. See Policy 4.2.4 for definition of open land.

[4] The uses listed here are ones that are explicitly prohibited regardless of whether they meet the intensity criteria. In addition to these explicitly prohibited uses, other uses will normally not be permitted in the respective compatibility zones because they do not meet the usage intensity criteria.

[5] As part of certain real estate transactions involving residential property within any compatibility zone (that is, anywhere within an airport influence area), information regarding airport proximity and the existence of aircraft overflights must be disclosed. This requirement is set by state law. See Policy 4.4.2 for details. Easement dedication and deed notice requirements indicated for specific compatibility zones apply only to new development and to reuse if discretionary approval is required.

[6] The total number of people permitted on a project site at any time, except rare special events, must not exceed the indicated usage intensity times the gross acreage of the site. Rare special events are ones (such as an air show at the airport) for which a facility is not designed and normally not used and for which extra safety precautions can be taken as appropriate.

[7] Clustering of nonresidential development is permitted. However, no single acre of a project site shall exceed the indicated number of people per acre. See Policy 4.2.5 for details.

[8] An intensity bonus may be allowed if the building design includes features intended to reduce risks to occupants in the event of an aircraft collision with the building. See Policy 4.2.6 for details.

[9] Hazards to flight include physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations. Land use development that may cause the attraction of birds to increase is also prohibited. See Policy 4.3.7.

[10] Examples of highly noise-sensitive outdoor nonresidential uses that should be prohibited include amphitheaters and drive-in theaters. Caution should be exercised with respect to uses such as poultry farms and nature preserves.

[11] Storage of aviation fuel and other aviation-related flammable materials on the airport is exempted from this criterion. Storage of up to 6,000 gallons of nonaviation flammable materials is also exempted. See Policy 4.2.3(c) for details.

[12] Critical community facilities include power plants, electrical substations, and public communications facilities. See Policy 4.2.3(d) for details.

[13] NLR = Noise Level Reduction, the outside-to-inside sound level attenuation that the structure provides. See Policy 4.1.6.

[14] Objects up to 35 feet in height are permitted. However, the Federal Aviation Administration may require marking and lighting of certain objects. See Policy 4.3.6 for details.

[15] This height criterion is for general guidance. Shorter objects normally will not be airspace obstructions unless situated at a ground elevation well above that of the airport. Taller objects may be acceptable if determined not be obstructions. See Policies 4.3.3 and 4.3.4.

[16] Two options are provided for residential densities in *Compatibility Zone D*. Option (1) has a density limit of 0.2 dwelling units per acre (i.e., an average parcel size of at least 5.0 gross acres). Option (2) requires that the density be *greater than* 5.0 dwelling units per acre (i.e., an average parcel size *less than* 0.2 gross acres). The choice between these two options is at the discretion of the local land use jurisdiction. See Table 2B for explanation of rationale. All other criteria for *Zone D* apply to both options.

[17] Discouraged uses should generally not be permitted unless no feasible alternative is available.

[18] Although no explicit upper limit on usage intensity is defined for *Zone E*, land uses of the types listed—uses that attract very high concentrations of people in confined areas—are discouraged in locations below or near the principal arrival and departure flight tracks. This limitation notwithstanding, no use shall be prohibited in *Zone E* if its usage intensity is such that it would be permitted in *Zone D*.

Table 2A, continued

The project site is highly suitable to development of residences as it is nearly flat, with soils conducive to construction. The native soils are highly saline but have presumably been treated to support agriculture. From a wildlife standpoint, the conditions were almost entirely benign during the WHSV as the plowed fields supported almost no vegetation and only a few small birds were noted on the site. Most were attracted to the irrigation being applied to a portion of the property, in the shade provided by the buildings in the center of the property, or perched on the buildings and

utility lines of the infrastructure itself. It was impossible to empirically determine whether larger numbers would be supported when hay or other rotated crops are present, but it is highly probable that they would. Similar areas in the surrounding landscape were surveyed during the July 2022 visit and previous experience in the immediate local area allowed for some reasonable estimates of such attractiveness to be determined.

2. **Jacqueline Cochrane Regional Airport:** The Jacqueline Cochrane Regional Airport (TRM) is an uncontrolled General Aviation airport open to the public and operates 24 hours a day (see Figure 6). It has two runways: 17/35 and 12/30. It has several Fixed Based Operators (FBOs) including a jet training center. Ninety four aircraft are based at the field including single engine aircraft, multi-engine aircraft, jet aircraft, helicopters, and ultralights. As of December 2020, aircraft operations averaged 303 per day including 62% transient general aviation, 36% local general aviation, 1% military, and <1% air taxis (AirNav 2022). Aircraft operations have been increasing over the past several years and it is anticipated that this trend will continue in the future. A total of 8 wildlife strikes have been reported and documented in the FAA Wildlife Strike Database (FAA 2022) for aircraft operating from TRM. All reported strikes occurred since 2002 with the latest in 2021. Four of the eight strikes caused significant damage to the aircraft and are a high proportion of reported strikes when compared to other airports nationwide. One was caused by coyotes, one by a California Gull, and two by Canada Geese (see Appendix B). However, strike reporting rates for TRM are well below those observed for other airports of similar size and likely indicate a relatively lower risk compared to other locations, though it is unknown how many unreported strikes have been experienced there. Further, each of these strikes took place within the local area, including in the approach and departure airspace and one on the airport itself. It is not possible from the database to determine the exact location of the strikes other than the one reported on landing roll at the airport. A brief interview with one of the lead instructor pilots at the jet training center and prior contact with the airport manager indicated that bird strike risk is considered minimal by pilots operating from the airport but nevertheless a concern with increased emphasis associated with rapid development in the airport vicinity in the recent past.

Figure 6. Jaqueline Cochrane Regional Airport (Source: BASH Inc).

Site Visit Protocol

1. **Document Review:** Relevant documents were provided by Wood/WSP for review, though were limited in scope. Additional documents were obtained from the Riverside County Airport Land Use Commission, the Airport, and through internet research on FAA, ALUC, and other sources. Review of documents was conducted prior to, during, and after the site visit to determine history, current conditions, and future plans for the site.

2. **Site Visit:** The Thermal Ranch Project site and surrounding areas were visited by Dr. DeFusco on July 13, 2022. Dr. DeFusco has been involved in prior land use planning and wildlife hazard assessments for other projects in the immediate vicinity in the recent past, including visits during different seasonal conditions that allowed for expert analysis relevant to this current project and report preparation. Timing of the current visit was determined by scheduling and contracting timelines. Mid-summer conditions and extreme heat were not conducive to optimal bird and other wildlife activity with daytime temperatures reaching over 112 degrees Fahrenheit. As a consequence, bird numbers and behaviors were minimal and migrant movements were non-existent. Reliance on past experience in the area, published references, internet resources, and other data were used to supplement the short-term site visit observations. It must be emphasized that a short-term site visit cannot capture the full annual cycle of presence and abundance of species in the vicinity of the project and past experience and reliance on other data sources were necessary while conducting the review. Nevertheless, a good representation of avifauna in the area was present during the visit.

Unlimited access to the site was granted to the site by the developer and ground-based surveys were conducted during the site visit. Dr. Tim Chumley of Wood/WSP, an environmental specialist with much local expertise, joined Dr DeFusco for a portion of the survey period. Surveys of the surrounding areas were also conducted to determine potential attractiveness to wildlife as the project will substantially alter the current environment. These surrounding area surveys were also essential as the project does not exist in a vacuum but is part of a complex landscape that determines wildlife presence on a larger scale. Surveys focused on the immediate surrounding areas, primarily within five miles, but extended to the Salton Sea whose northern reaches are approximately 8.4 miles to the south and is the major landscape feature attracting a wide variety of species to, and passing through, the Coachella Valley. It is acknowledged that features outside the property and especially at extended distances are well beyond the control of the project and development plans, but are surveyed for their influence on the local and migratory movement of birds that drive the presence of species in the area of the project. Other areas included the airport itself (only accessed in the public areas and viewed through perimeter fences), agricultural fields, suburban developments, recreational areas, and others potentially influencing wildlife presence in the valley.

Results and Findings

1. **Species Observed:** Ninety nine species of birds, and eleven species of mammals, or their sign, were observed during the site visit, though the vast majority of those were observed in the surrounding area and not necessarily on or over the project site itself. It must also be emphasized that these observations are only a fraction of the over 400 bird species and dozens of mammal species recorded and documented in other sources for the Coachella Valley. Surrounding area observations are important to include as these species could potentially occur on the project site or could be observed flying over or through the immediate vicinity. Observations from surrounding area are also required by the FAA and ALUC as a measure of background level of wildlife activity for any such survey such as occurred in this instance. Observed species from the surrounding area may not necessarily be attracted to the site, but provide the background level of wildlife activity as required for this survey. A full listing of species observed during this site visit is included in Appendix A. Mammals are only listed as they can be a potential source of prey for predatory or scavenging birds in the area, but do not pose a direct threat to aircraft at the project site and would only be so if on the airport property itself. Reptiles were not included as they pose no issues in the context of this report. Observed species include those found on the Thermal Ranch Project site and in the surrounding areas. The current habitat conditions at the project site are such that very few birds or other wildlife species were observed there. The vast majority of species were found in the surrounding areas where more

suitable habitat occurred, but would indicate presence in the vicinity, including migratory birds that pass through and overwinter in the Coachella Valley. Special consideration was given to observations on lakes, ponds, canals, and other water sources in the area and to another equestrian facility immediately adjacent to the proposed development as these could indicate the potential to attract birds and other wildlife to the Thermal Ranch Project equestrian facilities and any potential future water features when constructed. As required for a qualifying WHSV, the federal and state status of listed species as a subset of the total observation list is included in Table 1. Of the total species observed, none were listed as Federally Threatened or Endangered. However, virtually all are protected under the Migratory Bird Treaty Act and several species observed are afforded additional state-level protections as detailed in the table. The Peregrine Falcon and Northern Harrier were observed flying over the Thermal Ranch Project property during the site visit.

Table 1: Federal and State-Listed Species Status of Species Observed During Site Visit

Common Name	Status
Peregrine Falcon	Fully Protected State Species
Black-tailed Gnatcatcher	State Watch List
California Gull	State Watch List
Cooper's Hawk	State Watch List
Burrowing Owl	Species of Special Concern
Savannah Sparrow	Species of Special Concern
Loggerhead Shrike	Species of Special Concern
Northern Harrier	Species of Special Concern
American Badger	Species of Special Concern
Round-tailed Ground Squirrel	Species of Special Concern

2. **Water Bodies in the Vicinity of the Project:** There are numerous water bodies in the vicinity of the Thermal Ranch Project. They range in size from small intermittent puddles following rain events to the enormous Salton Sea approximately 8.4 miles to the south of the project and over 9 miles from the airport. Rivers, irrigation canals/drains, stormwater detention/retention ponds, recreational lakes, landscaping features, a sewage treatment plant, and others exist throughout the area (See Figures 7 and 8). The Riverside County ALUC produced a brochure entitled "*Airports, Wildlife and Stormwater Management*" (Undated a) (Appendix C) with guidelines that can be referenced to address water features near airports and may be applied to this project.

   By far the most significant water feature in the entire Coachella Valley is the Salton Sea. It is the major attraction and determines the migratory route for

birds each fall and spring and holds many thousands of wintering birds each year. The wetlands along its margins are extremely important to migratory, over-wintering, and resident birds including those that are potentially hazardous to aircraft operations such as waterfowl, gulls, pelicans, waders, shorebirds, raptors, blackbirds, and others.

Figure 7. Examples of the Many Water Features Including Ponds and Agricultural Drains in Immediate Vicinity of the Thermal Ranch Project. Locations of these features respectively are: ¼ mile of the project site SE of the intersection of Tyler Street and 64th Avenue. Immediately adjacent to SE corner of the project at Tyler and 64th. One mile ENE of the project site along Polk Street and N of 62nd Avenue. ½ mile WSW of the project site W of Harrison Street at the end of Nena Drive. (Source: BASH Inc).

Figure 8. Salton Sea (Source: BASH Inc).

The presence of the Thermal Ranch Project development will have no impact on large-scale bird movement patterns. However, the Salton Sea has undergone significant recession in the recent past following extended periods of drought. The wetlands on its margins are most significantly affected and has forced birds to find other suitable places to forage, breed, and shelter. In the long term, it is unknown whether continued receding water levels will cause birds to short stop their migrations or continue further south into Mexico and the Sea of Cortez, or whether some of these birds will find other local water sources to meet their requirements. Restoration of the Salton Sea to historic water levels is planned but the schedule for such is unknown. Most birds remain on, in, or very close to the Salton Sea once they establish there. However, during the site visit and previous visits to the area, it was noted that several very large flocks of gulls (primarily Ring-billed Gulls), shorebirds and waders (including White-faced Ibises, Long-billed Curlews, Whimbrels, Cattle Egrets, and others), and waterfowl (geese and ducks) would leave the Sea and forage in the agricultural fields and seek fresh water in the nearby area (for examples, see Figure 9). None of these flocks were specifically noted near the Thermal Ranch Project property during the site visit as most remained two or more miles south of there, but it is possible that they could do so with the presence of new landscape features on the site and immediate surroundings.

Figure 9. Flocks of Snow Geese and Ring-billed Gulls on Freshwater Pond and Over Agricultural Fields in Coachella Valley. (Source: BASH Inc).

Other water features in the area variously attracted birds in generally small numbers. An overall observation is that the larger, shallower water bodies, and those that supported emergent vegetation contained the most birds. Small, steep-sided, or lined detention structures and canals were least attractive. Ring-billed Gulls were observed in and around the sewage treatment plant to the east of the project. Birds observed in some of the agricultural and stormwater detention ponds included gulls of mixed species, waterfowl of mixed species, coots, grebes, herons, egrets, ibises, and others. In ponds that held some shoreline or emergent vegetation, flocking birds such as Great-tailed Grackles, Red-winged Blackbirds, Yellow-headed Blackbirds, and European Starlings were observed in small numbers. In these same areas, raptors such as hawks and vultures were noted, also in small numbers. Songbirds such as Loggerhead Shrikes, Black-tailed Gnatcatchers, Marsh and Bewick's Wrens, Verdins, Common Yellowthroats, Song Sparrows, and others were also noted in pondside vegetation, but these smaller, generally solitary species are of no concern to aviation safety.

3. **Agriculture in the Vicinity of the Project:** There are a variety of agricultural activities in the vicinity of the Thermal Ranch Project. These range from date palms to row crops, to hayfields, to small-scale livestock operations. Each of these attract a variety of wildlife species including birds that can be hazards to aviation. Nearly every stage of agricultural operations can attract wildlife of various species, including plowing and field preparation, planting, harvesting, and transportation. Birds such as blackbirds (Red-winged and Yellow-headed Blackbirds, Great-tailed Grackles, Brown-headed Cowbirds, and European Starlings) were noted in several fields, shorebirds and waders (White-faced Ibises, Long-billed Curlews, Whimbrels, Killdeer, Cattle Egrets) in others, gulls (mostly Ring-

billed) in others, doves and pigeons in others, and geese and ducks in still others (for example, see Figure 10). Farmers and ranchers were noted taking various measures to deter wildlife from ripening fruit and other crops. No such agricultural activity will take place at the project site and the developers have no control over these outside operations, though presumably some of the green fields in the Ranch riding and training areas will be irrigated and may be used to produce feed. However, the presence of agriculture in the surrounding landscape, and associated water systems as noted above, do contribute significantly to the presence and abundance of birds and other wildlife in the area and elevates populations beyond the natural background that would otherwise occur in the absence of such operations. Birds might be attracted to the project from nearby agricultural fields and must be deterred or dispersed when that might occur.

Figure 10. Shorebirds and Waders in Irrigated Agricultural Field Near Project Location (Source: BASH Inc).

4. **Equestrian Facilities in the Vicinity of the Project:** There is an existing equestrian facility immediately adjacent to the property to the northeast at the intersection of 62nd Avenue and Tyler Street (see Figure 11). Although it is acknowledged that this facility is different in nature than the proposed project, it can give some indication as to conditions on portions of the

Thermal Ranch Project once developed. Horses were stabled in some semi-open facilities, fed from bins under shade coverings, and allowed to graze in irrigated hayfields on site. Small numbers of birds were noted at the existing facility including Great-tailed Grackles, European Starlings, and Killdeer feeding in the irrigated fields (see Figure 12). Additionally, House Sparrows, House Finches, American Crows, Mourning Doves, and Eurasian Collared-Doves were observed in and on the buildings that contained feeding bins and housed horses. Although numbers observed were small, some of these species can occur in flocks that could be hazardous to aircraft, particularly during migratory and wintering seasons when aggregations are most common. It is also possible that concentrations of birds could occur as noted above in other agricultural areas, particularly when irrigated fields become most attractive.

Figure 11. Green Fields and Feeding Area in Equestrian Facility Adjacent to Project Location (Source: BASH Inc).

Figure 12. Birds attracted to Irrigated Fields at Adjacent Equestrian Facility (Source: BASH Inc).

5. **Community Development in the Vicinity of the Project:** There are several other community developments existing or planned in the area that can potentially affect local bird and other wildlife populations. Small-scale industry, suburban housing areas, and rural residences may attract birds to the structures themselves, but mostly due to landscaping features including non-native vegetation. Rock Pigeons, Eurasian Collared-Doves, European Starlings, House Sparrows, Mourning Doves, White-winged Doves, Common Ravens, American Crows, House Finches, and others were noted in such areas. In fact, the first four species listed are non-native and never occurred in the area prior to human settlement. Many other species would not occur in the absence of such landscaping and infrastructure. Any vegetation that produces food sources, shelter, or breeding sites can attract birds beyond those naturally present in the desert environment. Landscaping vegetation must be carefully selected in sensitive areas where airport operations may be affected. The Riverside County ALUC produced a brochure entitled "*Landscaping Near Airports*" (Undated b) (Appendix D) that should be followed and will significantly assist in deterring birds and other wildlife that may be attracted to the Ranch property.

Recommendations

1. **Implement the Bird Mitigation/Management Plan:** The Thermal Ranch Project developers plan to implement a Wildlife Hazard Management Plan (WHMP) and can be based on the findings and recommendations in this WHSV report. The following sections expand on the specific passive and active measures that must be included in the plan to ensure procedures follow industry-standard best management practices as the plan is implemented.

2. **Passive Control Measures:** Passive wildlife control measures are those that do not require the active participation of personnel once in place and on their own act to deter attractiveness. In general, these are grouped into habitat management and exclusionary features that may include engineering design, construction, landscaping, and other physical features of the site. Overall, such provisions must be implemented for more active methods to be successful in the long term.

    a. **Inclusion, Physical Design, and Management of any Water Bodies.** FAA and ALUC guidelines prohibit the inclusion of certain water features within the separation criteria detailed in FAA AC 150/5200-33C and RC ALUC policies. In general, the guidelines detailed in the ALUC brochure entitled "*Airports, Wildlife and Stormwater Management*" should be followed (Undated a) (Appendix

C). Water features in the extreme desert environment and especially given the current drought conditions in the region will potentially attract hazardous bird species, at least during some periods of the year. Federal and state guidelines do accommodate stormwater management and allow for temporary detention of water after design storm events. Such features must drain within 24 hours following "average" events and up to 72 hours following 100-year flooding events. Detention structures must remain dry between such events. Permanent retention of water, defined as outside the above parameters, are prohibited within the separation criteria defined by the FAA and ALUC. This would not apply to swimming pools and similar water features in the development plans, as treated water and physical design of such pools do not attract hazardous birds. That said, most of the existing ponds and smaller water features in the area do attract birds, but only in relatively small numbers.

Should the developer propose any future water features with untreated water that could allow vegetation in or along the edges of the feature, and should the ALUC and Riverside County permitting agencies allow such features to be added to the development plans, mitigation strategies must be applied to minimize the attractiveness to potentially hazardous species that could adversely affect nearby flight operations. Specifically, the shape of any natural water features must be engineered to eliminate coves, peninsulas, and convoluted shorelines to create a much more open structure that is less attractive to all species of interest. Additionally, the elimination of all shoreline and emergent vegetation will significantly deter species that would feed, breed, or take shelter there. A water clarification system would be essential to "sterilize" the water and virtually remove all organic matter that would otherwise form the base of a food chain that could promote zooplankton, macroinvertebrates, and the larger species that would feed on them. Even without intentional introduction, fish, amphibians, and aquatic invertebrates (and therefore birds and other wildlife that would feed upon them) would eventually find their way into any natural water bodies, but it is unlikely that they could be supported with a clarification treatment regime in place. Potential water features, if allowed, must also be designed with steep sides to limit shallow, shoreline access to wading birds and developed with a sand or gravel shoreline to prevent vegetation from forming. So long as the shoreline of any water feature is maintained in sand or gravel and vegetation is prevented from growing along its margins, its attractiveness will remain minimal and will limit the possibility of introducing organic matter to such features. With all these provisions in place, the only remaining potential attractant would be the fresh water itself as all other resources would be virtually eliminated.

Staff would have to be dedicated to maintenance of any potential fresh water feature. Cleaning of debris, removal of vegetation and algae, and other duties would keep them occupied for many hours each day. The presence of staff and maintenance activity can act as a deterrent to any potentially hazardous birds that may attempt to enter water bodies, particularly if personnel are equipped with active dispersal techniques as further described below. Finally, the presence of residents and patrons using the facility, so long as they are not actively or unintentionally feeding birds, will add another level of disturbance at the facility. Residents, visitors, and guests must be prohibited from introducing birds or feeding birds or any other wildlife on the property.

Given the FAA and ALUC requirements and the effort needed to maintain any potential fresh water features, it seems best not to consider such features on the property. Other uses should be considered in lieu of an open water feature to be less attractive to birds and other wildlife.

b. Equestrian Housing, Feeding, and Maintenance Considerations: Livestock operations including equestrian facilities have the potential to attract a variety of birds and other wildlife. Facilities for housing animals, feed production areas, feeding bins/troughs, and even manure can directly attract birds, but each can also draw small mammals that feed on grain or other food resources that in turn can attract predators and scavengers, and insects and other invertebrates that will decompose manure and indirectly attract birds to feed on them. The infrastructure that houses the horses or are used for training and competitions can also provide cover and shade to birds that may occupy the buildings and other structures for roosting or nesting areas. Buildings including stables and arenas should be designed to minimize open, exposed ceilings with perching sites available. Netting can be applied inside such facilities to limit access to I-beams or other such supporting structures that are favorable perching sites. Anti-perching spike strips may also be used in such facilities to prevent birds using specific structures. Birds should be deterred not only to minimize aviation hazards, but also for health precaution and aesthetic disruptions to owners and patrons of equestrian operations.

Feeding troughs, storage areas, or bins used to contain grain, pelletized alfalfa, or other such feed can attract birds and those should occur under shade or other covered structures to limit visual exposure to flocking bird species. Irrigated hayfields or other grazing areas should be minimized to limit standing water available to birds and other wildlife. Water applied to such areas should be limited to that necessary to maintain vegetation and not allowed to accumulate

in puddles or along furrows. Grassy riding, training, and competition areas should use drought-resistant species that minimize water usage and soil improvements that can attract a variety of birds and other wildlife. Landscaping in the equestrian areas of the development should follow ALUC guidelines (see below). Manure must be routinely removed from facilities and training areas and contained for disposal to avoid exposure to birds, small mammals, and invertebrates. Active harassment methods must be available to disperse flocks of birds that may occur in these areas as well (see below for options).

c. **Miniature Golf Course.** A miniature golf course is included in the development plans as part of the commercial area. This feature, especially if constructed using artificial turf, is not deemed to be attractive to wildlife and requires no special mitigation measures. No water features should be included as part of the course design.

d. **Landscape Plans:** The Wildlife Hazard Management Plan also must specify landscaping that would not attract birds to the property. It must further stipulate that the Thermal Ranch Project will be responsible for managing all landscaping and will ensure uniform compliance with guidelines established to prevent attracting nuisance birds. Selecting vegetation suitable for xeriscaped landscapes to ensure species adapted to local conditions and minimize necessity for irrigation is highly encouraged. Vegetation that produces seeds, fruits, or berries, or that will provide dense cover for nesting or roosting should be prohibited. The Riverside County ALUC published a brochure entitled "*Landscaping Near Airports*" (Undated b) that is an excellent resource in that it provides a suitable species list and general planting guidelines to limit birds and other wildlife. Following these guidelines and selecting vegetation species from the list will assure hazardous wildlife are minimized throughout the property. Individual residents must be held accountable to follow the guidelines and only maintain vegetation stipulated in the approved landscaping plan and species list for the overall development site.

e. **Trash and Food Management:** Many birds can be attracted to trash or food intentionally or unintentionally provided them. Other wildlife such as coyotes, meso-mammals, or feral pets may access and expose trash or food items left unattended or in unprotected conditions. It is imperative that all household or industrial trash on site that includes organic material or food items be contained and covered at all times. This includes manure generated in community and individual stables and horse training and competition areas as it is removed in daily maintenance of facilities. Dumpsters and household trash containers must have lids that remain closed and cannot be breeched or opened by birds or other wildlife. It is also

imperative that concessions and patrons using the swimming pools, recreational facilities, miniature golf course, and clubhouses do not intentionally feed birds anywhere on site. It is recommended that signs be prominently placed in strategic locations around the center and that a no feeding policy be strictly enforced. These provisions should also be a mandatory inclusion in the project covenants governing residents and their guests.

3. **Active Deterrent Measures:** Each of the measures described above are passive measures that will deter birds without constant or purposeful intervention. It is recognized that passive measures alone may on occasion require active measures to supplement their effects. The Thermal Ranch Project Wildlife Hazard Management Plan must specify additional options that can be used to reinforce passive deterrents as needed and appropriate and as further detailed below. These should be used in combination but are arranged somewhat in order of priority. Also see Cleary and Dickey 2010, Belant and Martin 2011, and DeFusco and Unangst 2015 for much more detailed discussion of all the techniques described.

    a. **Trained and Equipped Personnel:** As mentioned above, several maintenance personnel will regularly be present on site to clean and maintain the property. The mere presence of these individuals will act as a deterrent to birds as will residents and others using the facility for recreational purposes. Ensure that staff are further trained and equipped to disperse birds that may attempt to access the facility. In addition to maintenance staff, contracted wildlife management professionals may be used as needed to supplement local staff. These professionals may bring their own equipment and techniques to the program and diverse, innovative strategies are always encouraged to add to the options available on site.

    b. **Sonic Devices:** Most bird harassment programs rest on a foundation of active dispersal techniques employing a variety of pyrotechnic devices that produce loud sounds and explosive visuals. It is recognized that these devices cannot be used in highly populated or urban areas and are not to be used at this location due to human disturbance and potential fire hazards. Therefore, alternative harassment techniques may be needed. For this project, it is recommended that long-range hailing devices be used. These are essentially high-tech “bullhorns” that project high decibel sound pressures in a focused beam using parabolic speakers. Sound attenuates and can be perceived outside the central beam, but unless in the beam itself, sound levels are fairly innocuous. Commercial versions of these devices are available in small, hand-held applications and come with a variety of pre-programmed sounds specifically designed for bird dispersal. However, virtually any sound can be projected with these devices if desired. Generally, distress or

alarm calls of the actual species targeted are most effective, though some species (such as waterfowl and raptors) do not possess these calls. Projected calls are effective over extreme ranges and have been tested at distances over one half mile. They are also effective on soaring raptors and other birds that may not respond to other standard techniques. Although there are likely others, two companies that produce these devices for bird control are the LRAD Corporation (for Long-Range Acoustic Device) (www.lrad.com) and Ultra Electronics Hyperspike (www.Ultra-Hyperspike.com). Each make a variety of models including small handheld versions suitable for this project. It is important to use these properly. They must only be used when birds are noted present or approaching the site, and then focused upon them to "herd" them away from the site. DO NOT USE CONTINUOUSLY in a static mount or orientation as habituation to the sounds will rapidly erode effectiveness and compromise all other methods.

c. **Remote-controlled Devices:** Remote controlled devices such as aerial drones or boats can be effectively used to disperse birds that may be out of reach by other means. Used in combination with sonic devices, the visual disturbance and the sound they themselves generate can be highly deterrent to potentially hazardous species. They are particularly effective on flocking species such as waterfowl, gulls, shorebirds, blackbirds, grackles, and starlings as they may cause panic in the flock and encourage their departure. It is imperative that coordination with the airport be established before considering aerial drones as they may be prohibited at certain altitudes and distances from any active airport. Frequency interference and the obvious threat of collisions must be addressed before implementing these devices. There should be no reason to use these against birds at this location at altitudes that would conflict with aircraft, but prior coordination with and approval from the airport is necessary.

d. **Trained Dogs:** The Wildlife Hazard Management Plan may include specifically trained dogs as an option, and these can certainly be effective. Dogs are most effective on larger and flocking birds such as geese, ducks, and gulls. Dogs can be expensive to obtain, train, and maintain and may require local volunteers or contractors to effectively implement and therefore this option must be carefully considered before inclusion in the mitigation program.

e. **Trained Birds of Prey:** The Wildlife Hazard Management Plan might also include specifically trained hawks or falcons as an option and these, like dogs, can certainly be effective. Potentially hazardous birds have evolved to fear airborne predators and virtually never habituate to their presence. They are most effective against small to

medium sized flocking birds such as ducks, gulls, doves, blackbirds, grackles, and starlings. However, falconry has even more limitations than do dogs. They are more expensive to obtain, train, and maintain. They cannot fly during inclement weather, in fog, in rain, in very high winds, at night, after they have fed, or while they are molting. They also require special permits to obtain and use by specially trained handlers. This option would certainly require contracted effort and if used, should only be a part of a larger program as a supplement to other, more standard methods.

f. Lasers: While lasers can be effective, there are some significant limitations. They are most effective on roosting birds in low light conditions. Gulls and waterfowl have been effectively deterred from such locations. Other methods should work to prevent these conditions from developing, but if needed, lasers could be used to supplement more standard techniques to move roosting birds from ground-level sites. As with remote aerial drones, it is imperative that coordination with the airport (and in this case, the FAA) be conducted before considering the use of lasers. It is a federal offense to use lasers near airports if elevated above the horizon, used to illuminate aircraft, or pointed in pilot's eyes. Consultation with the FAA and airport would be necessary to determine if lasers can even be considered at the specific distance from the airport where this project is located. Therefore, it is not recommended that these be used at this location unless highly restricted in their application.

g. Removal of Nests: Any nests that may be established on the property may be removed at any time when they are not actively occupied by brooding adults, eggs, chicks, or fledglings. Generally, nests are removed after nesting seasons to comply with federal and state law. Any active nests can only be removed under the conditions of specific permits, with some exceptions granted for non-native species. Migratory Bird Treaty Act Federal Depredation Permits may be issued to deal with individual birds or their nests if they are found to compromise human health or safety and the Thermal Ranch Project may consider obtaining these permits if other non-lethal methods fail. Consultation with the US Department of Agriculture - Wildlife Services, US Fish and Wildlife Service, and State Natural Resources agencies will be required to obtain such permits.

h. Lethal Control: While the intent of this overall bird control program is to rely on non-lethal methods and those are most effective in the long-run, there may be exceptional circumstances where lethal control may be required. Generally, and for this site in particular, lethal control measures are not recommended until all non-lethal options have been exhausted. However, on rare occasion, an individual or group of birds or other wildlife habituates to other

methods and must be permanently removed. Should this situation arise at this project, a Federal (and applicable state) depredation permit may be considered. All species listed under the Migratory Bird Treaty Act require depredation permits to lethally remove. There are certain provisions and exceptions granted for some species such as resident Canada Geese, blackbirds, grackles, cowbirds, magpies, and crows, as well as non-native species such as Rock Pigeons, House Sparrows, European Starlings, and Eurasian Collared-Doves that may require consideration. If all other provisions of the plan and as outlined in this report are implemented, it is not anticipated that lethal control will be needed at this site.

Conclusion

This report summarized the findings of the July 2022 site visit and previous experience in the immediate area to determine presence and abundance of birds that might be potentially attracted to the Thermal Ranch Project and the program to deter their presence to minimize adverse impacts in the local area. Overall, results of this WHSV indicate a generally moderate risk of bird strikes to aircraft operating from the Jacqueline Cochrane Regional Airport on the overall landscape level. However, the potential is recognized as there are a large number and diverse mix of species that annually migrate through the region and overwinter on the Salton Sea and in surrounding areas. Some of these birds will certainly be attracted to any water features in the area including potentially at the Thermal Ranch Project site, if permitted. Likewise, birds may be attracted to the equestrian facilities themselves as well as associated other features of the developed property. An aggressive Wildlife Hazard Management Plan should be developed for the project and include engineering design, landscaping, passive, and active deterrent measures that will minimize if not eliminate the potential risks not only to aircraft, but to human health and safety as well. Implementing the plan would ensure any added potential risks would be negligible at best in the overall landscape as it currently exists. With the implementation of their plan, and the inclusions suggested herein, the Thermal Ranch Project should be highly successful at mitigating any possible issues at the site.

Appendix A: Wildlife Observations in the Area Surrounding the Thermal Ranch Project Property and Coachella Valley During the July 2022 WHSV*

*Note: These observations were made during the one day long visit to the area on July 13, 2022 and are therefore not comprehensive. The list only represents a fraction of the over 400 species documented in the Coachella Valley and only during this seasonal timeframe. Peak daytime temperatures reached 114 degrees Fahrenheit and as expected, bird activity was minimal during the visit and does not reflect the number of birds expected during other periods of the year. Other references should be used to supplement this list and more fully represent the presence and abundance of birds in the vicinity.

Birds:

Anseriformes - Waterfowl

Anatidae

Canada Goose	***Branta canadensis***
Green-winged Teal	***Anas carolinensis***
Northern Shoveler	***Anas clypeata***
Gadwall	***Anas strepera***
Mallard	***Anas platyrhynchos***
Northern Pintail	***Anas acuta***
American Wigeon	***Marecca americana***
Bufflehead	***Bucephala albeola***
Red-breasted Merganser	***Mergus serrator***

Pelicaniformes - Pelicans, Cormorants, and Ibises

Pelicanidae

American White Pelican	***Pelecanus erythrorhynchos***

Phalacrocoracidae

Double-crested Cormorant	***Phalacrocorax auritus***

Threskionithidae

White-faced Ibis	***Plegadis chihi***

Podicipediformes - Grebes

Podicipedidae

Pied-billed Grebe	***Podilymbus podiceps***
Horned Grebe	***Podiceps auritus***
Eared Grebe	***Podiceps nigricollis***

Falconiformes - Vultures, Hawks, and Falcons

Cathartidae

Turkey Vulture	***Cathartes aura***

Accipitridae

Northern Harrier	***Circus hudsonius***
Cooper's Hawk	***Accipiter cooperii***
Red-tailed Hawk	***Buteo jamaicensis***

Falconidae

American Kestrel	***Falco sparverius***
Peregrine Falcon	***Falco peregrinus***

Galliformes - Upland Game Birds

Odontophoridae

Gambel's Quail	***Callipepla gambelii***

Ciconiiformes - Herons and Egrets

Ardeidae

Black Crowned Night Heron	***Nycticorax nycticorax***
Great Egret	***Ardea alba***
Great Blue Heron	***Ardea herodias***
Snowy Egret	***Egretta thula***
Cattle Egret	***Bubulcus ibis***

Gruiformes - Cranes and Allies

Rallidae

American Coot	***Fulica americana***

Charadriiformes - Shorebirds and Gulls

Recurvirostridae

Black-necked Stilt	***Himanoptus mexicanus***
American Avocet	***Recurvirostra americana***

Charadriidae

Snowy Plover	***Charadrius nivosus***
Semipalmated Plover	***Charadrius semipalmatus***
Killdeer	***Charadrius vociferus***

Scolopacidae

Spotted Sandpiper	***Actitis macularius***
Lesser Yellowlegs	***Tringa flavipes***
Greater Yellowlegs	***Tringa melanoleuca***
Willet	***Tringa semipalmata***
Marbled Godwit	***Limosa fedoa***
Long-billed Curlew	***Numenius americanus***
Whimbrel	***Numenius phaeopus***
Western Sandpiper	***Calidris mauri***
Least Sandpiper	***Calidris minutilla***
Dunlin	***Calidris alpina***
Long-billed Dowitcher	***Limnodromus scolopaceus***

Laridae

Bonaparte's Gull	***Croicocephalus philadelphia***
Herring Gull	***Larus argentatus***
Ring-billed Gull	***Larus delawarensis***
California Gull	***Larus californicus***
Caspian Tern	***Hydroprogne caspia***
Forster's Tern	***Sterna forsteri***

Columbiformes - Pigeons and Doves

Columbidae

Rock Pigeon	***Columba livia***

Eurasian Collared-Dove	***Streptopelia decaocto***
Mourning Dove	***Zenaida macroura***
White-winged Dove	***Zenaida asiatica***
Common Ground Dove	***Columbina passerina***

Strigiformes - Owls

Strigidae

Barn Owl	***Tyto alba***
Burrowing Owl	***Athene cunicularia***

Apodiformes - Swifts and Hummingbirds

Apodidae

White-throated Swift	***Aeronautes saxatalis***

Trochilidae

Costa's Hummingbird	***Calypte costae***

Coraciformes - Kingfishers

Alcedinidae

Belted Kingfisher	***Megaceryle alcyon***

Piciformes - Woodpeckers

Picidae

Ladder-backed Woodpecker	***Dryobates scalaris***

Passeriformes - Perching Birds

Tyrannidae

Western Kingbird	***Tyrannus verticalis***
Black Phoebe	***Sayornis nigricans***
Say's Phoebe	***Sayornis saya***

Ptiliogonatidae

Phainopepla	***Phainopepla nitens***

Hirundinidae

Barn Swallow	***Hirundo rustica***
Tree Swallow	***Tachycineta bicolor***
Cliff Swallow	**Petrochelidon *pyrrhonota***

Corvidae

Common Raven	***Corvus corax***
American Crow	***Corvus brachyrhynchos***

Alaudidae

Horned Lark	***Eremophila alpestris***

Motacillidae

American Pipit	***Anthus rubescens***

Turdidae

Western Bluebird	***Sialia mexicana***
American Robin	***Turdus migratorius***

Sturnidae

European Starling	***Sturnus vulgaris***

Mimidae

Northern Mockingbird	***Mimus polyglottos***

Laniidae

Loggerhead Shrike	***Lanius ludovicianus***

Remizidae	
Verdin	***Auriparus flaviceps***
Troglodytidae	
House Wren	***Troglodytes aedon***
Marsh Wren	***Cistothorus palustris***
Bewick's Wren	***Thryomanes bewickii***
Polioptilidae	
Black-tailed Gnatcatcher	***Polioptila melanura***
Parulidae	
Orange-crowned Warbler	***Leiothlypis celata***
Common Yellowthroat	***Geothlypis trichas***
Yellow-rumped Warbler	***Setophaga coronata***
Passerellidae	
Abert's Towhee	***Melozone aberti***
California Towhee	***Melozone crissalis***
Savannah Sparrow	***Passerculus sandwichensis***
White-crowned Sparrow	***Zonotrichia leucophrys***
Song Sparrow	***Melospiza melodia***
Bell's Sparrow	***Artemisiospiza belli***
Passeridae	
House Sparrow	***Passer domesticus***
Icteridae	
Western Meadowlark	***Sturnella neglecta***
Yellow-headed Blackbird	***Xanthocephalus xanthocephalus***
Red-winged Blackbird	***Agelaius phoeniceus***
Brewer's Blackbird	***Euphagus cyanocephalus***
Brown-headed Cowbird	***Molothrus ater***
Great-tailed Grackle	***Quiscalus mexicanus***
Fringillidae	
House Finch	***Haemorhous mexicanus***

Mammals*:

*Note: No specific mammal surveys such as trapping were conducted as part of this WHSV. Mammals at the Thermal Ranch Project would not constitute a direct hazard to aviation at the Jacqueline Cochrane Regional Airport and therefore were not a focus of this review. Mammal and mammal sign (tracks, scat, burrows, bones) were noted incidental to other surveys conducted. This list represents only a small portion of those found in the region and may be supplemented with other data.

Carnivora	
Canidae	
Coyote	***Canis latrans***
Domestic Dog	***Canis familiaris***
Felidae	
Feral Cat	***Felis catus***
Mephitidae	
Striped Skunk	***Mephitis***
Mustelidae	
American Badger	***Taxidea taxus***
Lagomorpha	
Leporidae	
Desert Cottontail	***Sylvilagus audubonii***
Black-tailed Jackrabbit	***Lepus californicus***
Rodentia	
Sciuridae	
Round-tailed Ground Squirrel	***Xerospermophilus tereticaudus***
Geomyidae	
Botta's Pocket Gopher	***Thomomys bottae***
Cricetidae	
California Mouse	***Peromyscus californicus***
Desert Woodrat	***Neotoma lepida***

Appendix B: Wildlife Strikes Reported at the Jacqueline Cochrane Regional Airport (2002-present)

Date	Aircraft Type	Species	Time of Day	Damage
4/16/2002	Hawker 800	Unknown Medium	Day	None
2/22/2004	GulfAero IV	Canada Geese	Dawn	Substantial
3/27/2006	MU-300	CA Gull	Day	Substantial
10/17/2013	C-340	Geese	Night	Substantial
3/31/2017	C-550	Unknown Large	Day	None
4/20/2018	Citation Jet	Coyote	Unknown	Minor
10/26/2018	PA-28	Unknown Small	Day	None
4/21/2021	Citation Jet	Unknown Small	Day	None

Birds: Three reported to species level

Mammals: One reported to species level

Wildlife strikes not reported at a species level: Four

Appendix C: Riverside County Airport Land Use Commission Water Management Brochure (Note: trifold brochure appears out of sequence in this orientation).

Low-Impact Development. In recent years, Riverside County has focused on Low-Impact Development (LID), which includes techniques to filter, store and retain runoff on-site. LID BMPs retain runoff to optimize infiltration/recharge, and many promote the use of vegetation to provide for the uptake of pollutants. Although LID BMPs can provide environmental, economic and community benefits, they can retain open water for prolonged periods and attract hazardous wildlife. Many LID BMPs are incompatible with aircraft operations and must be considered with caution within the AIA.

Aviation-Specific Stormwater Management. FAA acknowledges that project-related BMPs must consider many non-aviation factors, such as soil types, space requirements, maintenance, constructability, etc. United States Department of Agriculture (USDA) and FAA have identified specific design characteristics that should be considered during BMP design and incorporated to make most BMPs less attractive to wildlife (**Table 2**).

ADAPTIVE MEASURES

When open water detention ponds must be used within the AIA, the ponds may be equipped with bird balls, floating covers, nets, or overhead wires to cover open water and discourage use by hazardous wildlife. For example, concrete basins are unlikely to attract wildlife, and pond liners can prevent the development of hydrophytic vegetation. These technologies must be used with caution and only in areas with controlled access.

Infiltration trenches detain water for brief periods. This trench at Seattle-Tacoma Airport includes vegetation appropriate for an airport environment.

Bioretention facilities can provide food and shelter for potentially hazardous wildlife, but may be suitable with modification.

Table 1. Structural Best Management Practices (BMPs) and Compatibility in an Airport Influence Area (AIA)

BMP	Compatibility within the AIA
Infiltration Trenches Recommended	▪ Suitable because water accumulates below ground surface ▪ Vegetation must be selected and reviewed by a FAA-qualified Airport Wildlife Hazard Biologist (qualified biologist) to discourage wildlife
Permeable Pavement Recommended	Does not include water storage. Appropriate for parking lots and other paved surfaces that are not high-traffic areas
Harvest and Use (RWH) Recommended	Suitable as long as water is stored in enclosed areas
Sand Filter Basins Recommended	Desirable because standing water is treated through an underdrain system
Vegetated Filter Strips and Vegetated Swales Recommended	Desirable because neither BMP involves ponded water. However, vegetation must be selected to discourage hazardous wildlife and reviewed by a qualified biologist.
Water Quality Inlets Recommended	Desirable because they do not provide ponded water. Associated vegetation must be selected to discourage hazardous wildlife and reviewed by a qualified biologist.
Infiltration Basins Not recommended without Modification. Suitable only if design addresses wildlife hazards	▪ Unsuitable in ALUCP Compatibility Zone A. ▪ Suitable in Zones B and C with appropriate modifications, such as: Drawdown within 48 hours or manufactured cover to prevent view and availability of open water; and absence of landscape or landscaping approved by a qualified biologist. ▪ Steep slopes (steeper than 3:1)
Bioretention Facilities Not Recommended without Modification (also known as rain gardens bioretention basins, infiltration basins, landscaped filter basins)	Although bioretention can mask open water, BMP is not recommended for airports based on its potential to provide food, water, and shelter for hazardous wildlife. ▪ Unsuitable in Compatibility Zone A. ▪ Potentially suitable in Zones B and C only when small in size (e.g., parking islands, site entrances, planter boxes, etc.) and when vegetation is selected to discourage hazardous wildlife and reviewed by a qualified biologist. ▪ Potentially suitable in Zones D and E when basin is less than 30 feet in length/width, and vegetation is selected to discourage hazardous wildlife and reviewed by a qualified biologist.
Extended Detention Basin Not Recommended	▪ Unsuitable in Zones A through C. ▪ Should be avoided in Zones D and E. If necessary, modify detention period to provide no visible water within 48 hours, provide steep slopes (1:1), provide hardscape for walls and sides, and do not provide vegetation within or adjacent to the pond.

Small bioretention facilities that provide sparse vegetation may be suitable in an aviation environment.

Extended detention basins are frequently used to serve both water quality management and to provide amenities. These basins hold water and would not be appropriate within an AIA because of the open water.

Sand filter at the base of the bioswale promotes infiltration.

Porous pavements allow water to infiltrate to a soil layer below the surface.

Adaptive measures such as liners, a concrete basin, and overhead wire grid can make extended detention strategies less attractive to hazardous wildlife.

Infiltration basins with rock bottoms are less attractive to birds because they mask water and do not provide vegetation.

Vegetated bioswales improve water quality and prevent water accumulation. However, dense and tall vegetation may be attractive to hazardous wildlife.

STORMWATER BEST MANAGEMENT PRACTICES

Riverside County and its incorporated cities require water quality/stormwater management controls for development and redevelopment projects. The Riverside Conservation District has prepared a separate Water Quality Management Plan for each watershed in the County that identifies treatment control Best Management Practices (BMPs) for improving water quality and managing stormwater volumes/flows following the design storm (i.e., 24-hour storm). Structural BMPs identified in Riverside County guidance and their compatibility within the AIA are summarized in **Table 1**.

ADDITIONAL RESOURCES/MORE INFORMATION:

- Riverside County Flood Control and Water Conservation District, Water Quality Management Webpage. Available at: http://rcflood.org/npdes.
- FAA Advisory Circular 150/5200-33, "Wildlife Hazard Attractants On and Near Airports": https://www.faa.gov/documentLibrary/media/advisory_circular/150-5200-33B/150_5200_33b.pdf
- Airport Cooperative Research Program, Balancing Airport Stormwater and Bird Hazard Management: https://www.nap.edu/login.php?action=guest&record_id=22216

Table 2. Recommended Measures to Reduce Wildlife Attraction Associated with Stormwater BMPs

BMP Characteristic	Recommended Design Measure
Exposed Surface Water • Especially attractive to waterfowl, shorebirds, and flocking birds. • Provides source for drinking and nest building. • More attractive when constructed near other open water features or ponds.	• Reduce availability by providing 48-hour drawdown following a design storm (i.e., 24-hour storm). • Cover using bird balls. • Consider earth-bottom culverts, French drains, trench covers, and underground storage options. • Avoid within 8 km (5 miles) of other open water features or facilities.
Vegetation and Landscaping • Provides food. • Tall vegetation provides shelter and nesting opportunities. • Diverse vegetation attracts more diverse wildlife.	• Eliminate vegetation (concrete banks, steep slopes, etc.). • If necessary, provide a monoculture or decreased diversity. • Never use species that provide a food source (seeds, berries, nuts, and drupes). • Provide regular maintenance to prevent seeding and shelter.
Aspect/Geometry • Slopes can provide opportunities for nesting and loafing.	Avoid or reduce available shoreline: • Implement narrow, linear trenches rather than open water or regular circles as pond shapes. • Create steep slopes (<3:1). • Avoid irregular shapes for basins. • Avoid vegetation.

WHAT YOU CAN DO:

Airport operators, developers and communities must work together to manage stormwater in the airport vicinity to reduce hazards to air travelers and the public while addressing site-specific challenges.

- Identify whether your project is near an airport and in an AIA or critical area. (http://www.rcaluc.org/Plans/New-Compatibility-Plan)
- Work with the airport operator, ALUC, and city/county staff to identify an acceptable water quality management strategy.
- Contact the applicable airport to review your stormwater plans or request plan review by a FAA-qualified wildlife biologist. The form is available at: http://www.rcaluc.org/Portals/0/PDFGeneral/Form/Wildlife%20Attractants%20-%20FAA%20Review.pdf

AIRPORTS, WILDLIFE AND STORMWATER MANAGEMENT

GUIDANCE FOR PROPOSED PROJECTS IN AN AIRPORT INFLUENCE AREA

Riverside County includes diverse topography and is home to three watersheds and a portion of the Salton Sea, an important stop along the Pacific Flyway for migrating bird species. The County's arid climate makes water quality management and water conservation paramount.

The County is also the home to Palm Springs International Airport, 12 public use general aviation airports, and the March Air Reserve Base, whose operations can be challenged by the presence of hazardous wildlife such as raptors, water-fowl, doves/pigeons, gulls, flocking birds, and mammals (coyote and deer). Since 1990, more than 150 wildlife strikes with aircraft have occurred in Riverside County, some of which have led to substantial aircraft damage. Most strikes occur at low altitude (less than 3,500 feet above runway height). Much of the geographic area associated with these altitudes coincides with an Airport Influence Area (AIA) as defined in the Riverside County Airport Land Use Compatibility Plan (ALUCP).

AIRPORTS, WILDLIFE AND STORMWATER MANAGEMENT

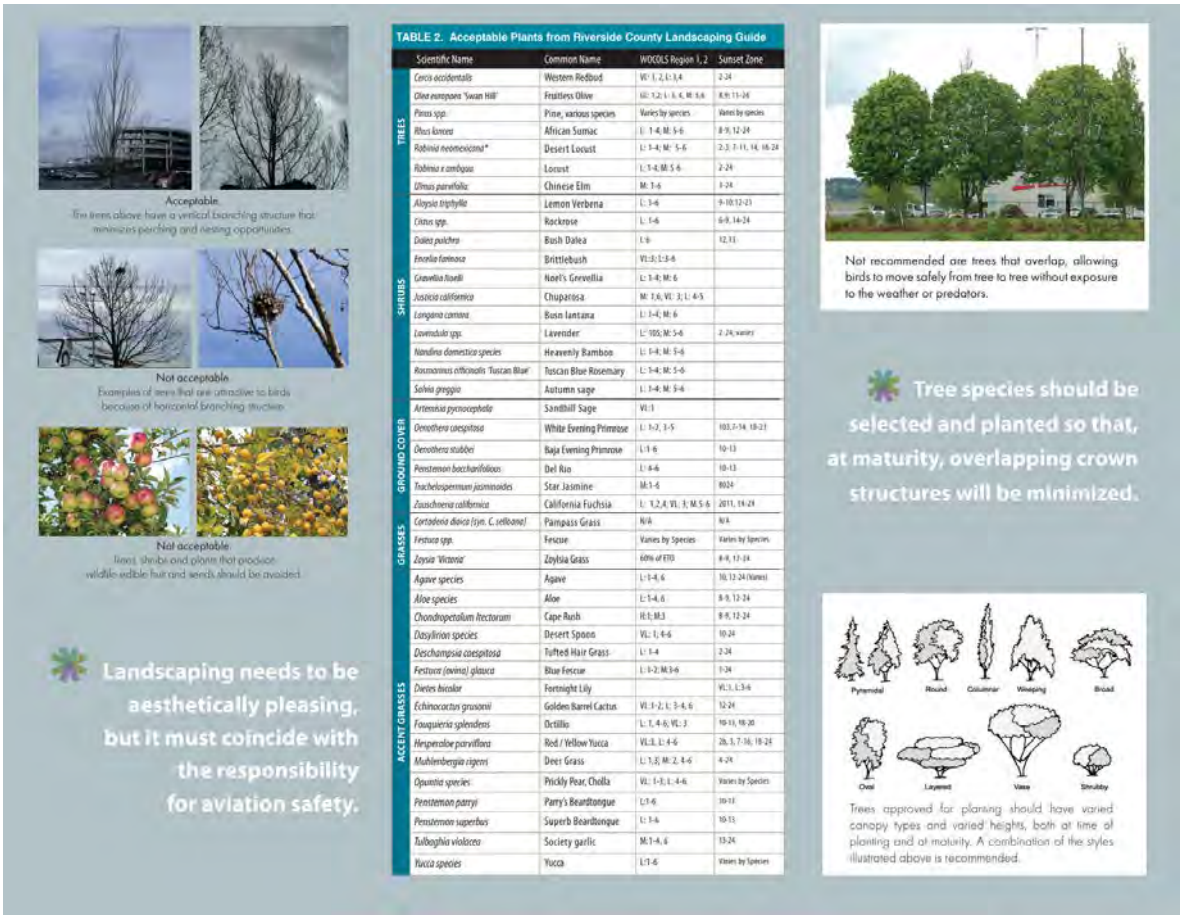
The Federal Aviation Administration (FAA) identifies stormwater management facilities on and near airports as one of the greatest attractants to hazardous wildlife. Many species are attracted to open water features and associated vegetation that offers water, food, and shelter. The FAA warns against the construction of new open water bodies or mitigation sites within 10,000 feet of aircraft movement areas and within 5 miles of approach/departure surfaces (FAA Advisory Circular 150/5200-33B).

Remains of an owl ingested by an aircraft engine.

Mead & Hunt

Riverside County
Airport Land Use Commission

Appendix D: Riverside County Airport Land Use Commission Landscaping Brochure (Note: trifold brochure appears out of sequence in this orientation).



Acceptable.
Tree limbs above have a vertical branching structure that minimizes perching and nesting opportunities.

Not acceptable.
Examples of trees that are attractive to birds because of horizontal branching structure.

Not acceptable.
Trees, shrubs and plants that produce wildlife edible fruit and seeds should be avoided.

Landscaping needs to be aesthetically pleasing, but it must coincide with the responsibility for aviation safety.

TABLE 2. Acceptable Plants from Riverside County Landscaping Guide

	Scientific Name	Common Name	WUCOLS Region I, 2	Sunset Zone
TREES	*Cercis occidentalis*	Western Redbud	VL: 1, 2; L: 3,4	2-24
	Olea europaea 'Swan Hill'	Fruitless Olive	L: 1,2; L: 3, 4; M: 5,6	8,9; 11-24
	Pinus spp.	Pine, various species	Varies by species	Varies by species
	Rhus lancea	African Sumac	L: 1-4; M: 5-6	8-9, 12-24
	*Robinia neomexicana**	Desert Locust	L: 1-4; M: 5-6	2-3, 7-11, 14, 18-24
	Robinia x ambigua	Locust	L: 1-4; M: 5-6	2-24
	Ulmus parvifolia	Chinese Elm	M: 1-6	1-24
SHRUBS	*Aloysia triphylla*	Lemon Verbena	L: 3-6	9-10; 12-21
	Citrus spp.	Rockrose	L: 1-6	6-9, 14-24
	Dalea pulchra	Bush Dalea	L: 6	12,13
	Encelia farinosa	Brittlebush	VL: 3; L: 3-6	
	Grevillea lanelli	Noell's Grevellia	L: 3-4; M: 6	
	Justicia californica	Chuparosa	M: 3,6; VL: 3; L: 4-5	
	Lantana camara	Bush lantana	L: 3-4; M: 6	
	Lavendula spp.	Lavender	L: 10S; M: 5-6	2, 24; varies
	Nandina domestica species	Heavenly Bamboo	L: 1-4; M: 5-6	
	Rosmarinus officinalis 'Tuscan Blue'	Tuscan Blue Rosemary	L: 1-4; M: 5-6	
	Salvia greggia	Autumn sage	L: 1-4; M: 5-6	
GROUND COVER	*Artemisia pycnocephala*	Sandhill Sage	VL:1	
	Oenothera caespitosa	White Evening Primrose	L: 1-2, 3-5	10,1,7-14, 18-21
	Oenothera stubbei	Baja Evening Primrose	L:1-6	10-13
	Penstemon baccharifolious	Del Rio	L: 4-6	10-13
	Trachelospermum jasminoides	Star Jasmine	M:1-6	8024
	Zauschneria californica	California Fuchsia	L: 1,2,4; VL: 3; M: 5-6	2011, 14-24
GRASSES	*Cortaderia dioica (syn. C. selloana)*	Pampass Grass	N/A	N/A
	Festuca spp.	Fescue	Varies by Species	Varies by Species
	Zoysia 'Victoria'	Zoylsia Grass	60% of ETO	8-9, 17-24
ACCENT GRASSES	*Agave species*	Agave	L:1-4, 6	10, 12-24 (Varies)
	Aloe species	Aloe	L:1-4, 6	8-9, 12-24
	Chondropetalum tectorum	Cape Rush	H:1; M:3	8-9, 12-24
	Dasylirion species	Desert Spoon	VL: 1; 4-6	10-24
	Deschampsia caespitosa	Tufted Hair Grass	L: 1-4	2-24
	Festuca (ovina) glauca	Blue Fescue	L: 1-2; M:3-6	1-24
	Dietes bicolor	Fortnight Lily		VL:1, L:3-6
	Echinocactus grusonii	Golden Barrel Cactus	VL: 1-2; L: 3-4, 6	12-24
	Fouquieria splendens	Ocotillo	L: 1, 4-6; VL: 3	10-13, 18-20
	Hesperaloe parviflora	Red / Yellow Yucca	VL:3, L: 4-6	2b, 3, 7-16, 18-24
	Muhlenbergia rigens	Deer Grass	L: 1,3; M: 2, 4-6	4-24
	Opuntia species	Prickly Pear, Cholla	VL: 1-3; L: 4-6	Varies by Species
	Penstemon parryi	Parry's Beardtongue	L:1-6	10-13
	Penstemon superbus	Superb Beardtongue	L: 1-6	10-13
	Tulbaghia violacea	Society garlic	M:1-4, 6	13-24
	Yucca species	Yucca	L:1-6	Varies by Species

Not recommended are trees that overlap, allowing birds to move safely from tree to tree without exposure to the weather or predators.

Tree species should be selected and planted so that, at maturity, overlapping crown structures will be minimized.

Trees approved for planting should have varied canopy types and varied heights, both at time of planting and at maturity. A combination of the styles illustrated above is recommended.

Figure 1. Selection of shrubs should be a mix of deciduous and coniferous species with no more than 50 percent evergreen species.

Plant Selection, Irrigation, and Wildlife Management. Riverside County requires landscaping for proposed development and redevelopment projects, and it is also committed to the use of native and drought-tolerant plants to reduce landscape-related water use. The County of Riverside Guide to California Friendly provides a lengthy plant palette to help landscape architects, planners, and the public select plant materials that will reduce water use in accordance with local and state goals: (http://rctlma.org/Portals/7/documents/landscaping_guidelines/Guide_to_California_Friendly_Landscaping.pdf)

Many of the plants on the "County of Riverside California Friendly Plant List" could attract potentially hazardous wildlife species. **Table 2** provides a reduced species list, nearly all of which were excerpted from the Friendly Plant List, but are less likely to support potentially hazardous wildlife. Project sponsors should use this list for projects within an AIA.

The list is not meant to be exhaustive, and other species may be appropriate based on the project location or other project-related circumstances. Sponsors who wish to propose plant materials that are not included in **Table 1** will need to demonstrate to the ALUC that proposed species will be unlikely to attract hazardous wildlife to the AIA.

General Guidelines. Other factors can affect wildlife behavior. Landscaping can provide a food source, opportunities for shelter, nesting and perching. Proposed landscaping can help to discourage wildlife through the application of the following guidelines summarized below and described in **Table 1**.

- **Close the Restaurant!** Do not use plant material that produce a food source, such as edible fruit, seeds, berries, drupes, or palatable forage for grazing wildlife. When possible, select a non-fruiting variety or male cultivar.
- **No Vacancy!** Avoid densely branched or foliated trees; they provide ideal nesting habitat and shelter.
- **Prevent Loitering!** Select tree species that exhibit a vertical branching structure to minimize nesting and perching opportunities (**Figure 1**).

Mead & Hunt

Table 1. Design Guidance for Plant Materials

TREES

Avoid/Prevent Contiguous Canopy

1. Prevent overlapping crown structures. Contiguous crowns can provide safe passage for wildlife. Provide sufficient distance between plants to ensure that at least 15 feet of open space will remain between mature crowns (**Figure 1**).
2. Prevent homogenous canopy types and tree height. Variable canopy height will reduce thermal cover and protection from predators.
   - Provide significant variation between the type of canopy and height of the species, both at planting and at maturity.
   - Provide no more than 20% evergreen species on site, and never plant evergreens in mass or adjacent to each other.

SHRUBS/ACCENTS/GRASSES

Limit Coverage

Limit the amount of cover and avoid massing to prevent the creation of habitat for birds or small mammals.

- Mix deciduous, herbaceous, and evergreen species.
- Do not plant species in mass. At a minimum, provide sufficient spacing to equal the width of each species at maturity. Avoid species with the potential to creep near shrubs (Figure 2).
- Provide at least 10 feet between trees and other species greater than 1 foot in height.

GROUNDCOVER/TURF

Prevent the natural succession of landscape!

Groundcover plays a transitional role between shrubs, grasses, and trees, and this succession creates an ideal habitat for diverse wildlife (see **Figure 2**).

1. Provide a buffer and sharp edges between groundcover, turf, shrubs and trees, using hardscape or mulching.
2. When possible, use alternative groundcovers, such as decorative paving and hardscapes instead of planted groundcover/turf.
3. The use of groundcover/turf may be impractical or undesirable based on irrigation needs or site-specific conditions. Consider using the following:
   - Artificial turf in place of groundcover, which can reduce maintenance and eliminate irrigation needs (**Figure 2A**).
   - Porous concrete to cover smaller areas (**Figure 2B**).
   - Permeable pavers to provide visual interest while promoting drainage (**Figure 2C**).

VINES

Limit Coverage

Limit the amount of cover and avoid massing to prevent the creation of habitat for birds or small mammals.

- Do not use vines to create overhead canopy or to cover structures.
- Do not plant vines to grow on the trunk or branches of trees.
- Minimize vines to areas of 5 feet or less in width. Vines require considerably more maintenance than other plant materials.

Acceptable plants from the Riverside County Landscaping Guide

Chinese Elm | Heavenly Bamboo | California Fuchsia | Deer Grass | Society Garlic

LANDSCAPING NEAR AIRPORTS:

Special Considerations for Preventing or Reducing Wildlife Hazards to Aircraft

Landscaping makes a visual statement that helps to define a sense of space by complementing architectural designs and contributing to an attractive, inviting facility. In some cases, a landscaping plan can be used to restore previously disturbed areas. However, such landscape plans are not always appropriate near airports.

Wildlife can pose hazards to aircraft operations, and more than 150 wildlife strikes have been recorded at Riverside County. The Riverside County Airport Land Use Commission (ALUC) prepared this guidance for the preparation of landscape designs to support FAA's efforts to reduce wildlife hazards to aircraft. The guidance should be considered for projects within the Airport Influence Area (AIA) for Riverside County Airports. The following landscape guidance was developed by planners, landscape architects and biologists to help design professionals, airport staff, and other County departments and agencies promote sustainable landscaping while minimizing wildlife hazards at Riverside County's public-use airports.

Discouraging Hazardous Wildlife. Plant selections, density, and the configuration of proposed landscaping can influence wildlife use and behavior. Landscaping that provides a food source, perching habitat, nesting opportunities, or shelter can attract raptors, flocking birds, mammals and their prey, resulting in subsequent risks to aviators and the traveling public.

Figure 2. Alternative hardscapes and groundcover/turf

Riverside County Airport Land Use Commission

Appendix E: References

AirNav KTRM Jacqueline Cochrane Regional Airport. https://www.airnav.com/airport/KTRM. Accessed July 24, 2022.

Belant, J. L. and J. A. Martin. 2011. ACRP Synthesis 23: Bird harassment, repellent, and deterrent techniques for use on and near airports, a synthesis of airport practice. Transportation Research Board of the National Academies, Washington, D.C.

CALTRANS. 2011. Airport Land Use Compatibility Handbook. California Department of Transportation, Division of Aeronautics. Sacramento, CA.

Cleary, E. C. and A. Dickey. 2010. ACRP Report 32: Guidebook for addressing aircraft/wildlife hazards at general aviation airports. Transportation Research Board of the National Academies, Washington, D.C.

DeFusco, R. P. and E. T. Unangst. 2013. ACRP Synthesis 39: Wildlife population management and control on airports. Transportation Research Board of the National Academies, Washington, D.C.

FAA. 2020. Advisory Circular 150/5200-33C Hazardous Wildlife Attractants on or near Airports. Federal Aviation Administration, Airport Safety and Standards. Washington D.C.

FAA. 2019. Advisory Circular 150/5200-36B Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculums for Airport Personnel Involved in Controlling Wildlife Hazards on Airports. Federal Aviation Administration, Airport Safety and Standards. Washington D.C.

FAA. 2018. Advisory Circular 150/5200-38 Protocol for the Conduct and Review of Wildlife Hazard Site Visits, Wildlife Hazard Assessments, and Wildlife Hazard Management Plans. Federal Aviation Administration, Airport Safety and Standards. Washington D.C.

FAA Wildlife Strike Database. https://wildlife.faa.gov/. Accessed July 24, 2022.

Riverside County Airport Land Use Commission. 2004. Riverside County Airport Land Use Compatibility Plan, Volume 1, Policy. Riverside, CA.

Riverside County Airport Land Use Commission. 2018. Wildlife Hazard Management at Riverside County Airports: Background and Policy. Mead and Hunt. Windsor, CA.

Riverside County Airport Land Use Commission. Undated a. Airports, Wildlife and Stormwater Management. Mead and Hunt. Windsor, CA.

Riverside County Airport Land Use Commission. Undated b. Landscaping Near Airports. Mead and Hunt. Windsor, CA.

TRM. 2017. Wildlife Hazard Assessment Report Jacqueline Cochrane Regional Airport Thermal, California. Mead and Hunt. Windsor CA.

Thermal Oasis Community Council

The Thermal Ranch Specific Plan falls within the boundary of the Thermal Oasis Community Council (Council). The Council serves as an advisory community to the Riverside County Board of Supervisors (BoS) on various community issues and new development proposals within the Council's boundaries. The County encourages new development projects to meet with the Council as part of community engagement process prior to a project being heard at the Riverside County Planning Commission or Board of Supervisors.

Airport Land Use Compatibility Plan (ALUCP)

The Thermal Ranch Specific Plan is located within the influence area of the Jackie Cochran Regional Airport and airport land use compatibility Zones "D" and "E" as shown on Figure 1.3, *Existing Conditions.* The Zone D and E designations are considered the least restrictive compatibility zones. Land use, density/intensity, building height and other restrictions associated with the zones are outlined in the 2004 Riverside County Airport Land Use Compatibility Plan (RCALUCP). Airport Land Use Commission (ALUC) consistency review is required when a project is located within an Airport Influence Area and a local jurisdiction processes a legislative action such as a General Plan Amendment, Plot Plan, or Specific Plan. Per the RCALUCP "the basic criteria for assessing whether a land use plan, ordinance, or development proposal is to be judged compatible with a nearby airport are set forth in the Basic Compatibility Criteria matrix, Table 2A." For reference, Table 2A has been attached to this Specific Plan as Appendix A. The ALUC will review the Specific Plan for compatibility with this table as part of the entitlement process. ~~and associated entitlements as the project progresses through the County process.~~

4. The development of property shall be in accordance with the mandatory requirements of all Riverside County ordinances including Ordinance No. 348 as amended for this Specific Plan in Section 3.0, Ordinance No. 460, and state laws; and shall conform substantially with the adopted Specific Plan as filed in the office of the Riverside County Planning Department, unless otherwise amended.
5. All development on the site will be consistent with this Specific Plan No. 401 and subsequent amendments, as on file with the Riverside County Planning Department, and with all applicable laws of the State of California.
6. Prior to issuance of a building permit for construction of any use contemplated by this approval, the applicant shall first obtain clearance from the County of Riverside Planning Department verifying that all pertinent conditions of the Specific Plan approval have been satisfied for the phase of development in question.
7. Lots created pursuant to this Specific Plan and any subsequent tentative map shall be in substantial conformance with the development standards of the Specific Plan.
8. Agriculture shall continue as an allowable use in accordance with Specific Plan Zoning Ordinance, until such time as permanent development under the Thermal Ranch occurs.
9. Utility service to this Specific Plan shall be provided by individual authorized service providers or through the creation of a Public Utilities District (PUD).
10. A maximum number of 1,362 dwelling units is allowed in the Thermal Ranch Specific Plan. Each residential planning area also has a target maximum based on the applicable density range and planning area acreage. Up to ten percent (10%) of density may be transferred between Planning Areas without a Specific Plan Amendment, provided that the total number of dwelling units within the Specific Plan is not exceeded.
11. A total of 5 acres of public parkland shall be provided for each one-thousand (1,000) in population within the Specific Plan or payment of an in-lieu fee, or combination of both . Fees shall be paid in accordance with Riverside County Ordinance 460.
12. All development should be compatible with the Riverside County Airport Land Use Consistency Plan (RCALUCP) and the Basic Compatibility Criteria matrix (Table 2A) as found in Appendix A of this document.

CHAPTER 3: PLANNING AREA STANDARDS

Development standards for the Thermal Ranch have been established at four levels: Chapter 2 – Project-Wide Planning Standards, Section 3.3 – Design Guidelines, Section 3.4 – Landscape Design Guidelines, and, Planning Area Standards, which are provided in this section.

3.1 Planning Area 1 – Equestrian Center

Planning Area Description

Planning Area 1 consists of approximately 231 acres for tourist commercial development located in the center of the Specific Plan. It will allow development of a full service equestrian center. Representative uses include barns, stables, arenas, horse trails, event areas, riding fields, farrier/veterinary services, equestrian themed retail, dining, parking, and back of house maintenance/service uses.

Planning Area Zoning

See Ordinance No. 348 (Chapter 5 – Specific Plan Zoning Ordinance) for allowable uses and development standards

Planning Area Development Standards

1. The primary entry to Planning Area 1 is from Harrison Street via the Primary Collector Road with secondary access on Tyler Street.
2. Refer to Chapter 2 for project-wide planning standards.
3. Refer to Chapter 4 for landscape and architectural design guidelines.
4. Planning Area 1 is located within Land Use Compatibility Zone D for the Jacqueline Cochran Regional Airport. Development will incorporate the necessary Zone D consistency criteria as per Table 2A of the RCALUCP (included as Appendix A of this Specific Plan).

3.2 Planning Area 2 – Estate Residential

Planning Area Description

Planning Area 2 contains approximately 187 acres for low density residential developement located in the northern portion of the Specific plan. It allows for the development of equestrian lifestyle estate residences on lot sizes rangining from half-acre to two acres. Representative uses within this planning area include single-family homes, clubhouse, equestrian trails, and open space/retention areas.

Planning Area Zoning

See Ordinance No. 348 (Chapter 5 – Specific Plan Zoning Ordinance) for allowable uses and development standards

Planning Area Standards

1. The primary entry to Planning Area 2 is on 62nd Avenue with secondary access from Tyler Street and Harrison Street.
2. This planning area will be developed with a community recreation center to serve neighborhood residents.
3. Refer to Chapter 2 for project-wide planning standards.
4. Refer to Chapter 4 for landscape and architectural design guidelines.
5. Planning Area 2 is located within Land Use Compatibility Zone D for the Jacqueline Cochran Regional Airport. Implementing development plans will incorporate the relevant Zone D consistency criteria as per Table 2A of the RCALUCP (included as Appendix A of this Specific Plan) except the average parcel size requirement. The estate lot size essential for this equestrian lifestyle community will fall in between the high and low ranges.

3.3 Planning Area 3 – Neighborhood Residential

Planning Area Description

Planning Area 3 contains approximately 72 acres for medium density residential development located in the eastern portion of the Specific Plan. It allows up to 390 attached and detached residential units at no less than 5 dwelling units per acre. Representative uses within this planning area include single-family detached and attached homes, clubhouses and other community amenities.

Planning Area Zoning

See Ordinance No. 348 (Chapter 5 – Specific Plan Zoning Ordinance) for allowable uses and development standards.

Planning Area Standards

1. The primary and secondary entries to Planning Area 3 are on Tyler Street.
2. This planning area will be developed with a community recreation center to serve neighborhood residents.
3. Refer to Chapter 2 for project-wide planning standards.
4. Refer to Chapter 4 for landscape and architectural design guidelines.
5. Planning Area 3 is located within Land Use Compatibility Zone D for the Jacqueline Cochran Regional Airport. Implementing development plans will incorporate the necessary Zone D consistency criteria as per Table 2A of the RCALUCP (included as Appendix A of this Specific Plan).

3.4 Planning Area 4 – Horse Park Workforce Housing

Planning Area Description

Planning Area 4 contains approximately 41 acres of land for high density residential development located in the southern portion of the Specific Plan. It allows for development of workforce housing consisting of modular housing units (between 300-500 dwelling units) as well as recreational vehicle parking for that segment of horse park seasonal workers with a mobile lifestyle (up to 320 stalls).

Planning Area Zoning

See Ordinance No. 348 (Chapter 5 – Specific Plan Zoning Ordinance) for allowable uses and development standards.

Planning Area Standards

1. The primary entry to Planning Area 2 is from Tyler Street with secondary access to Harrison Street via the Primary Collector road.
2. This planning area will be developed with a community laundromat, outdoor gathering space and barbeque amenities to serve resident workers.
3. Refer to Chapter 2 for project-wide planning standards.
4. Refer to Chapter 4 for landscape and architectural design guidelines.
5. A public trail easement will be dedicated adjacent to 64th Avenue.
6. Planning Area 4 is located within Land Use Compatibility Zone D for the Jacqueline Cochran Regional Airport. Implementing development plans will incorporate the necessary Zone D consistency criteria as per Table 2A of the RCALUCP (included as Appendix A of this Specific Plan).

3.5 Planning Area 5 – Resort/Hotel

Planning Area Description

Planning Area 5 contains approximately 55 acres of land located on the westerly portion of the Specific Plan and will allow for primarily hotel, retail, and extended stay condomium uses.

Planning Area Zoning

See Ordinance No. 348 (Chapter 5 – Specific Plan Zoning Ordinance) for allowable uses and development standards.

Planning Area Standards

1. The primary and secondary entries to Planning Area 5 are to Harrison Street via the Primary Collector Road.
2. This planning area will include a central water feature or recreational amenity as a focus for resort living.
3. Refer to Chapter 4 for landscape and architectural design guidelines.
4. Refer to Chapter 2 for project-wide planning standards.
5. Planning Area 5 is located within Land Use Compatibility Zone D and E for the Jacqueline Cochran Regional Airport. Implementing development plans will incorporate the necessary Zone D consistency criteria as per Table 2A of the RCALUCP (included as Appendix A of this Specific Plan).

3.6 Planning Area 6 – Commercial Village

Planning Area Description

Planning Area 6 consists of approximately 22 acres of land located in the western portion of the Specific Plan bordering Harrison Street and will promote a variety of commercially oriented development such as retail, restourant, recreation and similar uses.

Planning Area Zoning

See Ordinance No. 348 (Chapter 5 – Specific Plan Zoning Ordinance) for allowable uses and development standards.

Planning Area Standards

1. The primary and secondary entries to Planning Area 6 are to Harrison Street via the Primary Collector Road.
2. Refer to Chapter 2 for project-wide planning standards.
3. Refer to Chapter 4 for landscape and architectural design guidelines.
4. Planning Area 6 is located within Land Use Compatibility Zone D for the Jacqueline Cochran Regional Airport. Implementing development plans will incorporate the necessary Zone D consistency criteria as per Table 2A of the RCALUCP (included as Appendix A of this Specific Plan).

Any graded area left in an undeveloped condition shall be planted with drought tolerant landscaping and/or decomposed granite if they remain inactive for a period of 6 months following completion of grading. This shall include all pads or portion of the subject parcel and shall include fencing as appropriate. All landscaping and fencing shall remain in place and shall be regularly irrigated and maintained until the property has received authorization from the City to begin initial construction. The final landscape plan for each parcel or Planning Area shall contain detailed information for the planting, irrigation and maintenance of the vacant pad areas and/or undeveloped portions of the parcel.

Landscape Standards

Landscape standards (ex. minimum landscape requirements, parking lot requirements, lighting, minimum number of trees, etc.) within this Specific Plan will be consistent with those outlined in Ordinance 348 and with Riverside County Airport Land Use Commission (RCALUC) Landscape Criteria (as summarized in Table 1 and Table 2 in Appendix B of this Specific Plan).

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APPENDIX B – ALUC Landscape Criteria Table 1 and Table 2

THERMAL RANCH
SPECIFIC PLAN 401

February 2023

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ACKNOWLEDGEMENTS

Special acknowledgment and thanks is given to the following individuals:

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CHAPTER I: INTRODUCTION & SETTING

1.1 Executive Summary

The Thermal Ranch Specific Plan (Specific Plan) is an approximately 622-acre equestrian-oriented development located within the unincorporated community of Thermal, in Riverside County, California. This Specific Plan will provide for a mix of uses centered around a 231-acre equestrian center and related show facilities, including barns, stables, arenas, and related equestrian facilities and services. Surrounding this central facility are various supporting uses including areas for neighborhood commercial, resort and hospitality development along with a range of residential housing types such as large single-family estate lots, traditional detached and attached neighborhoods and horse park workforce housing. This Specific Plan will establish site-specific development standards, land use regulations, and programs to guide the development of the property in a manner that is consistent with the Riverside County General Plan while also maintaining flexibility to respond to changing conditions that factor in any long-term development. The Specific Plan implements all applicable elements of the General Plan and includes detailed information about the site's master plan and infrastructure improvements such as circulation, water, sewer, grading and drainage design. This Specific Plan is organized in six chapters, as described below:

Chapter 1, Introduction & Setting: This section provides an overview of the document, the project setting and history, legislative authority for the Specific Plan, entitlement process and other contextual information.

Chapter 2, Master Plans: This section describes the primary master plan components required for further development of the property. These include land use, circulation, open space and recreation, water and sewer, and grading and drainage.

Chapter 3, Planning Area Standards: This section provides development standards applicable within the Specific Plan area.

Chapter 4, Design Guidelines: This section establishes the design guidelines applicable within the Specific Plan area.

Chapter 5, Specific Plan Zoning: This section establishes the allowable uses and development standards applicable within the Specific Plan area.

Chapter 6, Specific Plan Administration: This section describes the various processes and procedures used to administer and implement the adopted Specific Plan Amendment.

1.2 Purpose and Intent

This Specific Plan is intended to guide future development and use of land within the Thermal Ranch Specific Plan boundary, including the establishment of site-specific development standards and regulations. The Specific Plan is intended to ensure quality development consistent with the goals, objectives, and policies of the County of Riverside General Plan.

This document has been prepared pursuant to California Government Code Section 65450, which grants local governments the authority to prepare specific plans as a systematic means of implementing their General Plan. California Government Code Sections 65450 through 65454 establishes the authority to adopt a Specific Plan, identifies the required contents of a Specific Plan, and mandates consistency with the General Plan.

Per California Government Code Section 65451, a specific plan shall include a text and a diagram or diagrams which specify all of the following in detail:

- The distribution, location, and extent of the uses of land, including open space, within the area covered by the plan.
- The proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan.
- Standards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable.
- A program of implementation measures including regulations, programs, public works projects, and financing measures necessary to carry out paragraphs (1), (2), and (3).
- The specific plan shall include a statement of the relationship of the specific plan to the general plan.

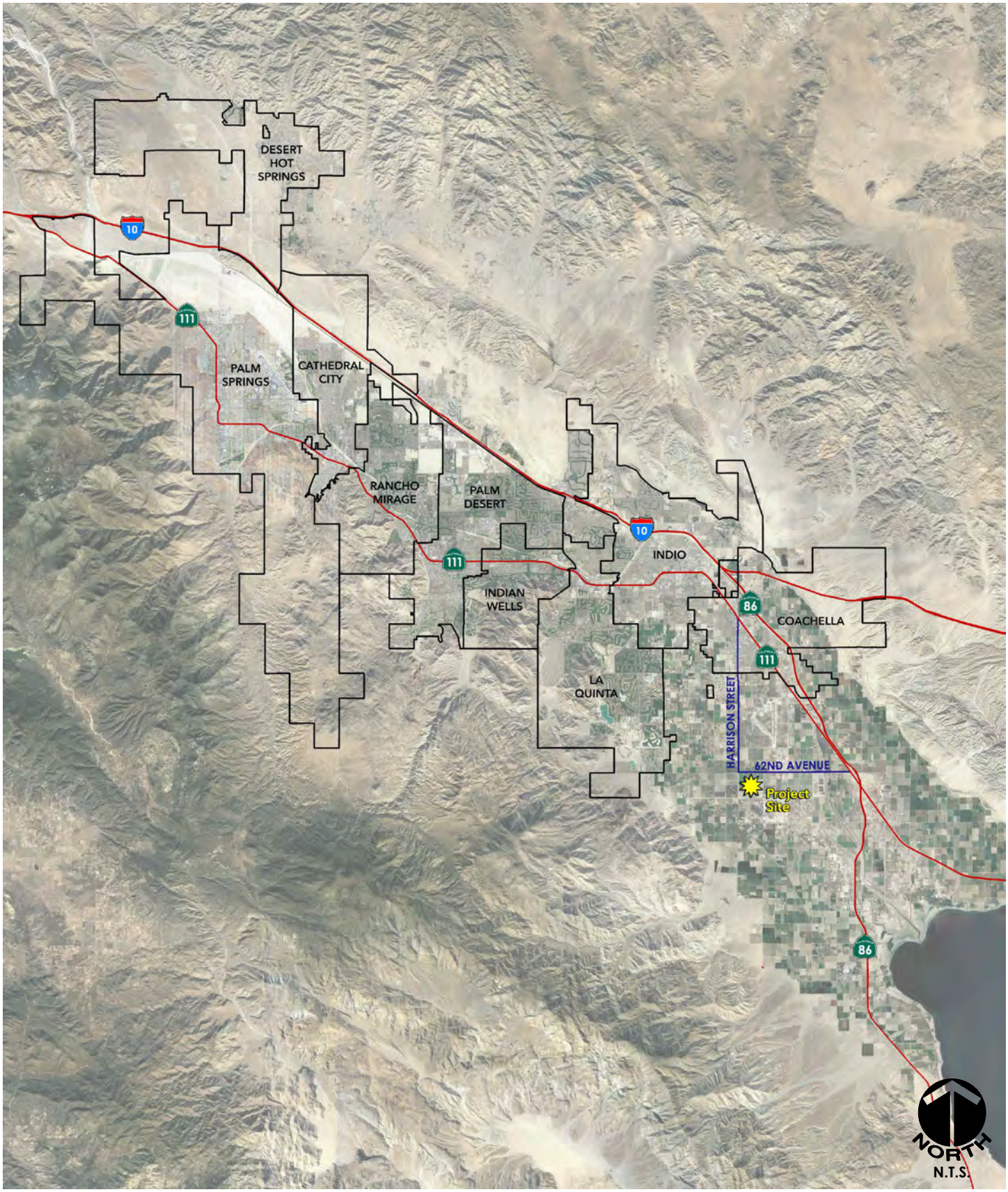
This Specific Plan defines the location, type and amount of development allowed within the Specific Plan area consistent with all requirements for Specific Plans identified in State Planning and Land Use Law as listed above and Sections 2.8-2.10 of the Riverside County Zoning Ordinance 348 (Ordinance 348).

1.3 Project Location & Site Characteristics

As shown on Figure 1.1, *Regional Location Map*, the Specific Plan is situated in the eastern portion of the Coachella Valley in Riverside County California within the unincorporated community of Thermal. The project is accessible from State Highways 86 and 111 via 62nd Avenue from the east and Harrison Street from the north (both two-lane paved public roads). The Specific Plan area totals approximately 620 acres (APNs 751-020-002,003, 006, & 007) Figure 1.2, *Vicinity Map*, depicts the physical setting of the property.

In its current condition the site consists entirely of undeveloped level land as shown on Figure 1.3, *Existing Conditions.* The site contains various agricultural buildings and structures along with well site infrastructure. Existing drain tiles and pipes are dispersed throughout the site from current agricultural use. Overhead pole lines run along the frontage of Ave 64 and a portion of Ave 62. A 25 ft drainage channel right-of-way owned by the Coachella Valley Water District adjoins the southerly boundary of the site on Ave 64.

Site topography slopes from the northwest to southeast with higher elevations ranging from 370 along the northwest corner of the property boundary to a low elevation of 350 along Ave 64 to the southeast. The project site borders Ave 62 to the north, Harrison Street to the west, Ave 64 to the south, and Tyler Street to the east. All permitter streets are currently paved 2-lane roads except for Ave 64 which is currently undeveloped along frontage of the southerly project boundary.



Source: Unincorporated Area of Riverside County

Exhibit Date: February 16, 2023

REGIONAL LOCATION MAP

FIGURE 1.1

MSA CONSULTING, INC.
>PLANNING >CIVIL ENGINEERING >LAND SURVEYING
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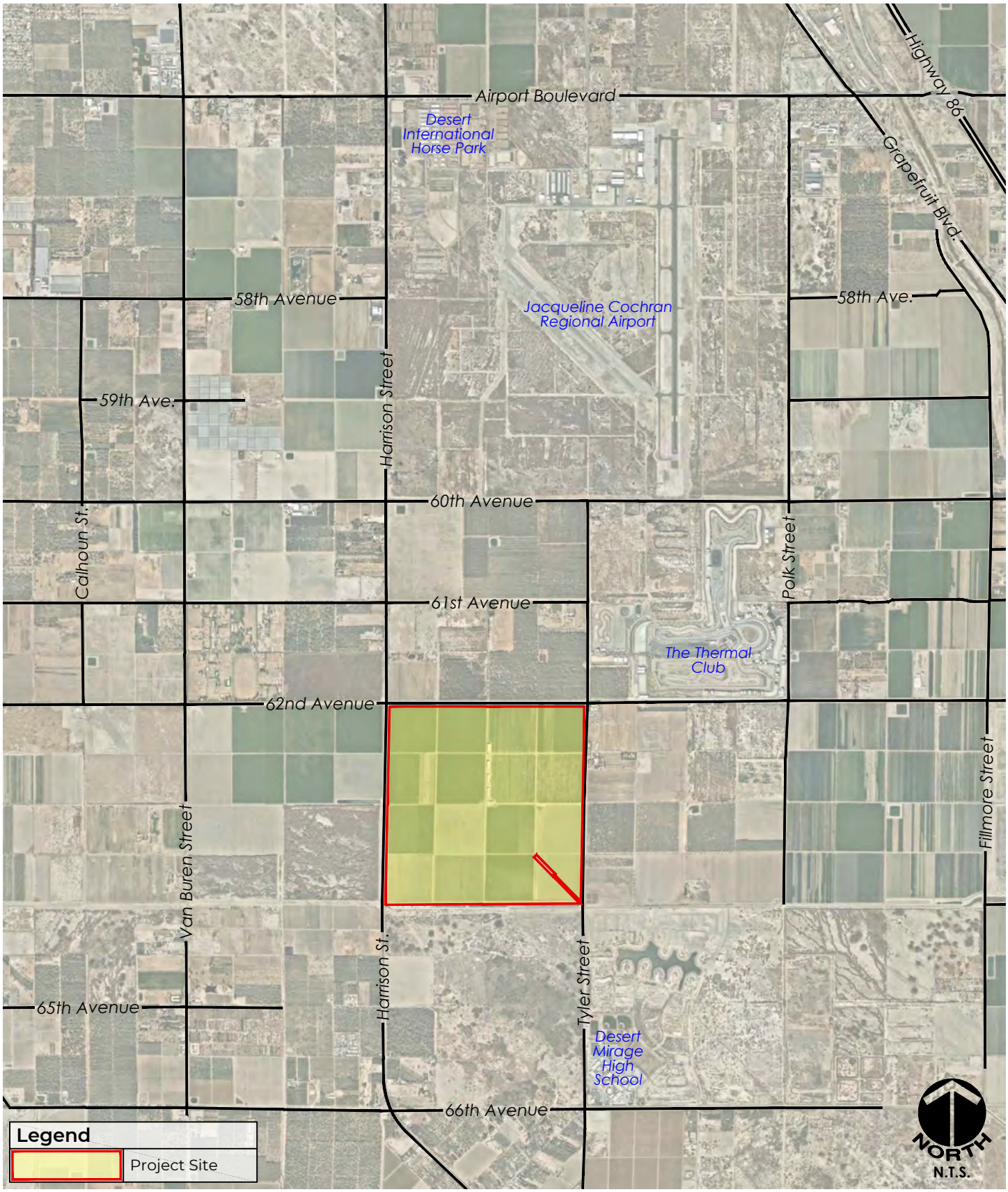

Source: Unincorporated Area of Riverside County

Exhibit Date: February 16, 2023

VICINITY MAP

FIGURE 1.2

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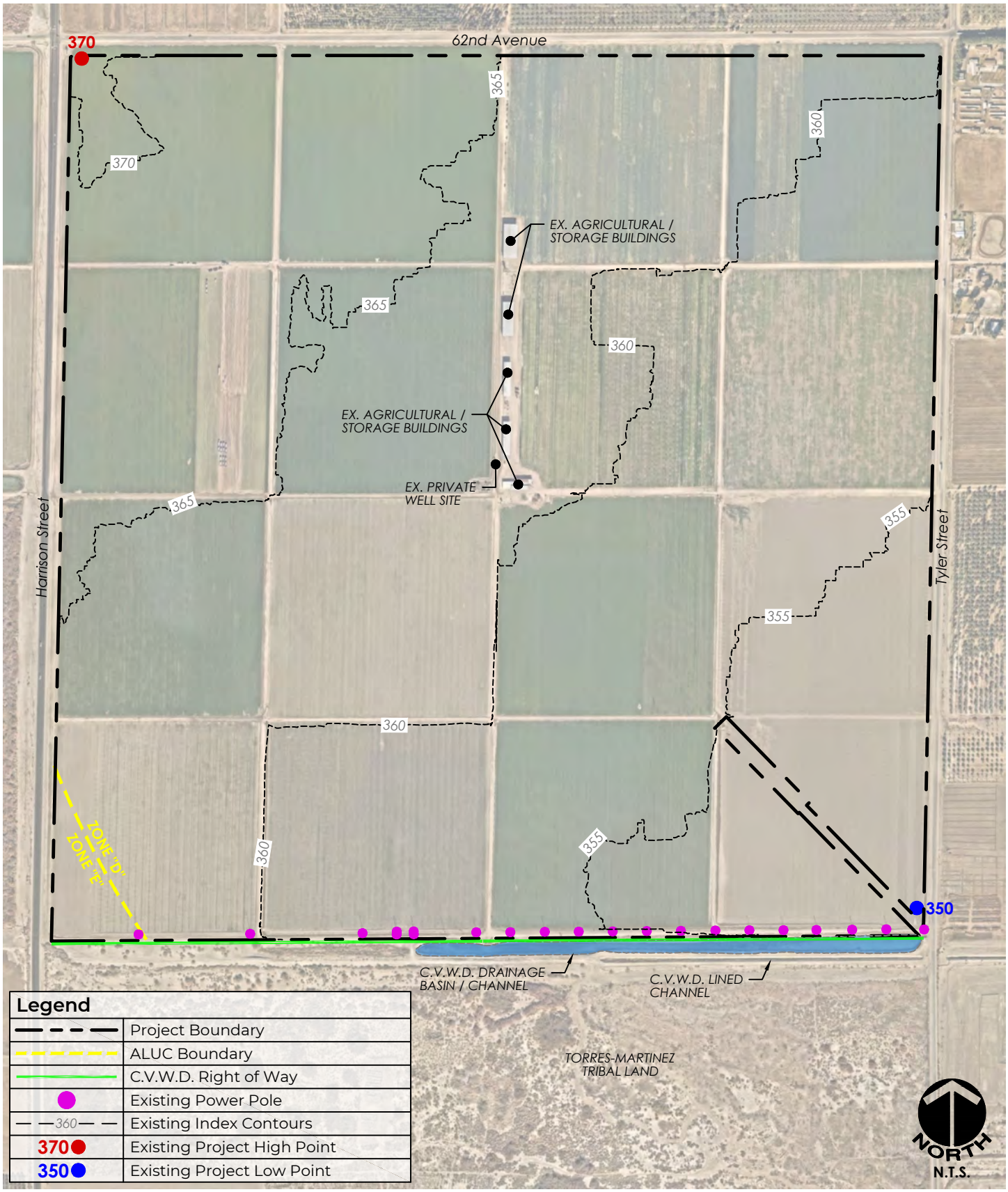


Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

EXISTING CONDITIONS

1.4 Regulatory Setting

Riverside County General Plan

The County of Riverside General Plan (General Plan) establishes the County's policy relative to the planned future pattern, intensity, density, and relationships of land uses in the County and the various infrastructure systems needed to effectively support those land uses. More focused policies that address specific regional and local issues are further refined through "area plans" and "community plans." This Specific Plan implements the General Plan by bringing detailed policies and regulations together into a focused development plan for the Specific Plan area. It serves as a link between the General Plan, the Eastern Coachella Valley Area Plan, the Vista Santa Rosa Community Plan, and subsequent development proposals within the Specific Plan area. This Specific Plan is a regulatory document which, when adopted by the County Board of Supervisors, will govern all facets of project development including the distribution of land uses, the location and sizing of supporting infrastructure, as well as the development standards and regulations that apply to the project.

Eastern Coachella Valley Area Plan (ECVAP)

The Thermal Ranch Specific Plan is located within Riverside County's Eastern Coachella Valley Area Plan. The Eastern Coachella Valley Area Plan serves as an extension to the County of Riverside General Plan and focuses on preserving the unique features of the valley while also setting forth standards and guidelines for future growth. The ECVAP is intended to help preserve the rural, agricultural, and open space character of the Eastern Coachella Valley, while also allowing for growth in desirable areas to bolster economic development and opportunities for the local communities.

Vista Santa Rosa Community Plan (VSRCP)

The Vista Santa Rosa Community Plan (VSRCP) is a community plan with an established set of design guidelines. The plan is intended to preserve the agricultural, rural, and equestrian focused character of the Eastern Coachella Valley, while also facilitating economic development and growth opportunities for the local communities. While the Thermal Ranch Specific Plan is not located within the VSRCP boundary, it is themed to reflect the rural/agricultural heritage of the Eastern Coachella Valley similar to the VSRCP.

Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP)

The CVMSHCP is a regional conservation plan that will ultimately protect over 240,000 acres of open space and 27 species in the Coachella Valley. The CVMSHCP includes both incorporated and unincorporated County land and covers a diverse landscape. The plan's goals are to preserve the Valley's native desert wildlife and system of open space, trails and reserves, in addition to safeguarding habitat linkages and wildlife corridors. The MSHCP is based on a regional ideal for balanced growth that preserves the Coachella Valley's diverse desert landscape while supporting opportunities for recreation, tourism and job development. The Project is not located in a Conservation Area designated for preservation but is within the CVMSHCP Mitigation Fee area to fund acquisition of priority habitat.

Thermal Oasis Community Council

The Thermal Ranch Specific Plan falls within the boundary of the Thermal Oasis Community Council (Council). The Council serves as an advisory community to the Riverside County Board of Supervisors (BoS) on various community issues and new development proposals within the Council's boundaries. The County encourages new development projects to meet with the Council as part of community engagement process prior to a project being heard at the Riverside County Planning Commission or Board of Supervisors.

Airport Land Use Compatibility Plan (ALUCP)

The Thermal Ranch Specific Plan is located within the influence area of the Jackie Cochran Regional Airport and airport land use compatibility Zones "D" and "E" as shown on Figure 1.3, *Existing Conditions.* The Zone D and E designations are considered the least restrictive compatibility zones. Land use, density/intensity, building height and other restrictions associated with the zones are outlined in the 2004 Riverside County Airport Land Use Compatibility Plan (RCALUCP). Airport Land Use Commission (ALUC) consistency review is required when a project is located within an Airport Influence Area and a local jurisdiction processes a legislative action such as a General Plan Amendment, Plot Plan, or Specific Plan. The ALUC will review the Specific Plan and associated entitlements as the project progresses through the County process.

1.5 Development Concept

The Thermal Ranch Specific Plan proposes to develop a high-quality, approximately 622-acre, master-planned, equestrian lifestyle community within six (6) distinct Planning Areas centered around a world-class equestrian center.

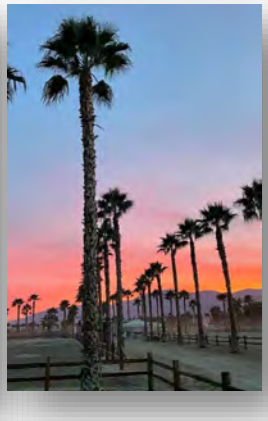
The equestrian center contains approximately 231 acres and will serve as the focal point of the Thermal Ranch development providing a new home to the Desert International Horse Park. This catalyst facility will bring world-class competitions, Olympic-level facilities, boarding, training, commercial retail, and dining options to the property. Horse owners and others who want a unique equestrian lifestyle have the convenience of housing near the facility where they can train, exercise and compete with their animals. Equestrian services and amenities located onsite include, but not limited to, barns, stables, covered arenas, event areas, riding fields, farrier/veterinarian services, RV and trailer parking, and back of house uses.

The center will be designed with an extensive internal network of horse trails and golf cart/walking paths to limit and control vehicular/horse interactions. Other than golf carts, motor vehicles are prohibited inside the equestrian center except those needed for deliveries, maintenance and emergency purposes, Parking fields are provided at the periphery of the horse park so visitors can park and walk into the equestrian center to attend show events.

Surrounding the equestrian center will be a mix of residential neighborhoods, including single-family homes (attached and detached), large rural estate lots, employee workforce housing providing a variety of housing options and neighborhoods within the Thermal Ranch community. Each of these neighborhoods is planned with direct connections to the golf cart and walking paths within the equestrian center, allowing residents to fully access the center's amenities, services, and events without exiting the property.

Neighborhood commercial uses will provide convenient retail access, amenities, and services to the Thermal Ranch development and local community while resort condominiums and hotel uses are proposed to provide hospitality options for visitors at the equestrian center. These uses will allow for convenient pedestrian and golf cart access, including controlled connection points into the equestrian center

As summarized above, this Specific Plan is intended to allow for a variety of uses to create a master-planned and integrated equestrian community. For a comprehensive list of allowable densities and maximum unit capacity, see Section 2.1, Land Use, for more information. For a comprehensive list of allowed uses and development standards, refer to Chapter 5 of this Specific Plan. Chapter 4 provides design guidelines and development standards to ensure quality project is built consistent with the Goals and Policies of the County of Riverside General Plan. This Specific Plan intends to provide a degree of flexibility of use and design so that implementing entitlements can respond to market demand factors. The Thermal Ranch Specific Plan will amend the development regulations of County Zoning Ordinance 348 to facilitate a unique and comprehensive master planned development strategy for the project.



1.6 Project Objectives

Various issues were considered and evaluated during the preparation of this Specific Plan. Engineering feasibility, water efficiency, General Plan goals, and compatibility with surrounding land uses were considered during the planning process. In order to ensure the functional integrity, economic viability, environmental sensitivity, and positive aesthetic contribution of this development, unique project objectives were established as follows:

- Develop a high-quality master planned equestrian community and world-class equestrian center that continues the long tradition of equestrian sports in the Thermal area.
- Develop an integrated community that allows equestrians, residents, and workers to live, work, and recreate within the project, with limited need for traditional vehicles.
- Develop a thoughtfully planned project that allows for a variety of uses including but not limited to residential, neighborhood and tourist commercial.
- Provide a variety of housing options including estate residences traditional single family attached and detached homes, attached modular cottages, and accommodations for recreational vehicle parking to provide immediate on-site housing opportunities for horse owners, riders, trainers, grooms and support staff within the project.
- Provide a comprehensive land use plan that establishes development standards, land use regulations, and programs to guide the orderly transition/development of the property.
- Accommodate phasing that provides for multi-year project development in an orderly and efficient manner.
- Provide flexible development regulations that allow future projects to be entitled quickly and easily in response to market demand and evolving design needs.
- Establish design guidelines, development regulations, use standards and procedures that result in cohesive and attractive landscape and architectural treatments.
- Provide a safe and efficient circulation system.
- Provide a safe and efficient network of golf-cart and pedestrian paths.
- Provide water, sewer, drainage systems and other utilities to adequately service the project.
- Promote quality development consistent with the goals and policies of the County of Riverside General Plan.

1.7 Utility & Service Providers

This Specific Plan is within the service area of the utility and service providers as listed in Table 1.2.

TABLE 1.2
UTILITY & SERVICE PROVIDERS

UTILITY/SERVICE	AGENCY	ADDRESS	PHONE
Sewer	CVWD	75-525 Hovley Lane, Desert, CA. 92211	760.398.2651
Water	CVWD	75-525 Hovley Lane Palm Desert, CA. 92211	760.398.2651
Natural Gas	SCG	P.O. Box 3150 San Dimas, CA. 91773	877.238.0092
Electric	IID	333 E. Barioni Blvd. Imperial, CA 92251	760.339.9379
CATV	Spectrum	44-425 Town Center Way Ste H Palm Desert CA 92211	760.340.2225
Police	Riverside County	73-705 Gerald Ford Dr. Palm Desert, CA 92211	760.863.8990
Fire	Riverside County	77-933 Las Montanas Rf., Ste 201 Palm Desert, Ca 92211	760.863.8886
Telephone	Frontier Comm.	401 Merritt 7 Norwalk CT, 06851	800.921.8101

1.8 CEQA

The project is subject to the requirements of the California Environmental Quality Act (CEQA) and an Environmental Impact Report (EIR) was prepared for the project in conformance with CEQA guidelines.

The EIR evaluated potential environmental impacts associated with the development as described in this Specific Plan and included mitigation measures to reduce those impacts wherever possible. The mitigation measures will be applied to all applicable components of the project as it is developed. The EIR will apply to all subsequent implementing entitlements proposed within the Specific Plan boundary. Future implementing projects that conform with the Specific Plan would be covered under the project EIR.

CHAPTER 2: MASTER PLANS

2.1 Land Use

The Thermal Ranch Specific Plan will create a master-planned community centered around a world-class equestrian center. The project would allow up to 285,000 square feet of commercial building space, 1,362 dwelling units, 150 hotel keys, and 320 recreational vehicle spaces on approximately 622 gross acres.

Land Use Plan

The project is divided into six (6) Planning Areas, each with a distinct land use, as depicted in Figure 2.1, *Land Use Map*, the exhibit is accompanied by Table 2.1, *Land Use Summary*, a statistical tabulation of uses and square footages allowed within the project.

TABLE 2.1
LAND USE SUMMARY [1]

Planning Area	Land Use	Acres	Residential DUs	RV Spaces	Commercial Sq. Ft.	Hotel Keys
PA1	Commercial Tourist	223.1			85,000	
PA2	Estate Residential	194.3	132			
PA3	Medium Density Residential	69.5	390 [2]			
PA4	High Density Residential	41.1	300-500	320		
PA5	Commercial Tourist	54.4	340		50,000	150
PA6	Commercial Retail	21.4			150,000	
	Perimeter ROW	15.3				
TOTALS		**619.1**	**1,162-1,362**	**320**	**285,000**	**150**

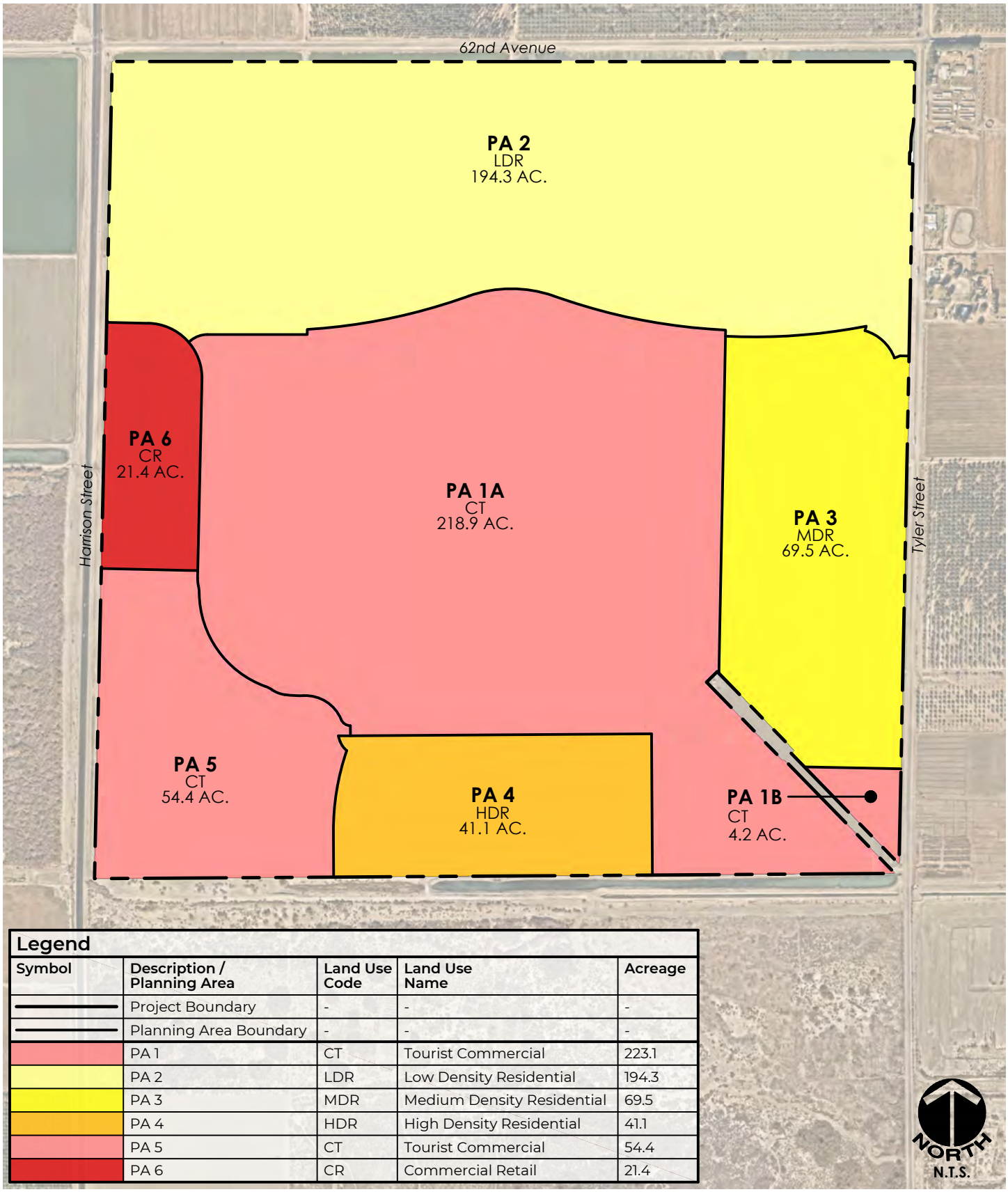
Notes:

1. *Unless otherwise noted, columns 4-7 represent development maximums. Each Planning Area may be developed at or below these numbers.*
2. *Residential development in PA 3 must be no less than 5 du/ac (356 units), consistent with ALUC density criteria for Zone E.*
3. *Up to 10% of development maximums may be transferred between Planning Areas, so long as Specific Plan totals are not exceeded.*

The ultimate site design and layout of these uses within each Planning Area will be refined with future entitlement approvals. Figure 2.2, *Illustrative Development Concept,* shows one possible development scenario illustrating how the Thermal Ranch Specific Plan might be implemented. Other development concepts are allowed subject to the guidelines and standards contained herein. Site specific land plans for Planning Areas 5 and 6 will be brought forward once retail and hospitality developers have been engaged.

As shown in the illustration, expected uses include:

- Equestrian Center and Event Area:
  - Barns, Covered Arena, Grand Prix Area
  - Warm up, jumper, hunter, FEI rings,
  - Farrier and Veterinarian,
  - Commercial retail and dining,
  - Open fields and riding areas,
  - Circulation infrastructure such as parking lots, driveways, golf cart paths, horse trails and bridal paths
  - Administrative office and back of house areas, etc.
  - Utility infrastructure facilities well sites and substations.
- Neighborhood Commercial:
  - Up to 150,000 sf of neighborhood commercial space and commercial amenities (Retail, Markets, Restaurants, Golf Facility, etc.)
  - Resort Condominiums (Up to 340 units) and Hospitality Uses (Up to 50,000 Sf and 150 Hotel Keys)
- A mix of residential neighborhoods:
  - Seasonal and year-round workforce housing
  - RV park facilities,
  - Single Family Homes (attached and detached), Multi-Family Condominiums.
  - Custom rural estate lots.
  - (See Section 2.1 for max residential densities and units allowed).
- Open space, amenity areas, and retention.



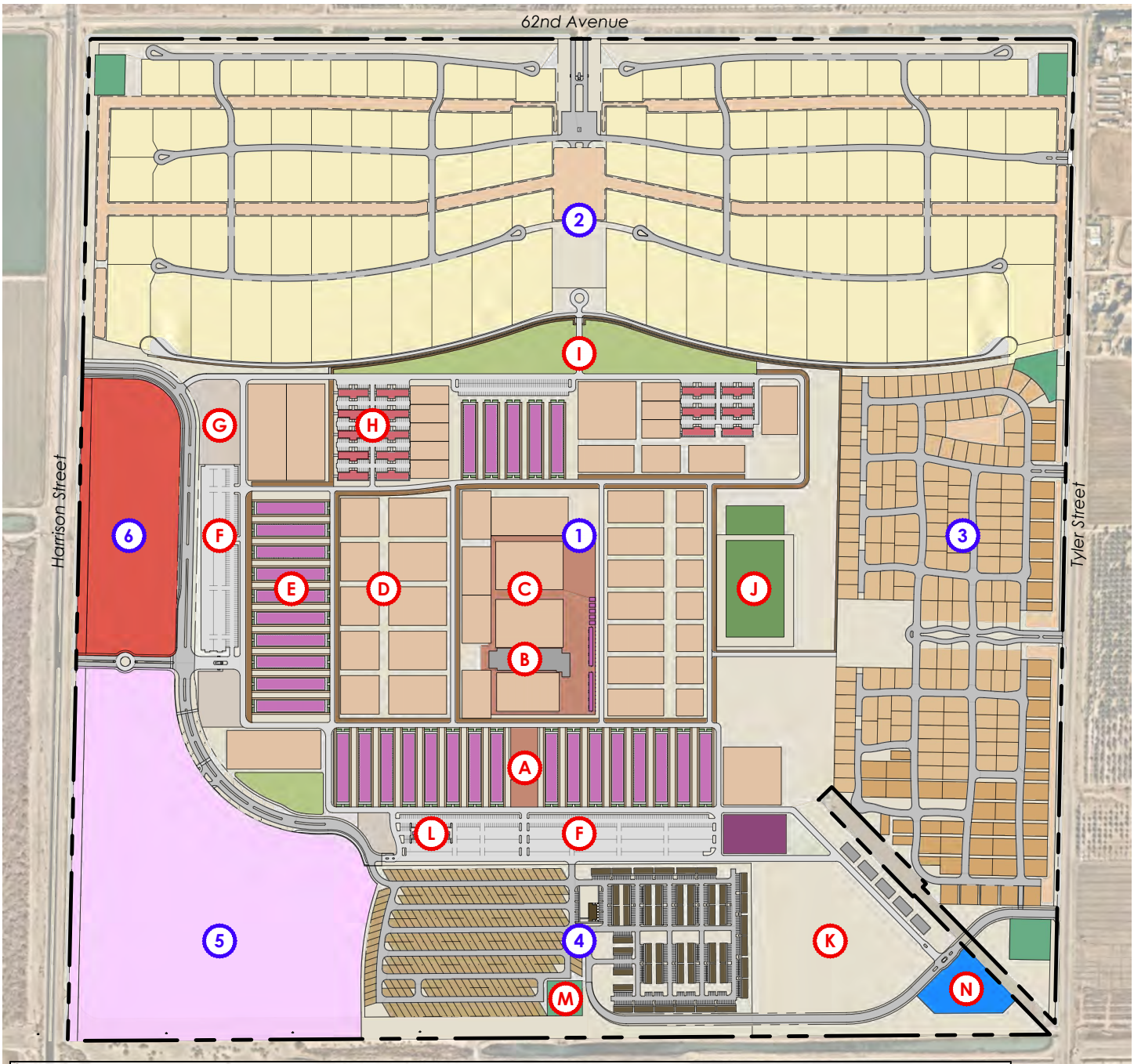
Legend

Symbol	Description / Planning Area	Land Use Code	Land Use Name	Acreage
	Project Boundary	-	-	-
	Planning Area Boundary	-	-	-
	PA 1	CT	Tourist Commercial	223.1
	PA 2	LDR	Low Density Residential	194.3
	PA 3	MDR	Medium Density Residential	69.5
	PA 4	HDR	High Density Residential	41.1
	PA 5	CT	Tourist Commercial	54.4
	PA 6	CR	Commercial Retail	21.4

Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

CONCEPTUAL LAND USE MAP



Legend					
	Project Boundary				
1	Horse Park	A	Grand Entry	H	Private Barns
2	Estate Lots	B	Gathering/Dining Commons	I	Pasture
3	Neighborhoods	C	Competition Rings	J	Grass Field
4	Horse Park Workforce Housing	D	Warmup/Jumper Rings	K	Back of House
5	Hotel/Resort	E	Common Barns	L	Office
6	Commercial	F	Parking	M	CVWD Well Site
		G	Staging Area	N	Potential Substation

Note: This exhibit illustrates one possible development scenario. Other site development concepts are allowed subject to the standards and guidelines of this Specific Plan.

NORTH
N.T.S.

Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

ILLUSTRATIVE DEVELOPMENT CONCEPT

Each land use is described below. A full list of allowable uses for each Planning Area is found in Chapter 6, Specific Plan Zoning Ordinance.

Tourist Commercial (Planning Area 1, Equestrian Center) Create a full-service, state of the art, equestrian center as the new home for the Desert International Horse Park. Located in the center of the site, the horse park would serve as the defining, anchor facility for all other land use components of the Specific Plan. Featuring world-class equine showgrounds and supporting amenties, the equestrian center will feature over 2.5 million square feet of riding space including 19 competition rings, extensive on-site riding paths, pastures and a professional quality grass showfield to make this the perfect home for horses and their riders as well as an attractive destination for visitors and guests. Key facilities include a central VIP dining commons, an olympic-level grand prix riding ring, barns, competition arenas, q highly manicured grassed showring, equestrian themed retail shops, maintenance/feed storae buildings and equine service facilities. The equestrian center will have the capacity to stable 3,300 horses and provide onsite veterinary services, farrier and feed stores.

Low Density Residential (Planning Area 2, Estate Neighborhood) Provide high end housing on large-lots for residents who want to board horses at the equestrian center and live nearby with immediate access to their animals during the show season. This would consist of a gated community with up to 132 custom, estate homes featuring custom homesites ranging from half-acre to two acres. Larger lots bordering the equestrian center would allow for the boarding of horses on property. These larger lots would be bordered by a private access driveway for horse trailer deliveries and a bridal trail so residents could ride their horses directly into the equestrian center. The estates will also feature a central community center with a range of residential amenities such as a clubhouse, swimming pool, pickle ball court, gym, locker rooms, meeting areas and dining. All access to the horse park would be through electric golf carts, walking or equestrian travel without dependence on automobiles.

Medium Density Residential (Planning Area 3, Traditional Neighborhood) Provide traditional single family detached and attached housing for residents who want to board horses at the equestrian center and live nearby with immediate access to the equestrian showgrounds, riding trails and services. This Planning Area will feature a variety of housing types including single-family detached homes and attached townhomes. Residents will enjoy access to a community center with a range of residential amenties such as tennis and pickle ball courts, gym, pool, meeting areas and dining. This residential community will have convenient golf cart access to the equestrian center to provide for an unparalled equestrian lifestyle experenice. All access to the horse park would be through electric golf carts, walking or equestrian travel without dependence on automobiles.

High Density Residential (Planning Area 4, Horse Park Workforce Housing) Provide convenient, affordably priced, housing for employees of the horse park during the competition season. This may take the form of functional and attractive modular housing or recreational vehicle parking spaces for those who travel from show to show and live out of an RV. This Planning Area will feature an onsite laundromat and recreation areas, providing a convenient and affordable way for workers to stay near their place of employment. From October to March, workforce housing would be used exclusively by workers at Thermal Ranch and The Desert International Horse Park. From April to September (the offseason) workforce housing would be made available for rent to farmers and farmworkers in the eastern Coachella Valley. Similar to the other residential planning areas, the workforce

housing area will have direct and convenient pedestrian and golf cart access to the equestrian center without the need of a car.

Tourist Commercial (Planning Area 5, Resort/Hotel) Develop hospitality uses such as hotel and hotel condominiums in a high-quality resort environment with immediate access to equestrian competitions and show events. This would be organized around a focal amenity, such as a central water or recreation amenity essential for establishing the necessary resort guest experience. Once at their accommmodations, guests would not need a car to access competitions at the equestrian center. PA-5 will provide a full range or hospitality/resort dining, spa, entertainment and retail activities.

Commercial Retail (Planning Area 6, Retail Village) Establish a retail village at Thermal Ranch offering a variety of conveniently accessible entertainment, food and beverage, service, retail, and commercial recreation amenties that cater to the residents and guests of Thermal Ranch and the local Thermal Community, who currently have limited access to retail services in the immediate area.

Land Use Goals and Guidelines

1. Uses and development standards shall be in accordance with the County of Riverside Zoning Ordinance No. 348 for this Specific Plan as described in Section 3.0 – Specific Plan Zoning Ordinance, and shall be defined by Specific Plan objectives, future detailed tentative maps and plot plans.
2. Standards relating to signage, landscaping, parking and other related design elements shall conform to the County of Riverside Zoning Ordinance No. 348 as amended for this Specific Plan in Section 5.0, and Coachella Valley Water District Ordinance 1302.3.
3. All project lighting shall be in accordance with County of Riverside standards.
4. The development of property shall be in accordance with the mandatory requirements of all Riverside County ordinances including Ordinance No. 348 as amended for this Specific Plan in Section 3.0, Ordinance No. 460, and state laws; and shall conform substantially with the adopted Specific Plan as filed in the office of the Riverside County Planning Department, unless otherwise amended.
5. All development on the site will be consistent with this Specific Plan No. 401 and subsequent amendments, as on file with the Riverside County Planning Department, and with all applicable laws of the State of California.
6. Prior to issuance of a building permit for construction of any use contemplated by this approval, the applicant shall first obtain clearance from the County of Riverside Planning Department verifying that all pertinent conditions of the Specific Plan approval have been satisfied for the phase of development in question.
7. Lots created pursuant to this Specific Plan and any subsequent tentative map shall be in substantial conformance with the development standards of the Specific Plan.
8. Agriculture shall continue as an allowable use in accordance with Specific Plan Zoning Ordinance, until such time as permanent development under the Thermal Ranch occurs.
9. Utility service to this Specific Plan shall be provided by individual authorized service providers or through the creation of a Public Utilities District (PUD).
10. A maximum number of 1,362 dwelling units is allowed in the Thermal Ranch Specific Plan.

Each residential planning area also has a target maximum based on the applicable density range and planning area acreage. Up to ten percent (10%) of density may be transferred between Planning Areas without a Specific Plan Amendment, provided that the total number of dwelling units within the Specific Plan is not exceeded.

11. A total of 5 acres of public parkland shall be provided for each one-thousand (1,000) in population within the Specific Plan or payment of an in-lieu fee, or combination of both . Fees shall be paid in accordance with Riverside County Ordinance 460.

2.2 Circulation

The Thermal Ranch Specific Plan is designed to provide safe and efficient access to all land uses within the project, including primary and secondary access points. Each Planning Area is designed to have direct access to one or more of the public, perimeter streets.

Circulation Plan

Key aspects of the circulation system include:

Frontage Improvements

Harrison Street, Tyler Street, and 62nd Avenue are all existing 2-lane paved roads along the project's north, east and west frontages. Per the County's General Plan Circulation Element, each of these roads will require additional right-of-way (ROW) dedication to accommodate the ultimate half-street design improvements required by this project.

64th Avenue is currently undeveloped along the project's southern boundary. Various physical conditions constrain the 64th Avenue corridor including powerlines, drainage channels, retention basins and their attendant easements and rights-of-way, which reserve prior rights to various agencies. Due to these complicating factors, the project is designed to avoid direct access to 64th Avenue and to limit project site improvements so as not obstruct the ultimate ROW width to construct 64th Avenue if/when it might be needed in the future.

Project Entries

Each of the six Planning Areas includes primary and secondary entries directly to the public frontage streets, so each can be accessed independent of the others. Conceptual locations of these are illustrated in Figure 2.3A *Master Circulation Plan*.

Vehicular Circulation

Figure 2.3A, *Master Circulation Plan,* illustrates the backbone vehicular circulation system for the overall Specific Plan. As shown, each Planning area has its own internal circulating street system that provides internal connection with the primary and secondary access points.

Figure 2.3B *Equestrian Park Circulation* Plan depicts the circulation structure within the horse park in greater detail. Gated entries provide secure access points into the horse park. These occur along the project's Primary Collector Street that intersects Harrison Street. A system of 24' and 30' roads are proposed within the horse park, all of which are available for emergency use by fire and emergency vehicles. Once inside the gates, the outer zone allows for parking and operation of service, maintenance and delivery vehicles. The inner zone occurs behind a second tier of minor gates and restricts access within the showgrounds to golf carts, pedestrians and horses only.

A service access road connecting to Tyler Street is provided at the southeast corner of the site to serve the workforce housing and horse park back of house areas.

Typical Street sections for these roads are shown in *Figure 2.4A Typical Street Sections – Public* and *Figure 2.4B Typical Street Sections – Private and Figure 2.4C Typical Street Sections – Private*.

Non-motorized Circulation

The Thermal Ranch project is designed to eliminate the need for an automobile once on property. After a resident or guest arrives and parks, all equestrian, dining and shopping needs will be provided on-site. Automobiles are restricted from entering the horse park where transportation will occur entirely by means of walking, horseback riding or golf carts. Residential uses ring the equestrian center with access gates that allow direct golf cart access into the horse park as well as the ability to cross connect via golf cart to retail commercial facilities on the west side of the project, all without resorting to an automobile.

Parking

Sufficient off-street parking will be provided to serve each use, including festival parking at the equestrian center, surface parking lots in commercial/resort areas and uncovered, carport and garage parking for residential neighborhoods and workforce housing areas. Parking at the equestrian center will only be used seasonally during show season. During the rest of the year, the parking lots will be largely vacant. Horse owners and workers that reside within Thermal Ranch will have parking met at their residence and need only golf cart transportation from their home to access their animals and the horse park facilities.

Circulation Standards

1. Street patterns, hierarchy, and entry access points contained in this Specific Plan are conceptual and may be adjusted and refined subject to approval of a tentative tract map, plot plan, or other entitlement approval that complies with County engineering standards.

2. Application for any subdivision within the specific plan boundary shall comply with the standards of Ordinance 460.

3. Planning Areas 2, 3, and 4 shall have direct golf cart connections into the equestrian center in Planning Area 1.

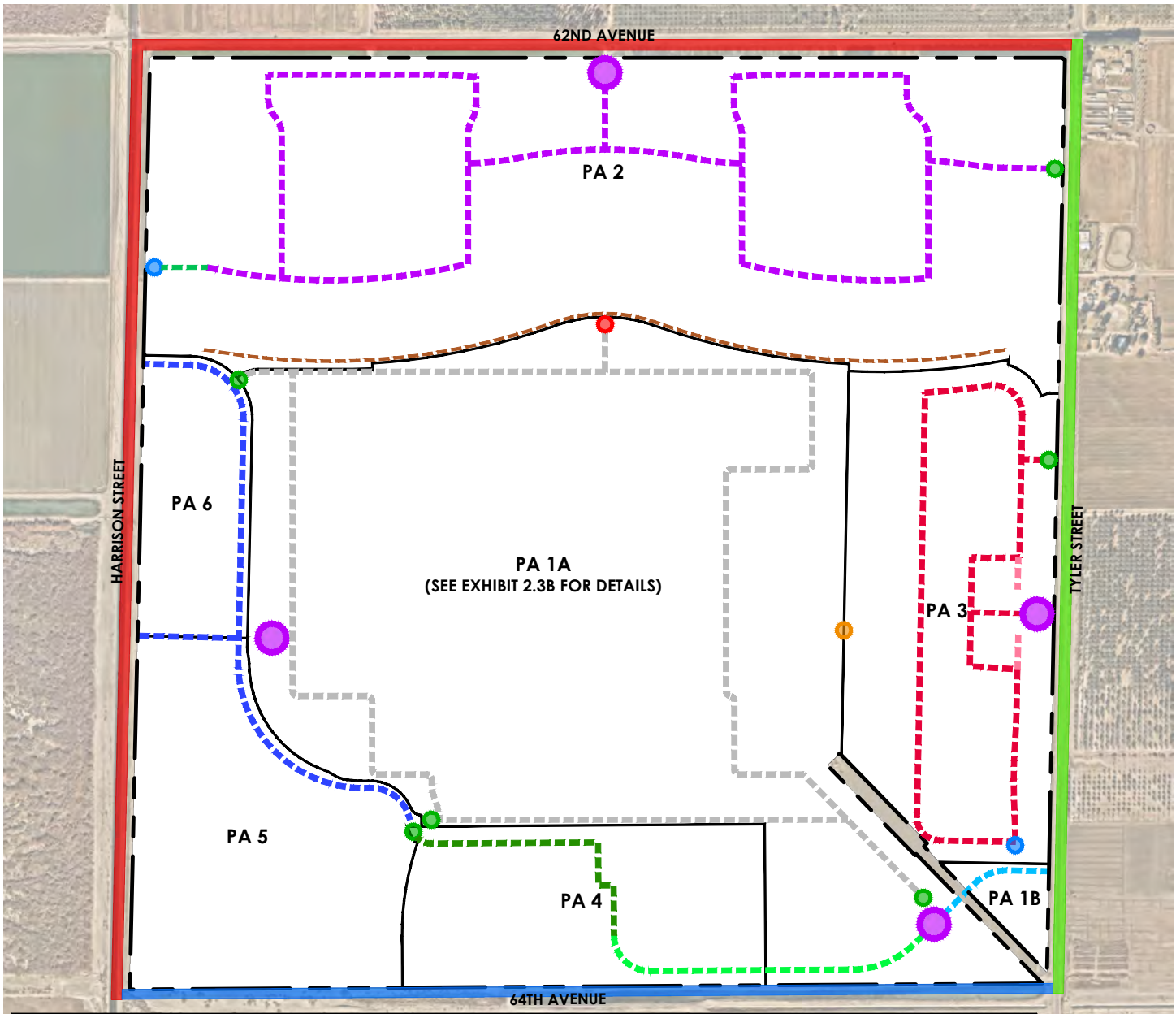
4. Each subdivision shall comply with applicable on-site and frontage street improvement recommendations outlined in any traffic study prepared for the project.

5. Parking standards for the Specific Plan are subject to County Review and to be consistent with the County of Riverside Zoning Ordinance 348 (Ordinance 348).

6. All typical street sections shall be per Ordinance 461, or as contained in this Specific Plan with approval by the County Transportation Department.

7. All intersection spacing and/or access openings shall be per Standard 114, Ordinance 461, or as approved by the Transportation Department.

8. Due to the flatness of the project site and surrounding frontage roads, retention facilities may be located within public road rights-of-way to facilitate effective dewatering of these frontage roads. Retention facilities will be maintained by an owner's association, county service area, or by the Coachella Valley Water District.



Legend

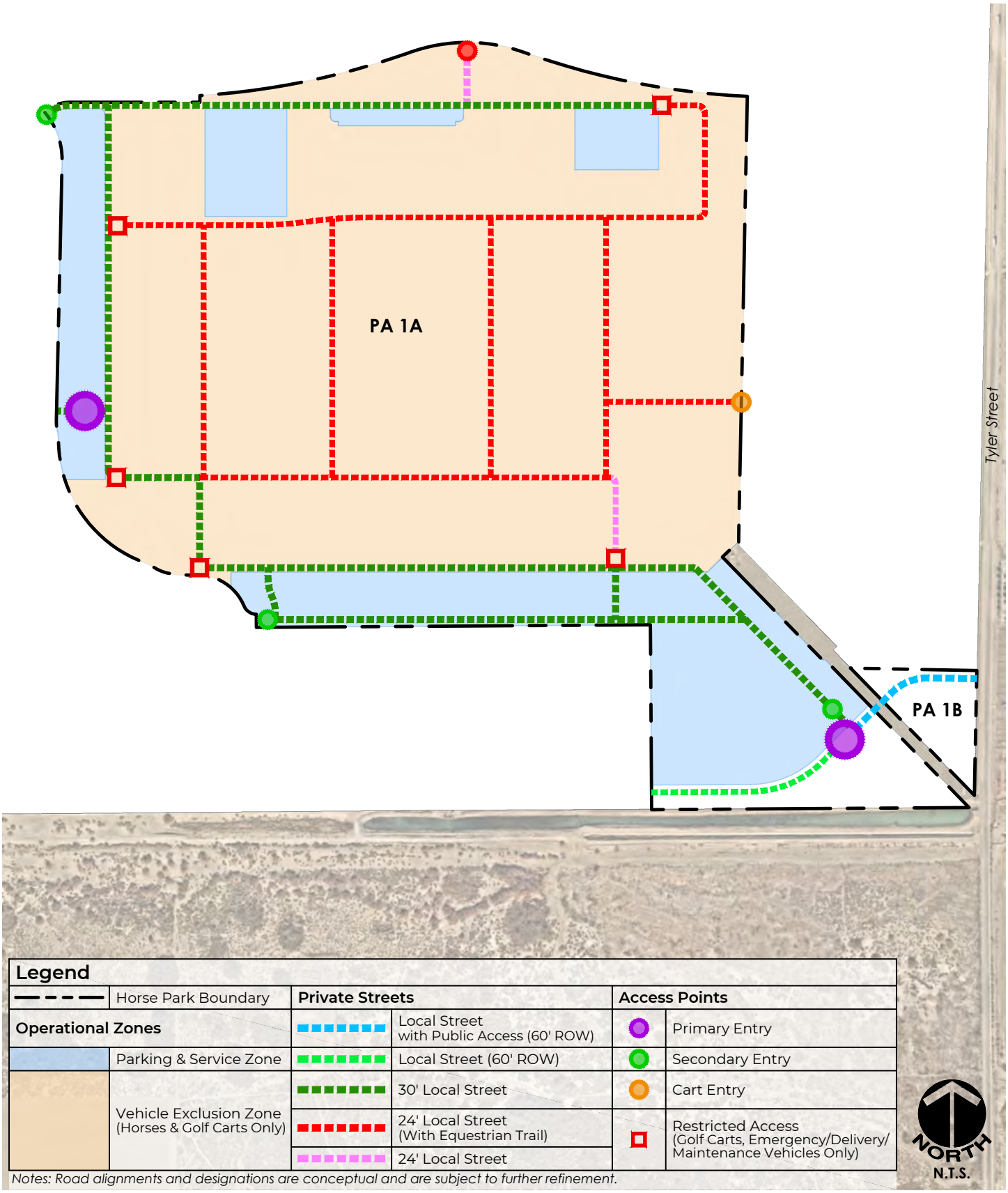
Project Boundary		**Private Streets**		**Access Points**	
Planning Area Boundary		Primary Collector with Public Access (23'-112' ROW Varies)		Primary Entry	
Public Streets		Local Street with Public Access (60' ROW)		Secondary Entry	
Expressway (184' ROW)		Local Street (60' ROW)		EVA Only Access	
Major Highway (118' ROW)		Local Street (37' ROW)		Cart Entry	
Secondary Highway (100' ROW)		Local Street (33' ROW)			
Note: All other streets are local roads and may use any of the typical sections shown in Figure XX. Street patterns shown are illustrative only and may be adjusted subject to approval of a tentative tract map or plat plan that complies with County engineering standards.		Local Street (32' ROW)		Cart / Trailer Entry	
		Local Street (30' ROW)			
		Emergency Access (24' Easement)			
		Service Driveway (15' Driveway)			
		Horse Park Circulating Road			

NORTH
N.T.S.

Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

MASTER CIRCULATION PLAN

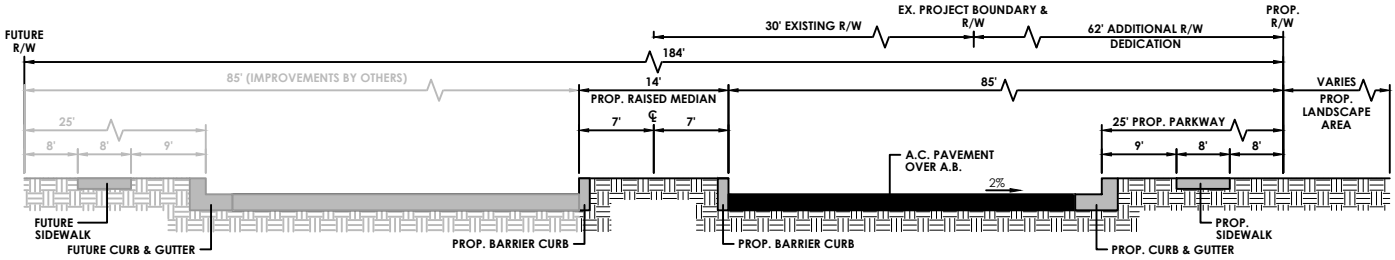


Notes: Road alignments and designations are conceptual and are subject to further refinement.

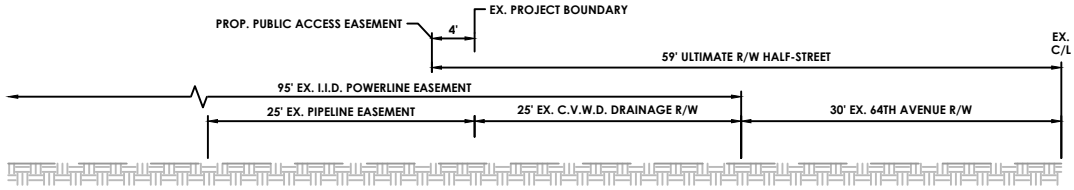
Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

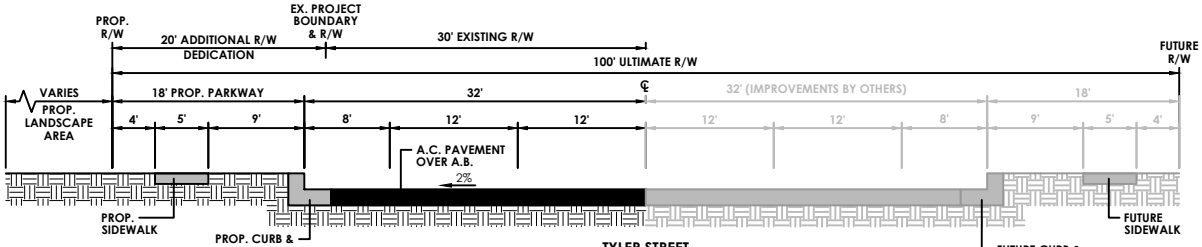
HORSE PARK CIRCULATION PLAN



HARRISON STREET & 62ND AVENUE
(COUNTY OF RIVERSIDE STANDARD NO. 87)
(EXPRESSWAY PER GENERAL PLAN / PUBLIC ROAD)
N.T.S.



64TH AVENUE
(COUNTY OF RIVERSIDE STANDARD NO. 93)
(MAJOR HIGHWAY PER GENERAL PLAN / PUBLIC ROAD)
N.T.S.

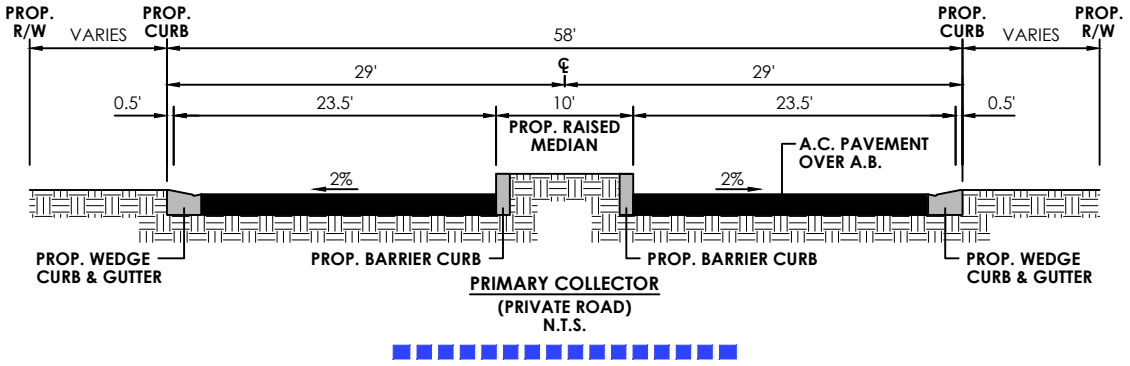


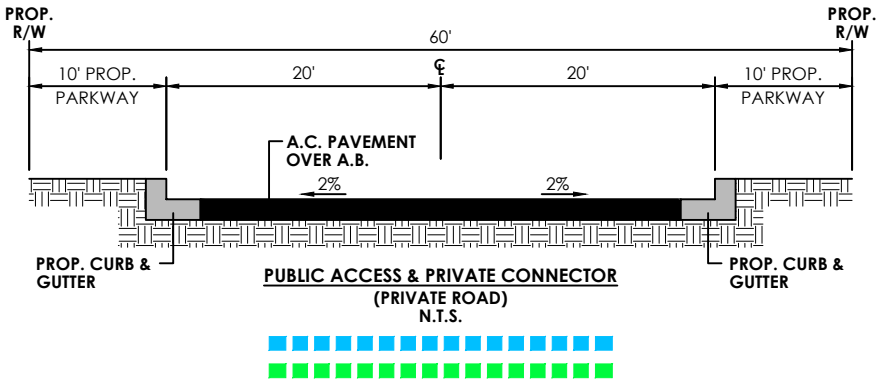
TYLER STREET
(COUNTY OF RIVERSIDE STANDARD NO. 94)
(SECONDARY HIGHWAY PER GENERAL PLAN / PUBLIC ROAD)
N.T.S.

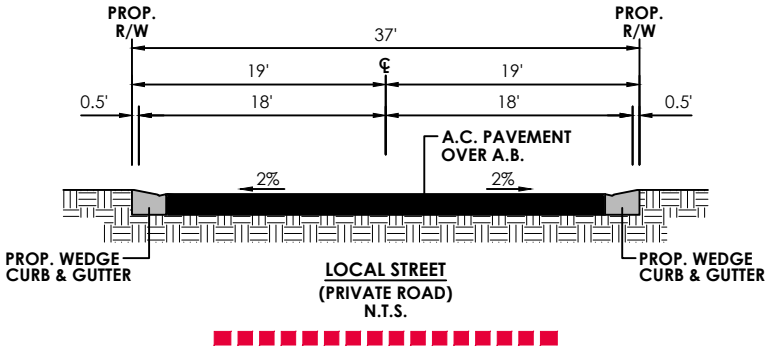
Source: Unincorporated Area of Riverside County

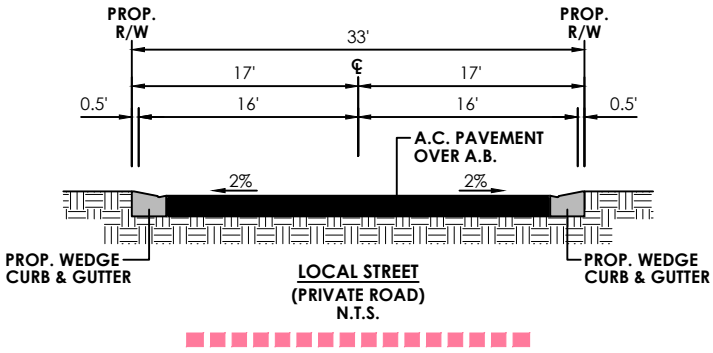
Exhibit Date: February 16, 2023

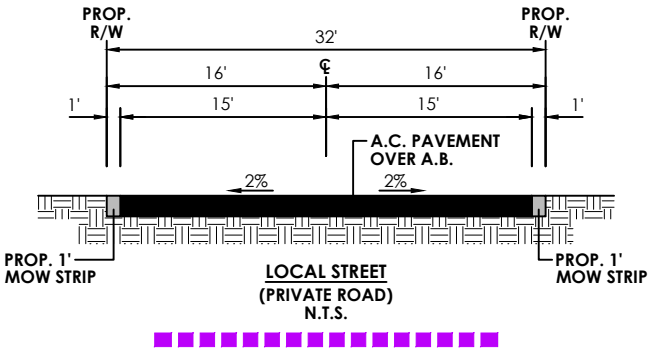
TYPICAL STREET SECTIONS: PUBLIC







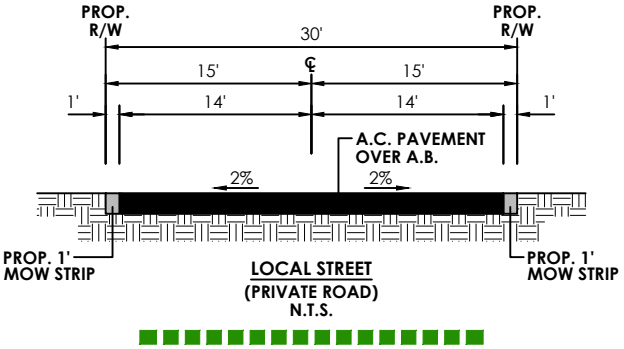


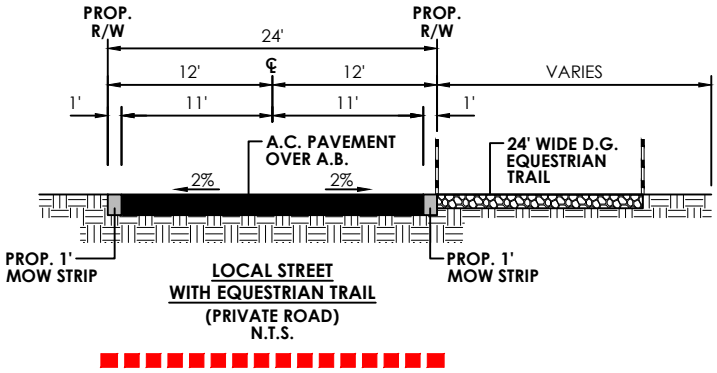


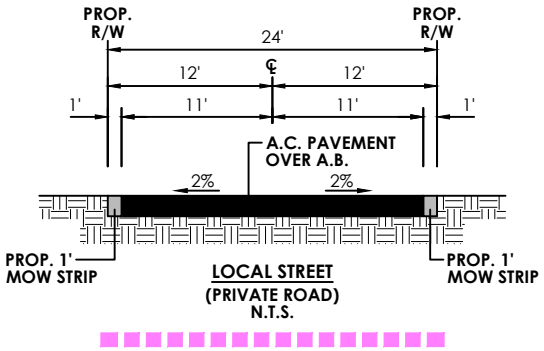
Source: MSA Consulting, Inc.

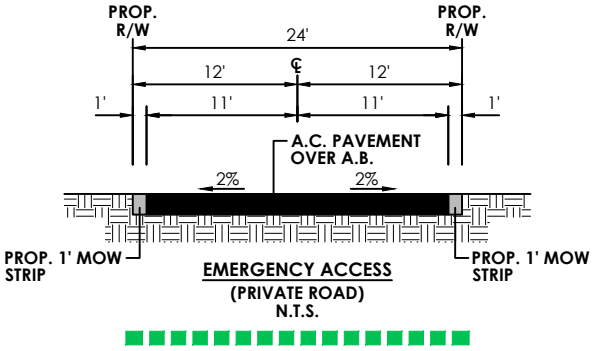
Exhibit Date: February 16, 2023

TYPICAL STREET SECTIONS: PRIVATE









Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

TYPICAL STREET SECTIONS: PRIVATE

2.3 Open Space

The Thermal Ranch Specific Plan will create a world-class equestrian and lifestyle community with a strong emphasis on outdoor recreation, open space, and its integration within the project. It will introduce a large permanent open space at the center of the project including such elements as triding trails golf-cart paths, event areas, equestrian competition and training rings, pastures, and open fields. These will be available to residents of the community and their families/guests, competitors, horse park workers and the general public as spectators at the events. Public Trails are provided along the project perimeter.

Open Space Plan

Residential areas (PA-2, PA-3, and PA-4) will each have appropriate community recreation amenities as well as convenient physical access to equestrian riding facilities and open spaces at the horse park, resulting in an integrated and connected outdoor / recreation experience.

As shown on Figure 2.5, *Public Open Space and Trails Plan*, public open space and recreation amenities occur along the project perimeter with the provision of meandering sidewalks and bike paths along each public road. Each Planning Area will have access to these public trails with connection to the regional trail system.

Open Space Standards

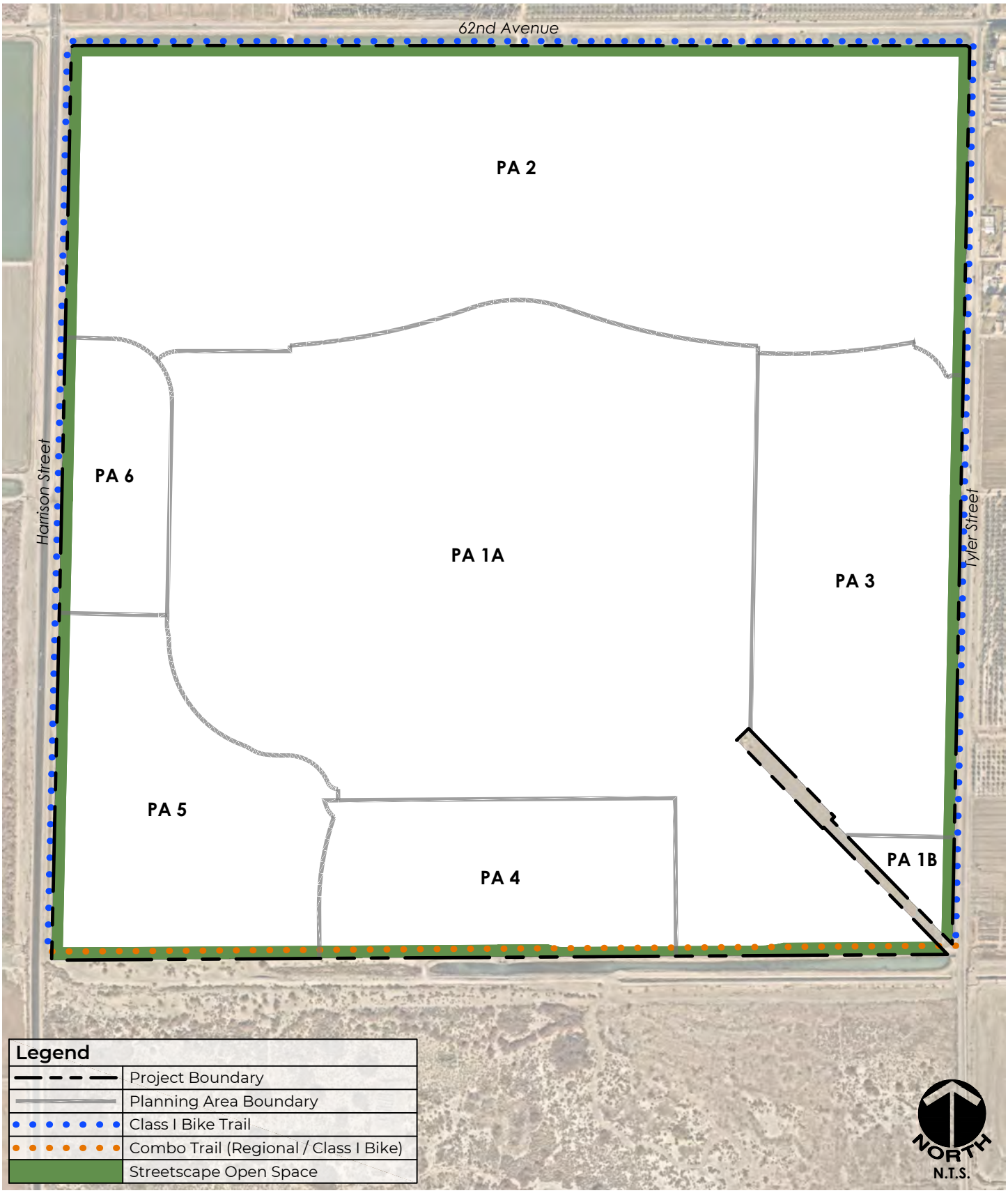
1. Provide direct golf cart access from each residential planning area to the equestrian center (PA-1)so that residents and workers can have direct access to horse park open space.

2. Residential planning areas should incorporate neighborhood scale open space and recreational amenities such as neighborhood parks, clubhouses, trails and golf-cart paths.

3. PA-5 should integrate outdoor open space and commercial recreational features to complement resort hotel and condominium uses.

4. PA-6 allows for the approval of commercial recreational facilities if supported by market conditions.

5. Implementing entitlements will specify the locations and amount of open space areas in each planning area.



Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

PUBLIC OPEN SPACE & TRAILS PLAN

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FIGURE 2.5

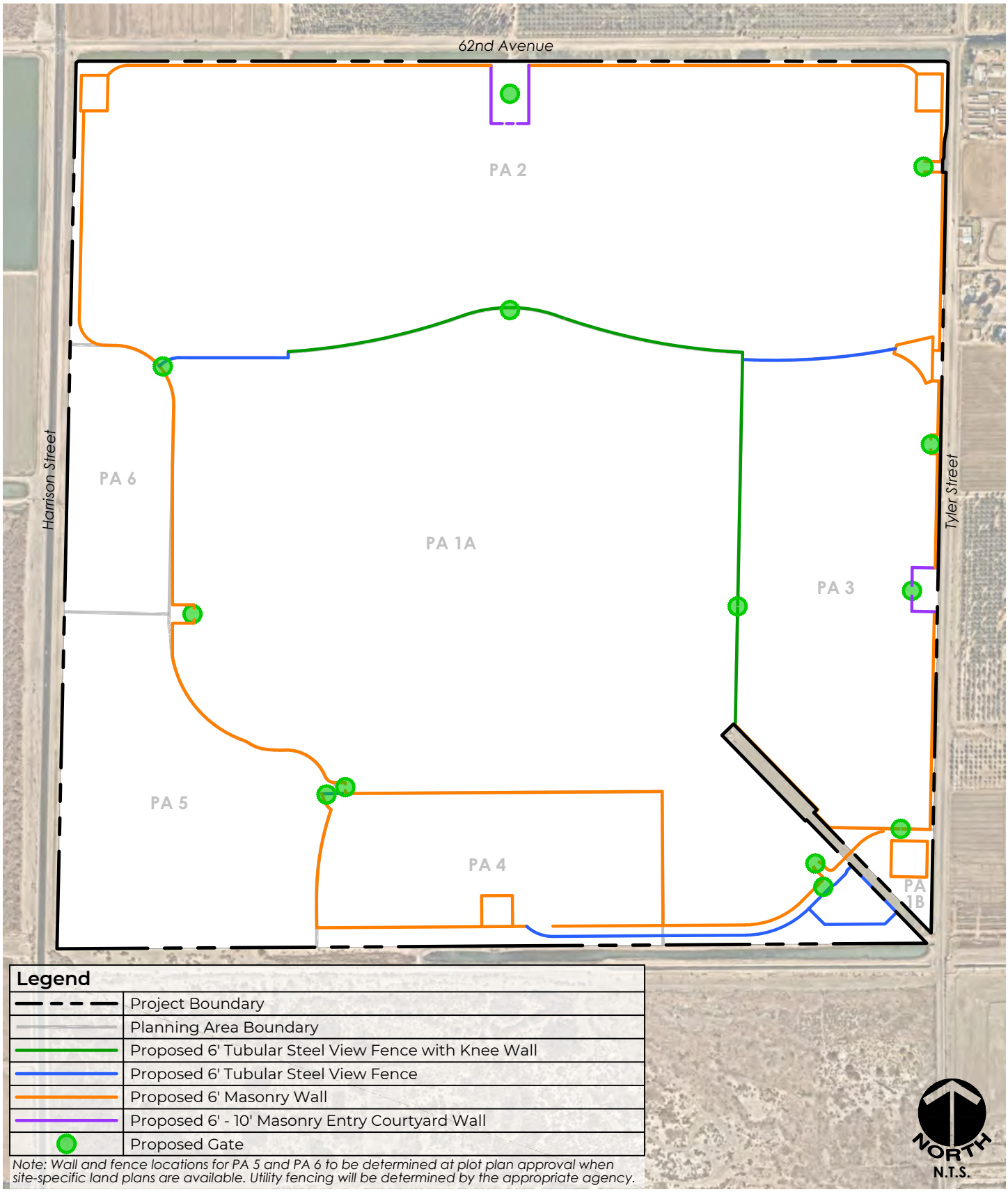
2.4 Walls and Fences

Wall/Fence Plan

As shown on Figure 2.6, *Conceptual Wall and Gating Plan*, public open space and recreation amenities occur along the project perimeter with the provision of meandering sidewalks and bike paths along each public road. Each Planning Area will have access to these public trails with connection to the regional trail system.

Wall/Fence Standards

1. Provide perimeter walls throughout the project as needed to secure each individual land use component.
2. Design guidelines for walls and fences are found in Chapter 4.



Note: Wall and fence locations for PA 5 and PA 6 to be determined at plot plan approval when site-specific land plans are available. Utility fencing will be determined by the appropriate agency.

Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

CONCEPTUAL WALL & GATING PLAN

2.5 Grading & Drainage

Site topography is extremely flat across the site with very little natural slope. The high elevation of 370 occurs in the northwest corner of the property at 62nd Avenue and Harrison Street. The low elevation of 350 occurs in the southeast corner or the site at 64th Avenue and Tyler Street. This equates to a vertical elevation change of only 20 feet over a distance of approximately 1 ¼ mile resulting in a natural gradient of 0.3%. The site contains an extensive system of agricultural tile drains. These will either be retained in place, relocated, or abandoned as determined during the final engineering design phase. Because grading and drainage are closely interrelated, they are addressed jointly in this section.

Grading/Drainage Plan

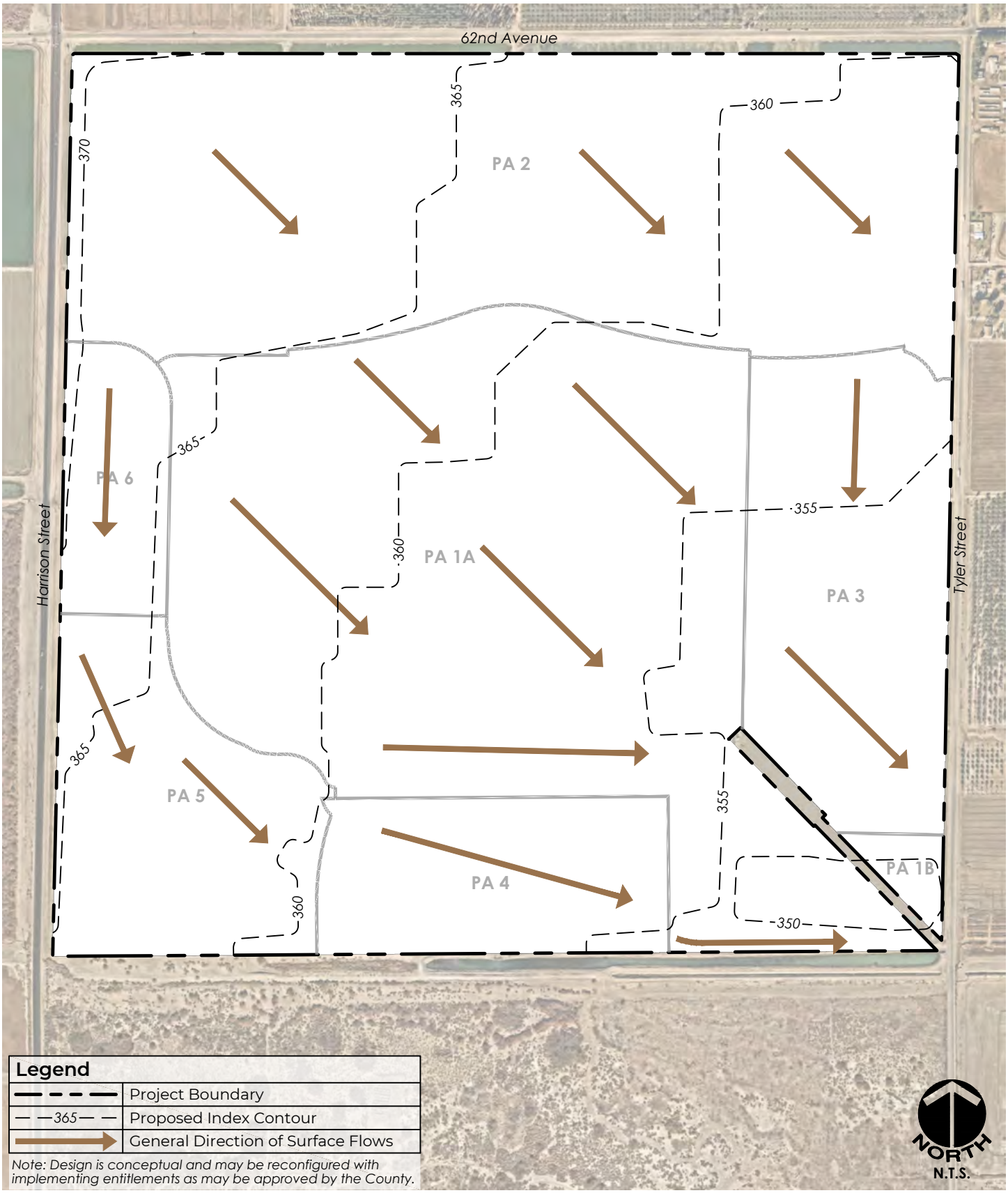
Site grading will create building pads and parking areas while keeping the earthwork cut and fill amounts balanced on site, so no soil export or import is expected. Because the site is relatively level, grading design will not deviate greatly from existing conditions and will be defined in greater detail as subsequent entitlement projects and plot plans are proposed. Grading will achieve positive surface flows and protect all structures and physical improvements from the 100-year storm through surface runoff into retention basins either above or below the finished surfaces. Soil erosion and water quality will be protected both during and after construction is completed. The incremental increase in storm water runoff from an existing condition to the new developed condition created by impervious surfaces (roofs, pavement) will be retained on site.

As shown in Figure 2.7, *Conceptual Grading Plan & Figure 2.8 Conceptual Drainage Plan* depicts the general routing of "developed condition" surface drainage through the site. Flows will be conveyed using future surface parking, drive aisles and limited piping where they will be delivered to a series of on-site retention facilities. The stormwater drainage system will be further refined and detailed as site-specific development proposals are submitted and approved by the County. Adjustments may include the number, location, configuration and depth of drainage pipes and basins as well as the specific flow path through the site. However, the retention basins and storm drainpipes will be sized appropriately for each phase of the project using standard engineering modelling methods as approved by the County of Riverside Engineering Department.

Grading/Drainage Standards

1. All grading activities shall be in substantial conformance with the Conceptual Grading and Drainage Plan, the California Building Code and Riverside County Ordinance No. 457.
2. Prior to development within any area of the Specific Plan, an overall Conceptual Grading Plan for the portion in process shall be submitted for Planning Department approval. The Grading Plan for each such area shall be used as a guideline for subsequent detailed grading plans for individual stages of development within that area and shall include preliminary pad and roadway elevations.
3. Unless otherwise approved by the County of Riverside, Building and Safety Department, all cut and fill slopes shall be constructed at inclinations of no steeper than two (2) horizontal feet to one (1) vertical foot.
4. A grading permit shall be obtained from the County of Riverside, as required by the County Grading Ordinance, prior to grading.

5. Soil stabilizers should be used to control dust as required by SCAQMD Rule 403.
6. Erosion control practices shall be implemented during grading activities.
7. All projects proposing construction activities including: clearing, grading, or excavation that results in the disturbance of at least five acres total land area, or activity which is part of a larger common plan of development of five acres or greater shall obtain the appropriate NPDES construction permit and pay the appropriate fees. All development within the specific plan boundaries shall be subject to future requirements adopted by the County to implement the NPDES program.



Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

CONCEPTUAL GRADING PLAN

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>PLANNING>CIVIL ENGINEERING>LAND SURVEYING
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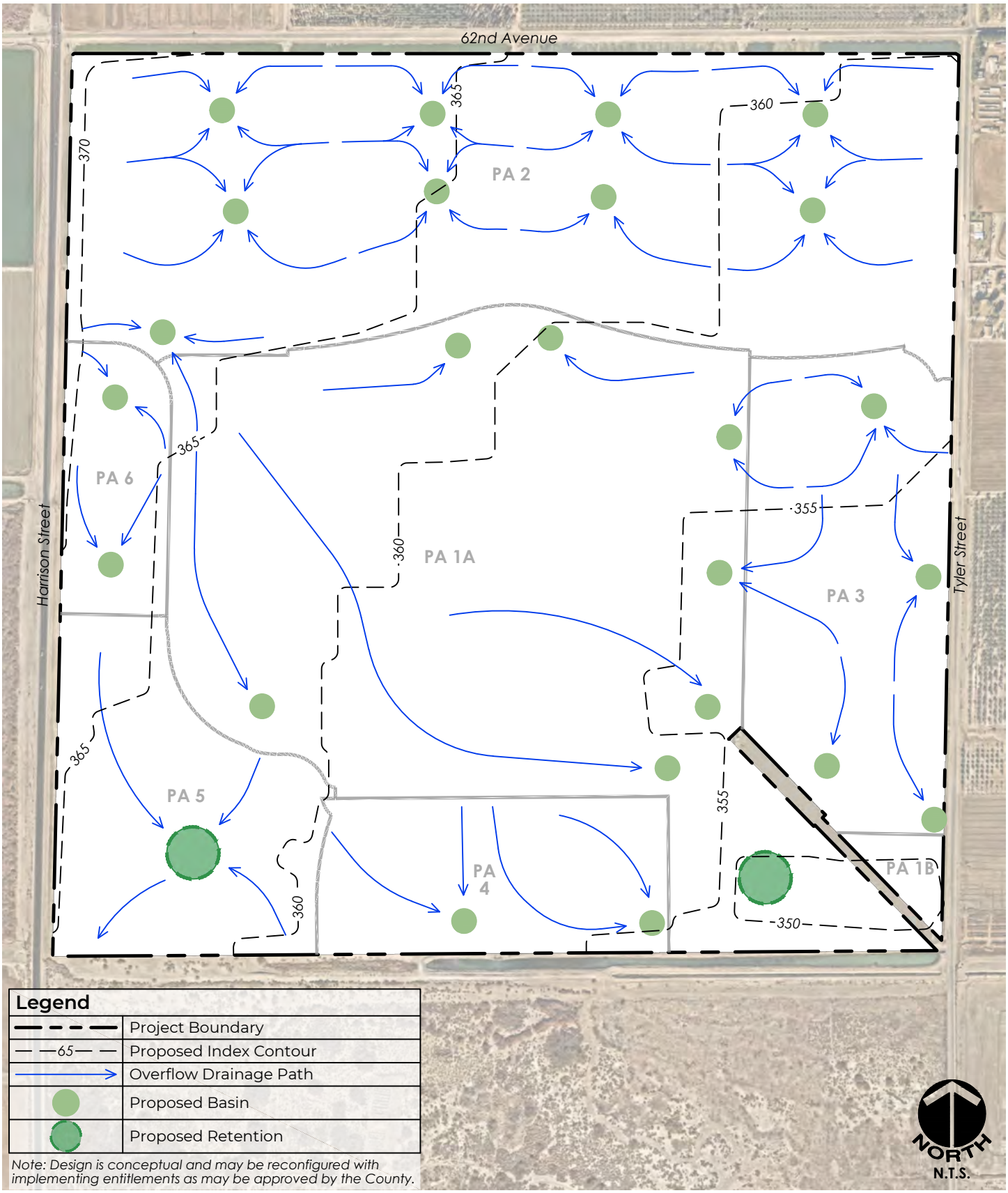
FIGURE 2.7



Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

CONCEPTUAL DRAINAGE PLAN

2.6 Water & Sewer

Water & Sewer Plan

As shown in Figure 2.9, *Conceptual Water Plan and* Figure 2.10*, Conceptual Sewer Plan,* the Specific Plan area is provided with domestic water and sanitary sewer service by the Coachella Valley Water District (CVWD). Development within the project will be served by a private network of lines that will connect to existing public CVWD water and sewer lines located in Harrison Street and 62nd Ave respectively.

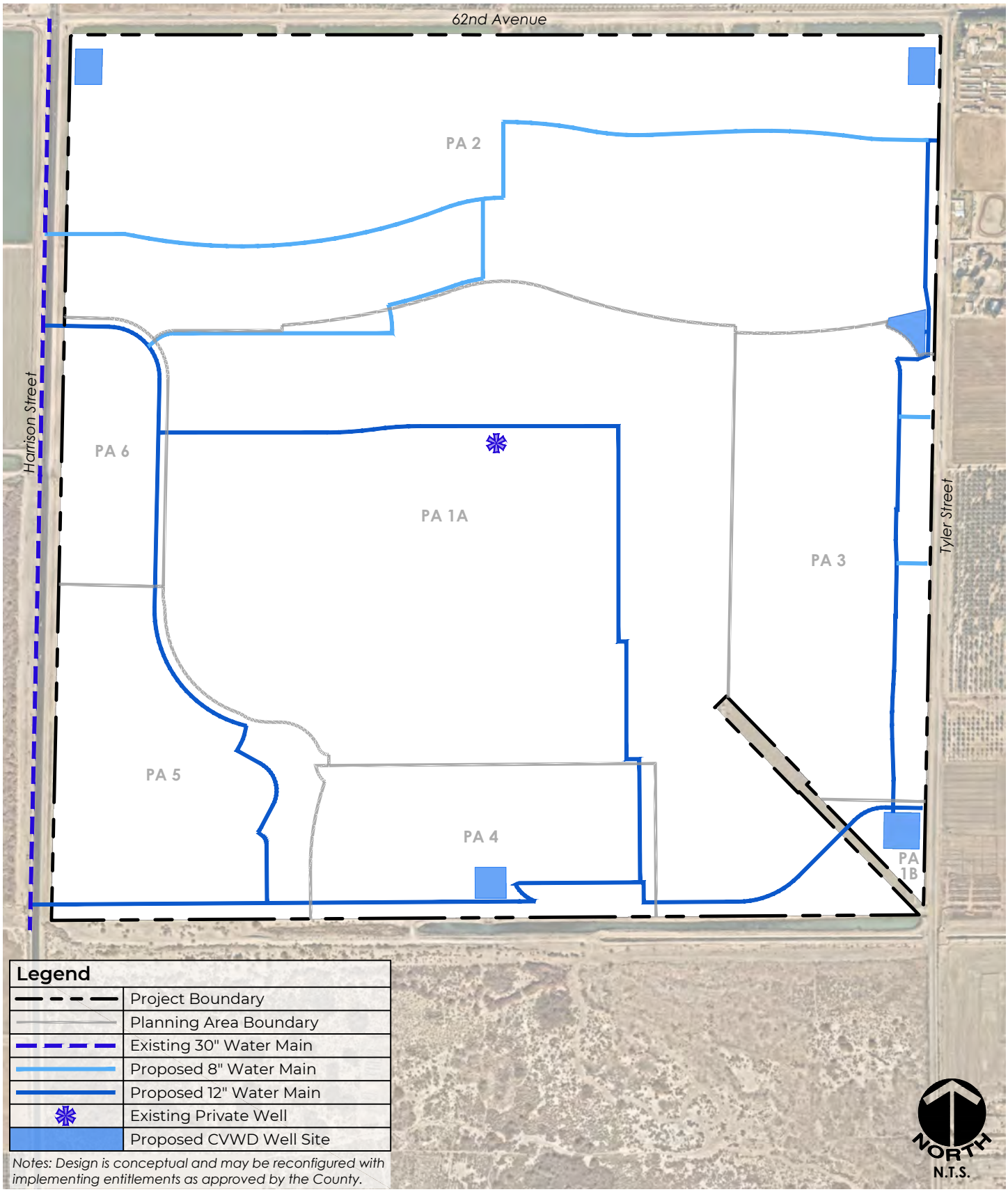
An Existing CVWD water main is located west of the site in Harrison Street. The project proposes connection points as illustrated on the Conceptual Water Plan. Water mains are proposed to be extended into the project site to provide an internal network of private lines to serve on-site development. In addition to serve the project's water needs, four (4) on-site wells are proposed as illustrated in Figure 2.8.

An existing CVWD 42" sewer main exists north of the project site in 62nd Ave. The project proposes to connect to the existing CVWD sewer infrastructure and will provide a private network of sewer mains within the project to serve on-site uses. Two lift stations are proposed in the southerly portion of the project as illustrated in Figure 2.10 Their exact location and specifications will be determined as part of the final design process.

Figure 2.9, *and Figure 2.10* are conceptual and subject to refinement / modification as necessary in response to future specific development proposals.

Water/Sewer Standards

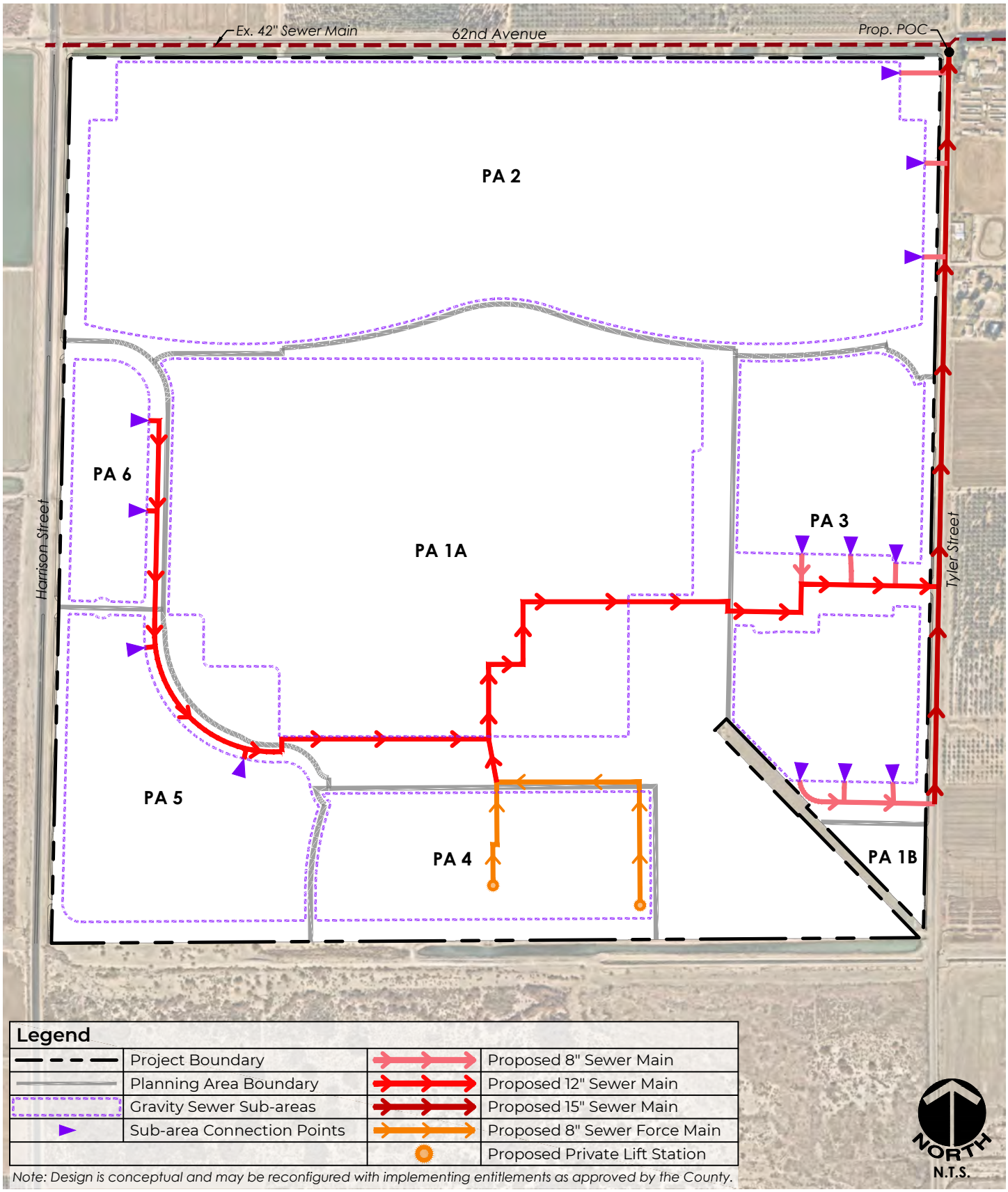
- All water and sewer facilities will be designed and constructed in accordance with the Coachella Valley Water District (CVWD) standards and specifications
- The capital cost of on-site and off-site facilities necessary to serve the project site will be the responsibility of the applicant. Relevant facilities will be dedicated to CVWD, after construction, for the District to maintain and operate. Fee credits may be available for transmission, storage, and wells.
- All development is required to landscape in accordance with Table X.X Plant Palette found in Section X.X, and CVAG Ordinance 1302.1, Landscape and Irrigation System Design Criteria. This will ensure additional water conservation through the use of desert-appropriate landscape material.
- All projects, including subdivisions within the specific plan boundary, shall be subject to a Mitigation Monitoring Program, included as part of EIR No. XXX and any updated environmental assessments associated therewith.
- The grading contractor shall be required to obtain an encroachment permit from CVWD prior to entering any rights-of-way belonging to the Coachella Valley Water District of US Bureau of Reclamation.



Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

CONCEPTUAL WATER PLAN



Note: Design is conceptual and may be reconfigured with implementing entitlements as approved by the County.

Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

CONCEPTUAL SEWER PLAN

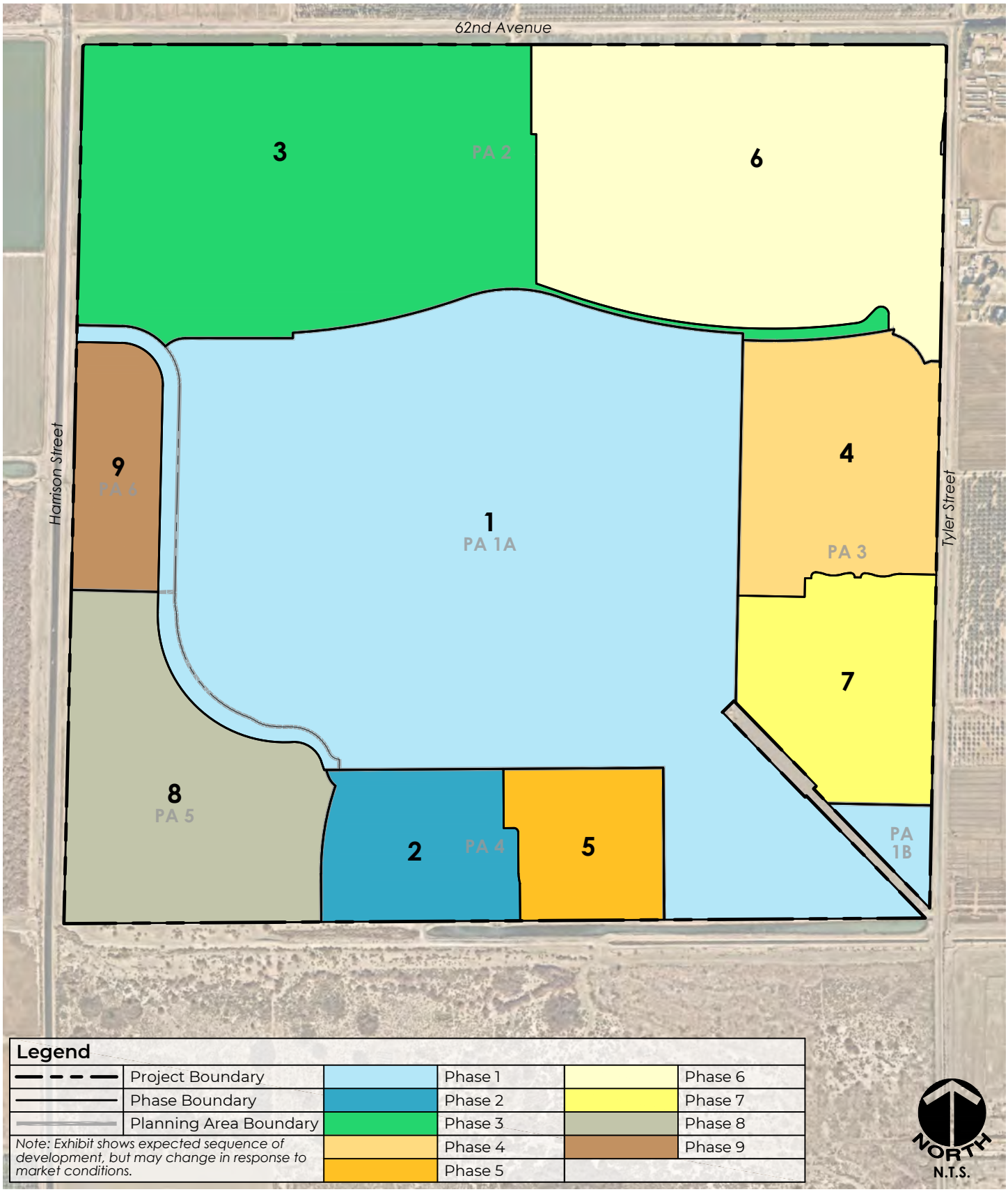
2.7 Phasing

Phasing Plan

Development of the Thermal Ranch Specific Plan may occur as a single project or over multiple phases. *Figure 2.11, Phasing Plan* illustrates the expected sequence of development in nine (9) development phases. Planning Area 1 (Equestrian Center) is intended as the first phase. Other project components would follow as shown on the plan, but the order may be adjusted in response to market demand. Adjustments are allowed so long as each phase accommodates future phases with the orderly extension of circulation, parking, utilities, and infrastructure in accordance with the final conditions of approval for each project and the County's Engineering Department.

Phasing Standards

1. Construction of the development, including recordation of final subdivision maps, may be done progressively in stages, provided adequate vehicular access is constructed for all dwelling units in each stage of development and further provided that such phase of development conforms substantially with the Specific Plan Phasing Program.
2. The Primary Collector Road will be constructed with PA-1, PA-5, or PA-6, whichever occurs first.
3. Perimeter walls shall be constructed with the adjoining phase of development.
4. Prior to recordation of any final subdivision map, improvement plans that phase of development shall be submitted to the County Planning Department for approval.



Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

CONCEPTUAL PHASING PLAN

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FIGURE 2.11

CHAPTER 3: PLANNING AREA STANDARDS

Development standards for the Thermal Ranch have been established at four levels: Chapter 2 – Project-Wide Planning Standards, Section 3.3 – Design Guidelines, Section 3.4 – Landscape Design Guidelines, and, Planning Area Standards, which are provided in this section.

3.1 Planning Area 1 – Equestrian Center

Planning Area Description

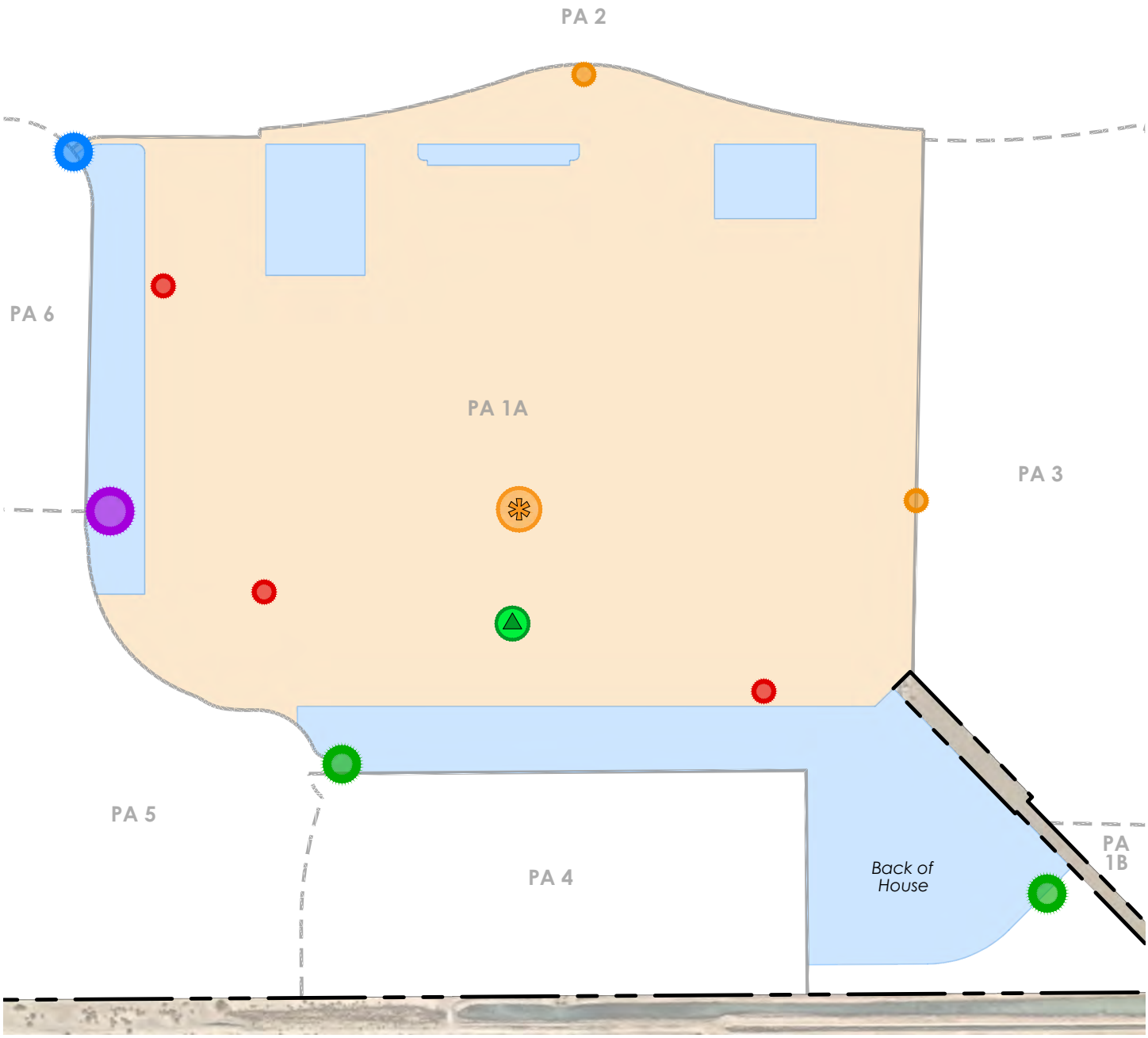
Planning Area 1 consists of approximately 231 acres for tourist commercial development located in the center of the Specific Plan. It will allow development of a full service equestrian center. Representative uses include barns, stables, arenas, horse trails, event areas, riding fields, farrier/veterinary services, equestrian themed retail, dining, parking, and back of house maintenance/service uses.

Planning Area Zoning

See Ordinance No. 348 (Chapter 5 – Specific Plan Zoning Ordinance) for allowable uses and development standards

Planning Area Development Standards

1. The primary entry to Planning Area 1 is from Harrison Street via the Primary Collector Road with secondary access on Tyler Street.
2. Refer to Chapter 2 for project-wide planning standards.
3. Refer to Chapter 4 for landscape and architectural design guidelines.
4. Planning Area 1 is located within Land Use Compatibility Zone D for the Jacqueline Cochran Regional Airport. Development will incorporate the necessary Zone D consistency criteria.



Legend			
	Project Boundary		Primary Entry (Manned Year Around)
	Planning Area Boundary		Secondary Entry (Season Only)
	Parking & Service Zone		Secondary Entry
	Vehicle Exclusion Zone (Horses & Golf Carts Only)		Cart Entry Gate
	VIP Gathering/ Dining Commons		Cart Restriction
	Primary Entry Gateway		

Note: All other streets are local roads and are allowed as described in Figure XX. Street patterns shown are illustrative only and may be adjusted subject to approval of a tentative tract map or plot plan that complies with County engineering standards.

NORTH
N.T.S.

Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

PLANNING AREA 1 OVERVIEW

3.2 Planning Area 2 – Estate Residential

Planning Area Description

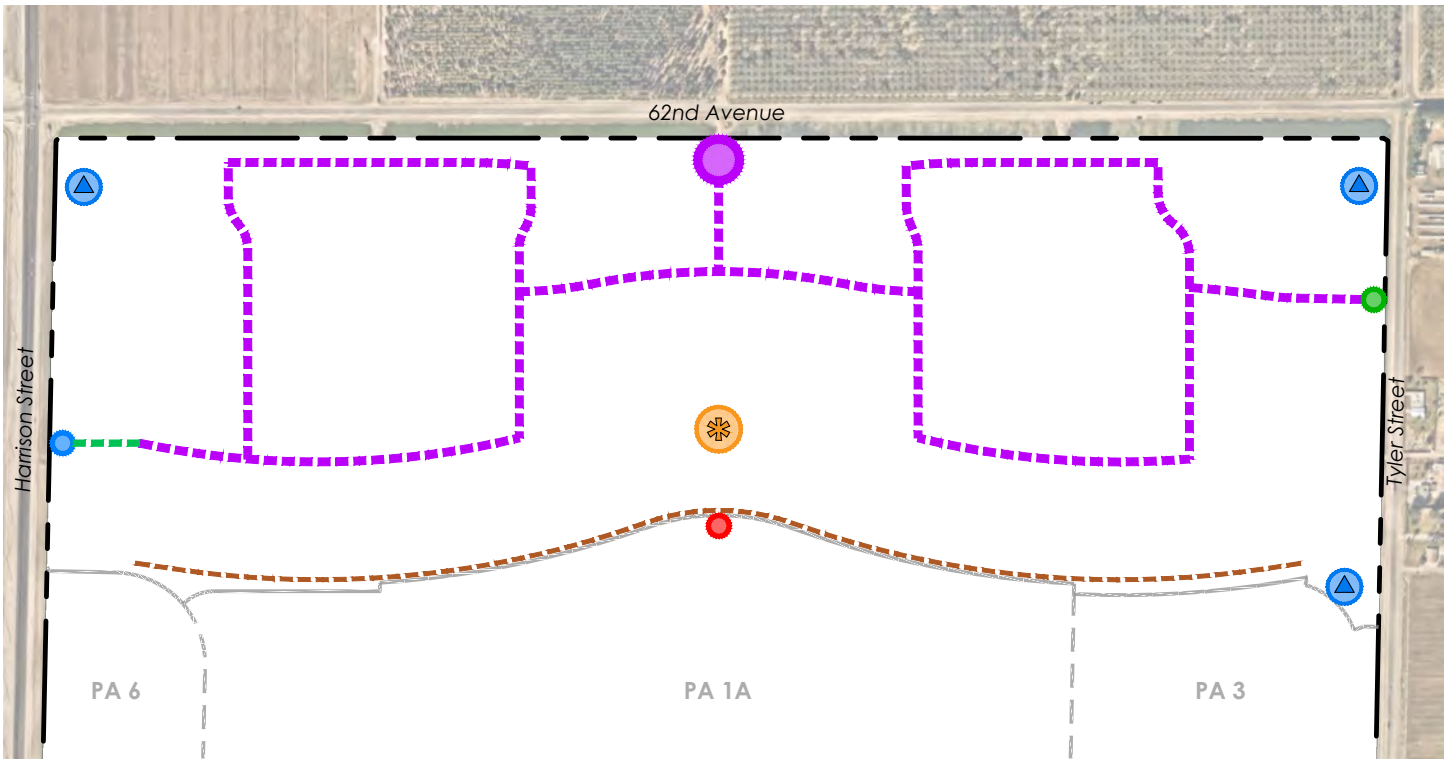
Planning Area 2 contains approximately 187 acres for low density residential developement located in the northern portion of the Specific plan. It allows for the development of equestrian lifestyle estate residences on lot sizes rangining from half-acre to two acres. Representative uses within this planning area include single-family homes, clubhouse, equestrian trails, and open space/retention areas.

Planning Area Zoning

See Ordinance No. 348 (Chapter 5 – Specific Plan Zoning Ordinance) for allowable uses and development standards

Planning Area Standards

1. The primary entry to Planning Area 2 is on 62nd Avenue with secondary access from Tyler Street and Harrison Street.
2. This planning area will be developed with a community recreation center to serve neighborhood residents.
3. Refer to Chapter 2 for project-wide planning standards.
4. Refer to Chapter 4 for landscape and architectural design guidelines.
5. Planning Area 2 is located within Land Use Compatibility Zone D for the Jacqueline Cochran Regional Airport. Implementing development plans will incorporate the relevant Zone D consistency criteria except the average parcel size requirement. The estate lot size essential for this equestrian lifestyle community will fall in between the high and low ranges.



Legend	
	Project Boundary
	Planning Area Boundary
	Local Street (32' ROW)
	Emergency Access (24' Easement)
	Service Driveway (15' Road)
	Community Amenity
	Potential CVWD Well Site
	Primary Entry
	Secondary Entry
	EVA Only Access
	Horse Park Entry

NORTH
N.T.S.

Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

PLANNING AREA 2 OVERVIEW

3.3 Planning Area 3 – Neighborhood Residential

Planning Area Description

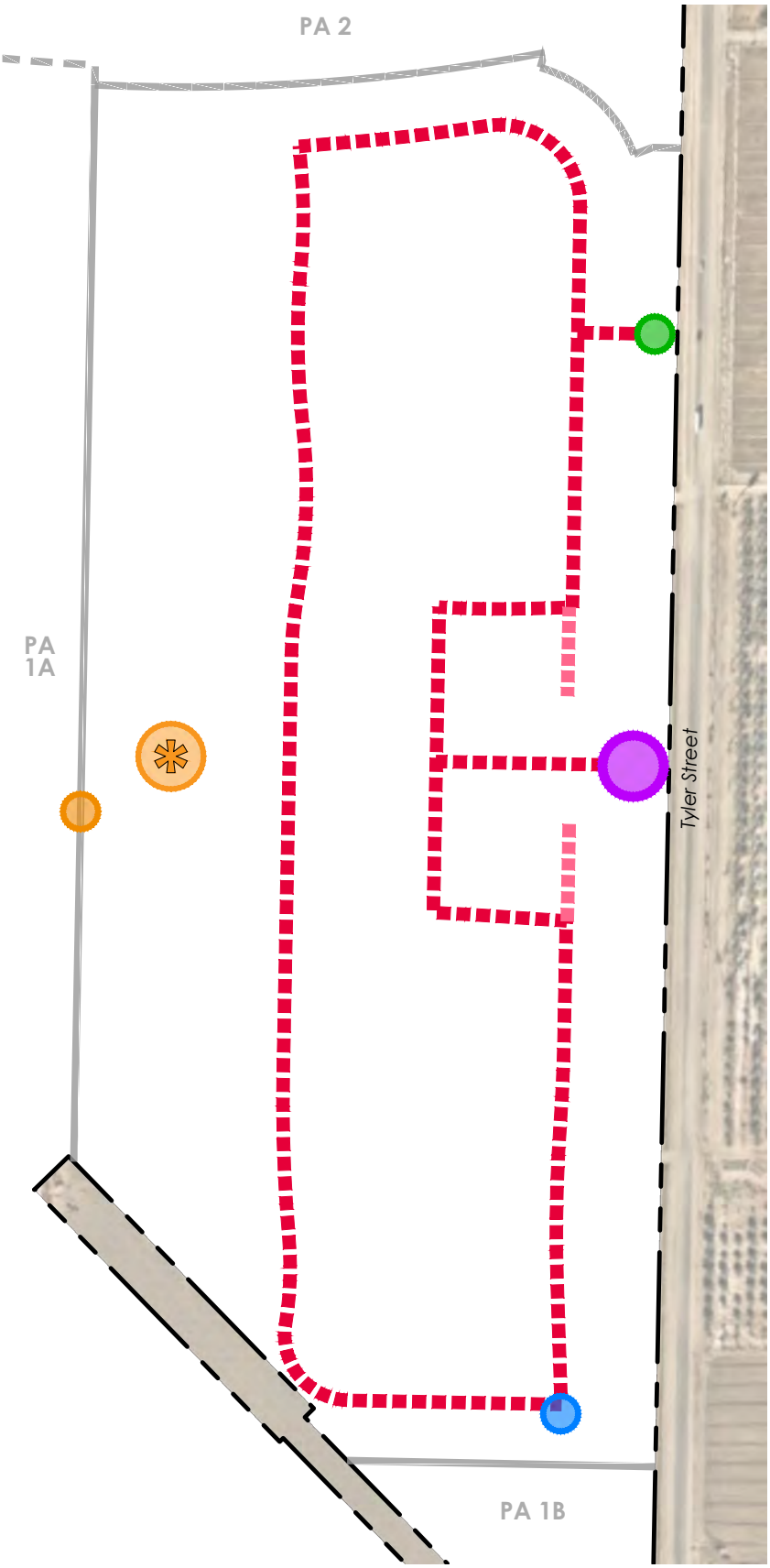
Planning Area 3 contains approximately 72 acres for medium density residential development located in the eastern portion of the Specific Plan. It allows up to 390 attached and detached residential units at no less than 5 dwelling units per acre. Representative uses within this planning area include single-family detached and attached homes, clubhouses and other community amenities.

Planning Area Zoning

See Ordinance No. 348 (Chapter 5 – Specific Plan Zoning Ordinance) for allowable uses and development standards.

Planning Area Standards

1. The primary and secondary entries to Planning Area 3 are on Tyler Street.
2. This planning area will be developed with a community recreation center to serve neighborhood residents.
3. Refer to Chapter 2 for project-wide planning standards.
4. Refer to Chapter 4 for landscape and architectural design guidelines.
5. Planning Area 3 is located within Land Use Compatibility Zone D for the Jacqueline Cochran Regional Airport. Implementing development plans will incorporate the necessary Zone D consistency criteria.



Legend	
	Project Boundary
	Planning Area Boundary
	Local Street (37' ROW)
	Local Street (33' ROW)
	Community Clubhouse
	Primary Entry
	Secondary Entry
	EVA Only Access
	Cart Entry

NORTH
N.T.S.

Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

PLANNING AREA 3 OVERVIEW

3.4 Planning Area 4 – Horse Park Workforce Housing

Planning Area Description

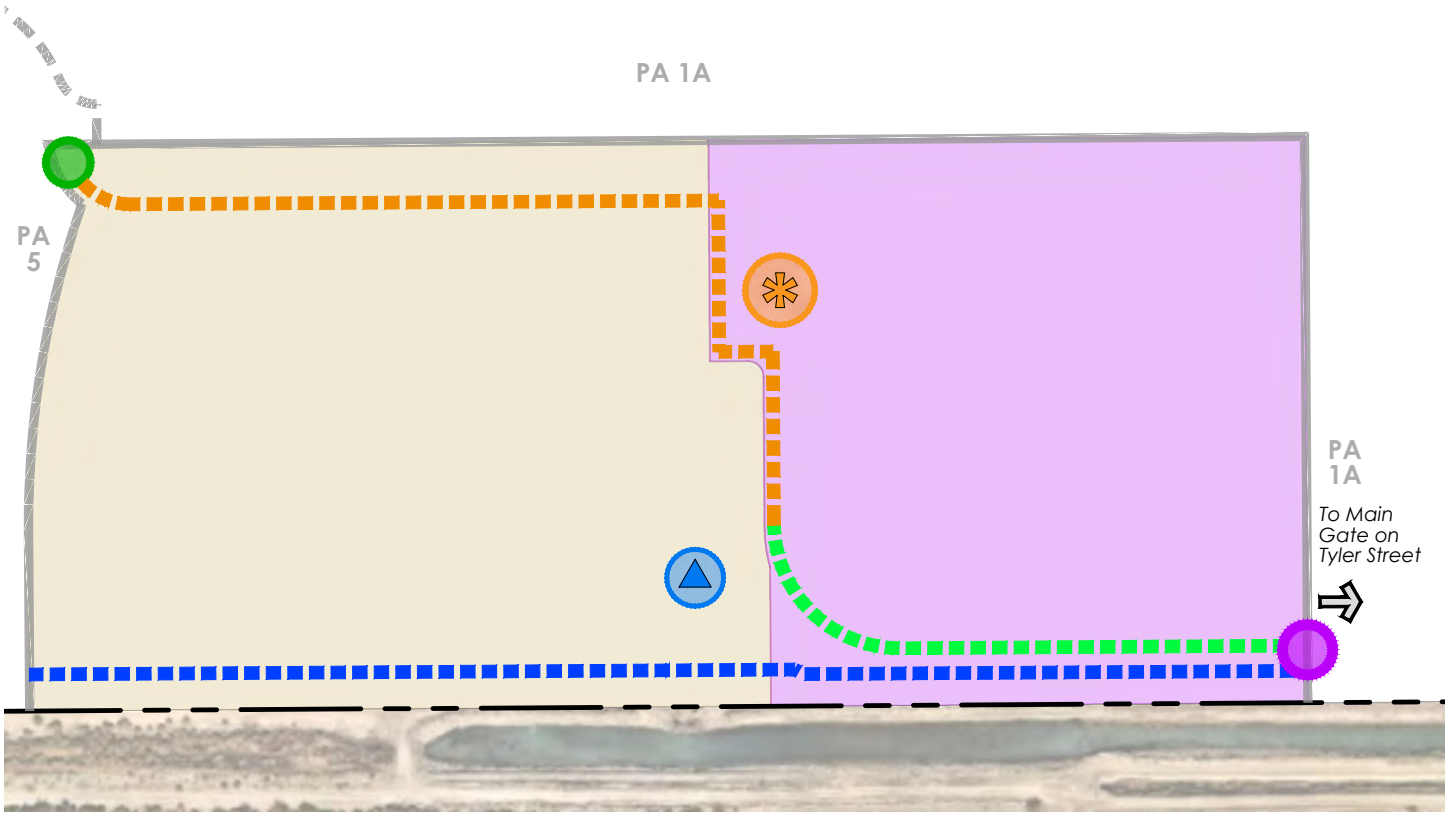
Planning Area 4 contains approximately 41 acres of land for high density residential development located in the southern portion of the Specific Plan. It allows for development of workforce housing consisting of modular housing units (between 300-500 dwelling units) as well as recreational vehicle parking for that segment of horse park seasonal workers with a mobile lifestyle (up to 320 stalls).

Planning Area Zoning

See Ordinance No. 348 (Chapter 5 – Specific Plan Zoning Ordinance) for allowable uses and development standards.

Planning Area Standards

1. The primary entry to Planning Area 2 is from Tyler Street with secondary access to Harrison Street via the Primary Collector road.
2. This planning area will be developed with a community laundromat, outdoor gathering space and barbeque amenities to serve resident workers.
3. Refer to Chapter 2 for project-wide planning standards.
4. Refer to Chapter 4 for landscape and architectural design guidelines.
5. A public trail easement will be dedicated adjacent to 64th Avenue.
6. Planning Area 4 is located within Land Use Compatibility Zone D for the Jacqueline Cochran Regional Airport. Implementing development plans will incorporate the necessary Zone D consistency criteria.



Legend	
	Project Boundary
	Planning Area Boundary
	Local Street (60' ROW)
	Local Street (30' ROW)
	Public Trail (20' Easement)
	Workforce RV Housing
	Workforce Cottage Housing
	Community Amenity
	Potential Well Site
	Primary Entry
	Secondary Entry

NORTH
N.T.S.

Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

PLANNING AREA 4 OVERVIEW

3.5 Planning Area 5 – Resort/Hotel

Planning Area Description

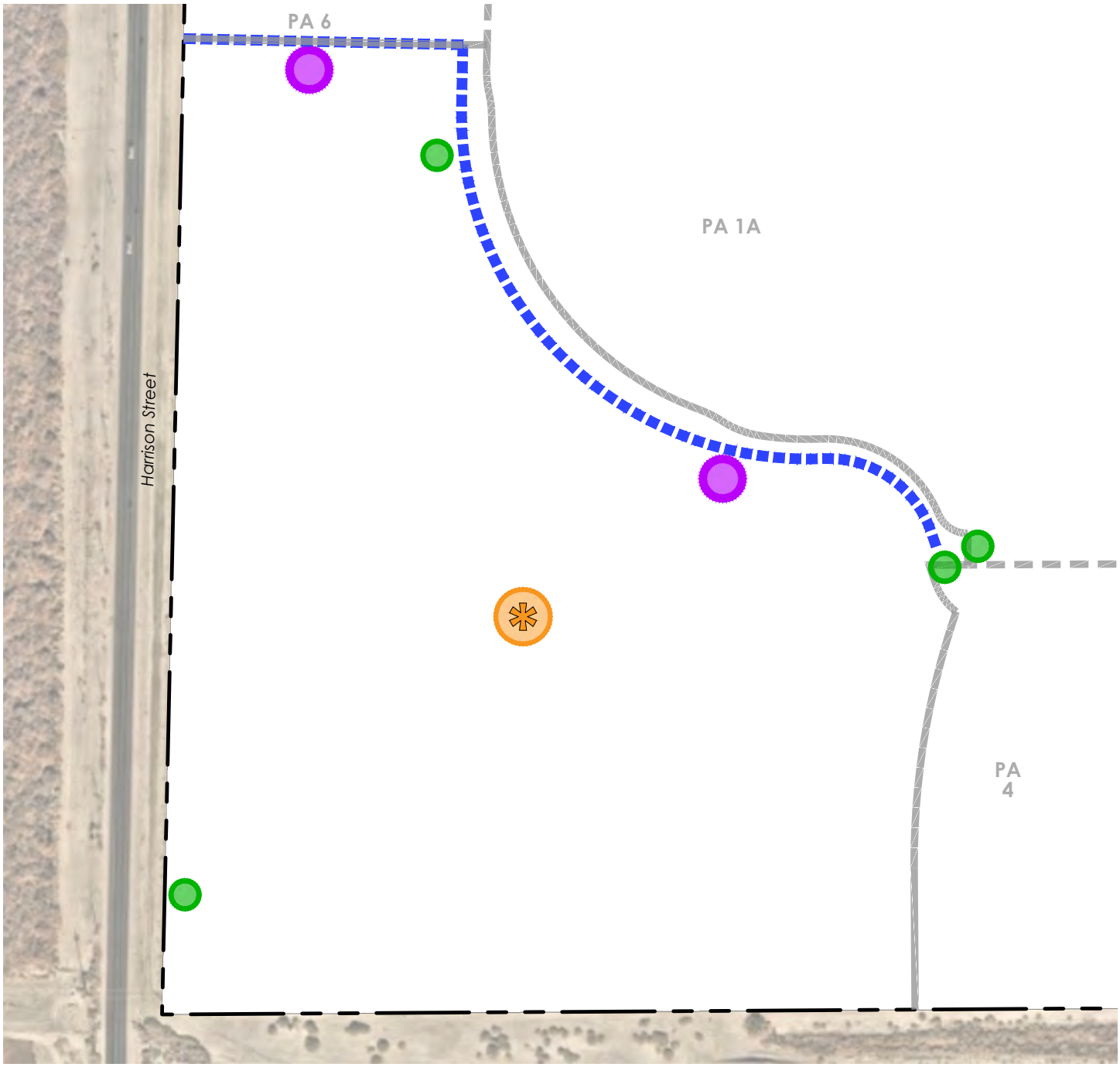
Planning Area 5 contains approximately 55 acres of land located on the westerly portion of the Specific Plan and will allow for primarily hotel, retail, and extended stay condomium uses.

Planning Area Zoning

See Ordinance No. 348 (Chapter 5 – Specific Plan Zoning Ordinance) for allowable uses and development standards.

Planning Area Standards

1. The primary and secondary entries to Planning Area 5 are to Harrison Street via the Primary Collector Road.
2. This planning area will include a central water feature or recreational amenity as a focus for resort living.
3. Refer to Chapter 4 for landscape and architectural design guidelines.
4. Refer to Chapter 2 for project-wide planning standards.
5. Planning Area 5 is located within Land Use Compatibility Zone D and E for the Jacqueline Cochran Regional Airport. Implementing development plans will incorporate the necessary Zone D consistency criteria.



Legend	
	Project Boundary
	Planning Area Boundary
	Primary Collector with Public Access (23'-112' ROW Varies)
	Central Resort Amenity
	Primary Entry
	Secondary Entry

NORTH
N.T.S.

Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

PLANNING AREA 5 OVERVIEW

3.6 Planning Area 6 – Commercial Village

Planning Area Description

Planning Area 6 consists of approximately 22 acres of land located in the western portion of the Specific Plan bordering Harrison Street and will promote a variety of commercially oriented development such as retail, restourant, recreation and similar uses.

Planning Area Zoning

See Ordinance No. 348 (Chapter 5 – Specific Plan Zoning Ordinance) for allowable uses and development standards.

Planning Area Standards

1. The primary and secondary entries to Planning Area 6 are to Harrison Street via the Primary Collector Road.
2. Refer to Chapter 2 for project-wide planning standards.
3. Refer to Chapter 4 for landscape and architectural design guidelines.
4. Planning Area 6 is located within Land Use Compatibility Zone D for the Jacqueline Cochran Regional Airport. Implementing development plans will incorporate the necessary Zone D consistency criteria.

Legend	
	Project Boundary
	Planning Area Boundary
	Primary Collector with Public Access (23'-112' ROW Varies)
	Primary Entry
	Secondary Entry

NORTH
N.T.S.

Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

PLANNING AREA 6 OVERVIEW

CHAPTER 4: DESIGN GUIDELINES

4.1 Overview and Purpose

The guidelines contained in this Chapter are intended to allow for flexible, creative design for the development of a high-quality equestrian center, a variety of commercial and resort uses, and various residential neighborhoods within the Thermal Ranch Specific Plan. These guidelines identify unifying elements for site planning, building, and landscape design which are intended to be compatible with the surrounding area and promote high-quality development within the Specific Plan. This comprehensive approach represents an understandable and predictable role in shaping the physical future by emphasizing site design, building form, and landscape design. The exhibits, photos, and illustrations provided are conceptual only and do not depict final designs, nor should they limit the range of expression among the developer or their professional design team. General and commercial design guidelines for this project are provided in this Chapter below. For residential uses, the project intends to largely follow the County Wide Design Standards and Guidelines which will be attached in the Appendix when available.

4.2 Vision Statement and Community Character

The Thermal Ranch Specific Plan is envisioned as a unique living and lifestyle community comprising of various residential neighborhoods, a variety of commercial and resort uses (retail space, hotels, golf, RV park, etc.), all surrounding a world-class equestrian center. The equestrian center which lies at the heart of the project will serve as the project's focal point, providing a sense of place and establishing the character for the Thermal Ranch community. The equestrian center will largely focus on farmhouse and agrarian architecture. Due to the variety of uses proposed, the design guidelines provided in this chapter will focus on broad concepts rather than specific details. The Thermal Ranch character will be captured through carefully integrating architecture and landscape into the overall design, resulting in a pedestrian/equestrian-oriented community and visually engaging place to live and ride.

4.3 General Design Guidelines

Site Design

Integration of effective site planning techniques, incorporated with basic design elements will enhance the visual experience of the development. Key site planning principles include:

- Site design should be compatible with the surrounding development and the public street frontages.
- Buildings should be located and orientated to respect the need for privacy of surrounding uses, especially adjoining residential development.
- Develop a pedestrian-friendly site design encouraging pedestrian links such as interior pathways, greenways, and crosswalks are encouraged to connect future onsite uses.
- Uses that are developed should complement other uses onsite and be compatible with the overall vision of the Specific Plan and community.

- Entries shall be clear, identifiable, and street oriented driveways must be provided at the project and parking entrances. Parking entrances should be designed to ensure safe pedestrian access and provide clean line-of-sight-walkways.

- Public gathering spaces such as outdoor plazas and patios shall be encouraged in commercial retail or restaurant buildings. Inviting outdoor spaces create an environment of relaxation and community interaction. Trees, planting, and comfortable site furnishings contribute to enhanced enjoyment of these spaces. Dynamic and seasonal shading strategies for exterior occupied spaces such as plazas and seating areas shall be incorporated.

- Promote safe pedestrian movement through highly visible pathways and walkways. Pedestrian and plaza spaces shall be thoughtfully separated from parking lots and vehicular movement through creative landscaping and built structures.

Lighting

Lighting contributes to the safety and security of commercial and residential development. It should complement and enhance the architectural style of buildings and contribute to the overall character of the center.

- Sufficient lighting shall be provided to ensure safe vehicular, equestrian, and pedestrian orientation and the security of persons, property, and vehicles during low-light periods.

- Lighting must be high quality and attractive and should be selected as part of the overall building and landscape theme. Creative fixture design is encouraged.

- Commercial buildings may use distinctive accent lighting may be used on buildings to highlight individual tenants, provided that the lighting is complementary to the overall lighting style of each commercial center.

- Specialized lighting is appropriate for entries, building towers, public art, water features, and other unique architectural elements.

- Light fixtures must be the appropriate scale and location to avoid spillover or glare into surrounding areas.

- Lighting fixtures shall be constructed of durable materials, have vandal-resistant covers, and be resistant to tampering.

- Lighting fixtures should include photocell control to reduce energy usage.

Lighting design for different uses. Lights can serve for both nighttime visibility and ambiance

Signage

Signs and graphics play a large role in creating and reinforcing the desired feel of a vibrant community and provide for residential and business identity and individuality. Non-residential signs are intended for identification and wayfinding and to help orient visitors and direct them to the appropriate activities. Residential signage is intended to help establish the character of particular development while continuing the community theme.

Signs within the Thermal Ranch Specific Plan should comply with the following guidelines:

- Reinforce that character, branding, and identity.
- Be simple and easily readable, enhance the center's environment, and not contribute to visual clutter.
- Be in scale with the buildings and the surrounding pedestrian environment.
- Provide significant contrast between lettering colors and background colors for legibility.
- Be aesthetically pleasing and visually complement the style of the associated building and community.
- Conceal sign conduits, transformers, junction boxes, etc. from view.
- Use permanent sign materials.
- Not cover windows or important architectural features.
- Use typefaces that are easy-to-read.
- Maximum dimensions for message sign areas shall be limited to dimensions established by

Riverside County Ordinance No. 348.

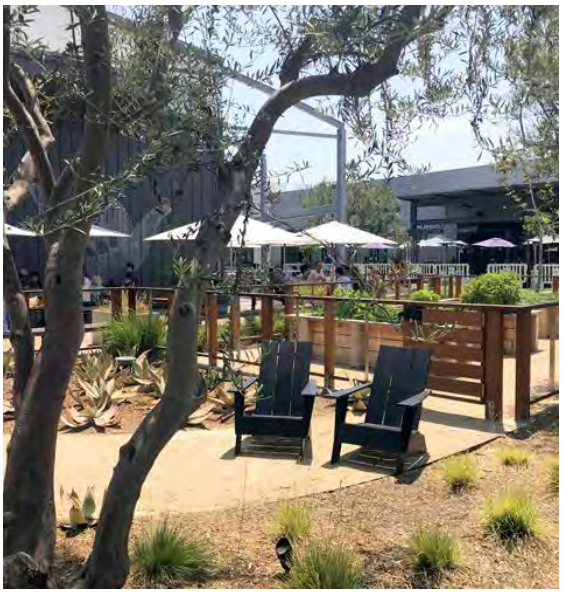
- Monument signs shall be placed in a landscape or plaza area and not inhibit pedestrian circulation.

Signage and monumentation examples

Public Spaces

A vibrant and convenient pedestrian environment is encouraged throughout the project. The following are recommendations regarding public spaces:

- Public pedestrian spaces or plazas should contain seating, shaded areas, lighting, and landscaping to create friendly, safe, and comfortable spaces.
- Active commercial uses such as restaurants, building entries, storefront display windows that encourage window shopping, and outdoor eating areas should front onto public spaces.
- Large, paved areas should be broken into smaller visual surfaces through the use of changes in decorative paving, such as stone, brick, or stamped concrete.
- In commercial areas, tree wells and landscaping in planters should be provided along pedestrian walkways and drive aisles.



Public spaces with seating, shade trees, lighting, and interesting landscape elements

Non-Vehicular Circulation

- On-site amenities for bicycle parking shall be provided at safe and convenient areas.
- Bicycle lanes should be clearly marked with pavement striping and bicycle routes with appropriate signage.
- The project should include a convenient and interconnected system of equestrian, pedestrian, golf cart, and bicycle paths as appropriate to each Planning Area.

Fencing and Walls

- Fences and walls in commercial areas may be used to define space, such as café seating, but should not obstruct pedestrian passage.
- Open space areas adjacent to streets and pedestrian rights-of-way shall avoid fencing or use view fencing if fencing is required for safety reasons.
- Fencing or walls should be used to screen trash receptacles and service areas. Such fencing and walls must be of solid construction and a minimum of 6 feet high.

Wall and fence examples, style should be appropriate to use

4.4 Commercial Architecture

The following recommendations should be addressed in the planning of the commercial area:

- Buildings should be grouped to create a concentrated, positive outdoor setting.
- Building entrances should create a visually inviting storefront with direct, identifiable, and safe access from streets and pedestrian walkways.
- Commercial development should be designed with an internal circulation system that includes well-defined pedestrian paths to avoid vehicular and pedestrian conflicts. Few or no parking spaces should back onto major entry drive aisles.
- Entries to commercial buildings should be clearly articulated and accessible from parking.
- Entries to buildings that front walkways and gathering places should include awnings, overhangs, arcades, or other architectural treatments to articulate the entry.
- Service areas should be screened from public view, whenever feasible.
- Site design should provide for outdoor seating areas.
- Service areas and loading functions should be integrated into a circulation pattern that minimizes conflicts with vehicles and pedestrian.

Example commercial layout (for illustrative purpose only)

- Site design should provide for outdoor seating areas.

Service areas and loading functions should be integrated into a circulation pattern that minimizes conflicts with vehicles and pedestrians.

Building Form

The commercial center should be designed to create a human-scale form that encourages walking and reduces the mass and bulk of large buildings. Building form should be articulated to add interest and reduce the appearance of building height and bulk. This can be achieved through the following design techniques:

- All sides of buildings visible to the public should be detailed and designed with interesting facades.
- Vary building materials, colors, and architectural elements, such as windows, entries, overhangs, awnings, arcades, recesses, trellises, and roof lines.
- Create a building base at the pedestrian level with high-quality materials that visually anchor the building to the ground plane.
- Individual tenant spaces in commercial centers should be easily identifiable: Place columns, piers, or pilasters between building bays.
- Vary the building facades with recessed entrances, creating niches for landscaping and pedestrians.
- Arcades and roof overhangs are encouraged for shading.
- Vary building or roof heights if style appropriate.
- Integration of a landmark feature into the building design is encouraged to help define the community image. Such features could include steeples, towers, or other vertical architectural elements that provide prominent symbols visible from surrounding neighborhoods and major roadways. Special treatment for corner buildings is encouraged.
- Building materials and colors should complement the architectural style of the community but may be used in a way to create a distinctive identity.
- Entries should be clearly articulated and easily accessible from parking lots and parking structures.
- Commercial frontages should provide a transparent facade area, such as windows, entries, and storefront displays, along the commercial street.

Building fronts with visibility both in and out, pronounced entries, engaging frontages

Materials and Finishes

High-quality, attractive, and durable materials should be used for all buildings, landscaping, paving, and signage.

- Durable exterior materials should be used on all sides of buildings.
- The predominant color on a building should be compatible with the overall character of the commercial center.
- Accent materials such as brick, stone, wood, or wrought iron may be used to highlight architectural elements.

Varied use of materials and colors to create architectural interest

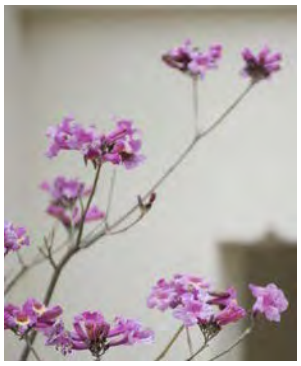
4.5 Residential Architecture

Residential Planning Areas will utilize the County Wide Design Standards and Guidelines for residential projects which will be attached to the appendix when available.

4.6 Architectural Character

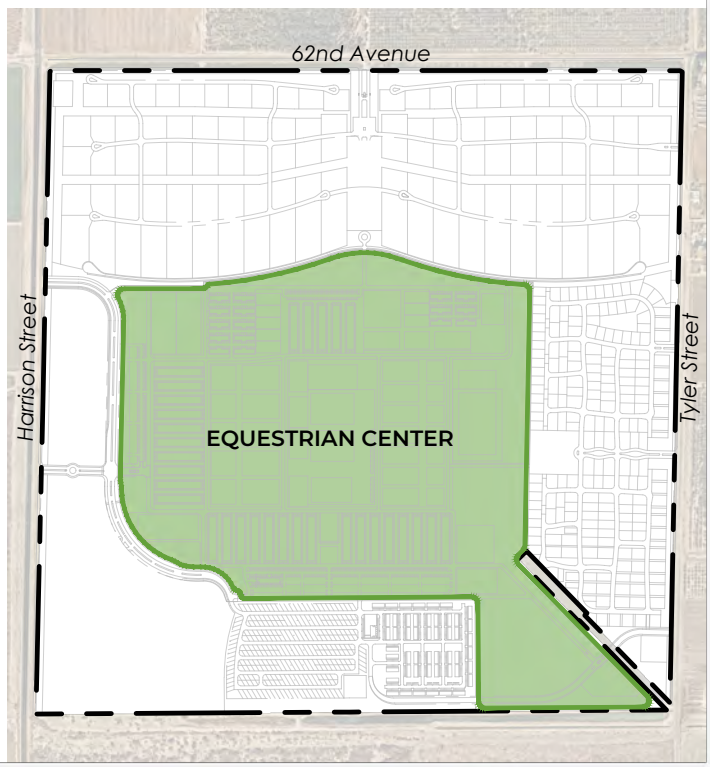
Figures 4.1 – 4.10 Architectural Character Imagery on the following pages is intended to present representative examples of the design intent and features described in the Specific Plan's architectural guidelines. The images are not intended to promote any particular architectural style but rather depict design features (such as massing, form, materials, etc.) that reflect the types of developments that would be compatible within the Specific Plan. The images shown in these figures are purely conceptual and future developments are not required to match in terms of intensity or architectural style.

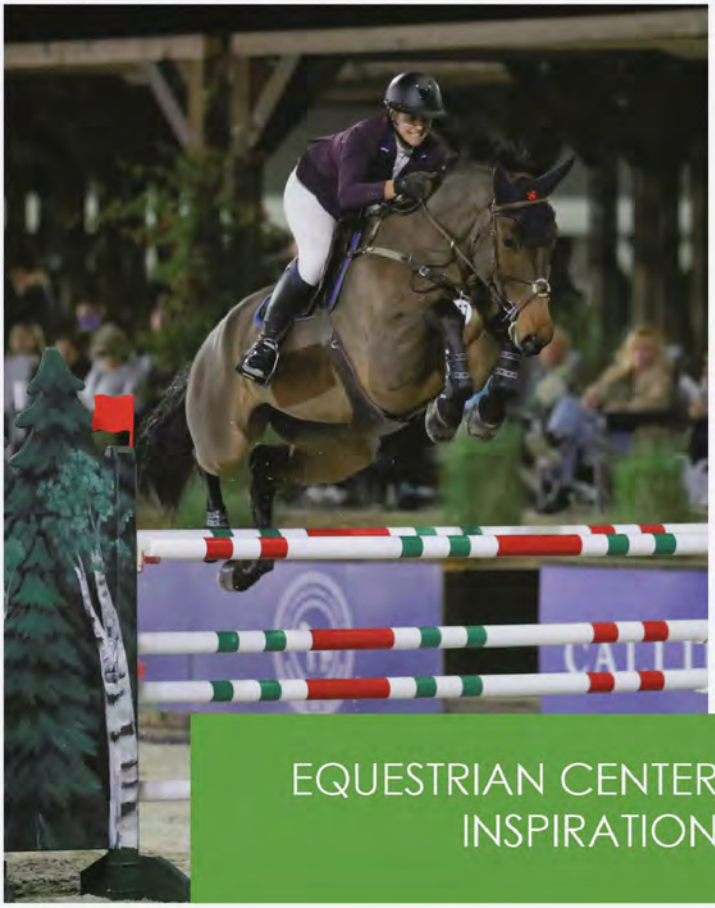
4.7 Landscaping



The following landscape design guidelines are intended to ensure a high level of creative landscape design within the Thermal Ranch Specific Plan. Because a wide range of uses are permitted within this Specific Plan, specific design guidelines are provided to account for a variety of development contexts. The guidelines established in this section will ensure that all landscape development within this Specific Plan is complementary within the project and with the surrounding community. All projects within this Specific Plan must be consistent with the design guidelines and features covered in this section.

The guidelines have an emphasis on non-invasive drought tolerant plant materials that are climate-appropriate, water efficient, and sustainable. The plant palette throughout the Specific Pan area shall utilize a low maintenance and low water palette. The landscaping and irrigation plans and system shall comply with all County ordinances relating to water efficiency and shall be an automatic system with an irrigation timer and two drip or bubbler heads per tree to produce deep root irrigation. The water use calculations for this system will be prepared and submitted per Coachella Valley Water District (CVWD) irrigation design requirements. *Figure 4.11 Plant Palette* provides a list of plant materials approved for use in the Thermal Ranch Specific Plan. Plant materials not listed in the plant palette may be used provided they are drought tolerant and compatible with the project and desert environment.





EQUESTRIAN CENTER INSPIRATION

Source: MSA Consulting, Inc.

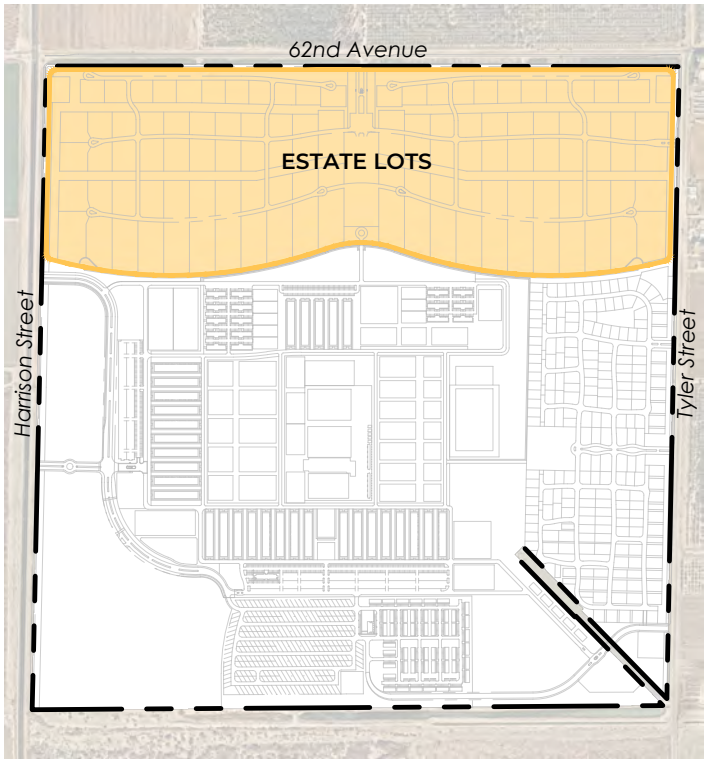
Exhibit Date: February 16, 2023

ARCHITECTURAL CHARACTER: EQUESTRIAN CENTER

Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

ARCHITECTURAL CHARACTER: EQUESTRIAN CENTER 2



CUSTOM HOMES & LUXURY AMENITIES

Source: MSA Consulting, Inc.

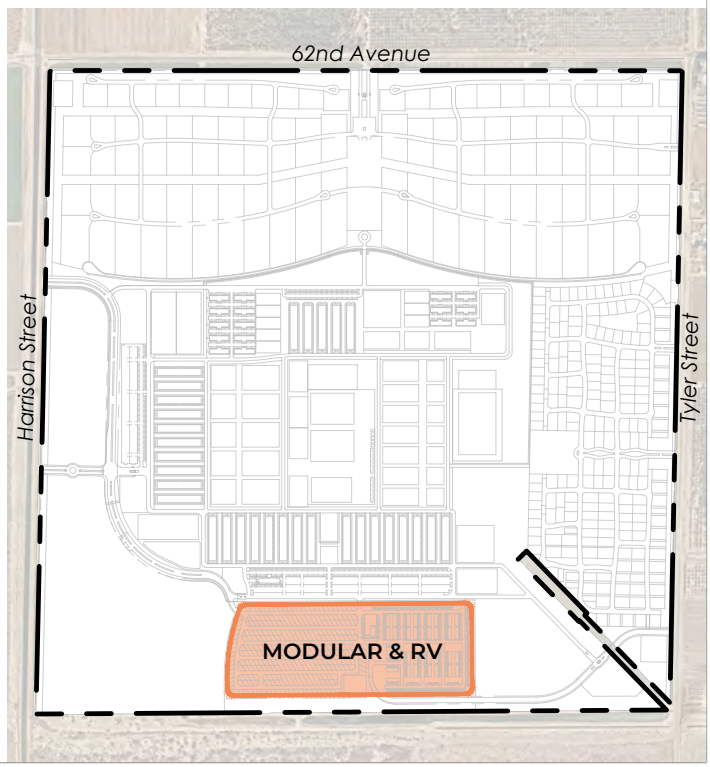
Exhibit Date: February 16, 2023

ARCHITECTURAL CHARACTER: ESTATE LOTS 1

Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

ARCHITECTURAL CHARACTER: ESTATE LOTS 2



MODULAR & RV HOMES

Source: MSA Consulting, Inc.

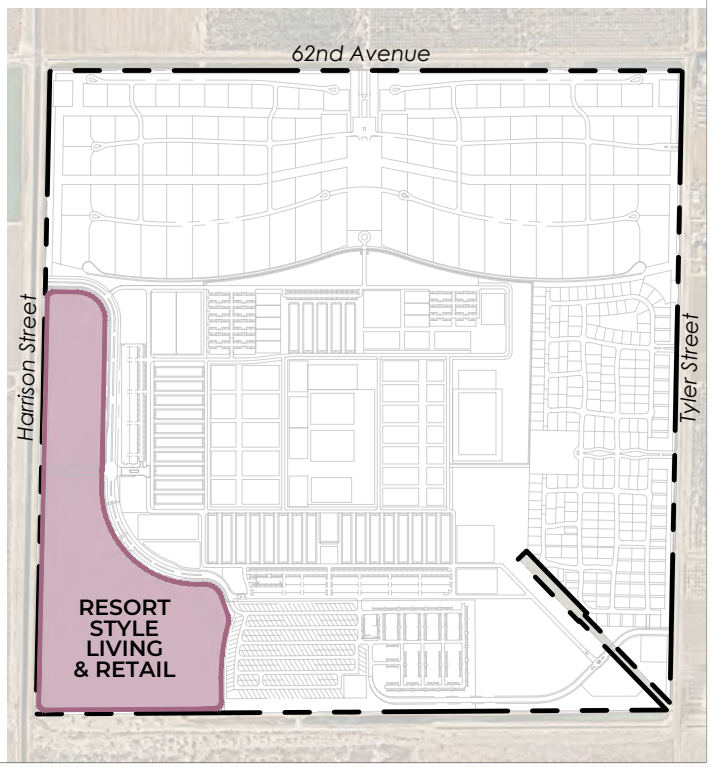
Exhibit Date: February 16, 2023

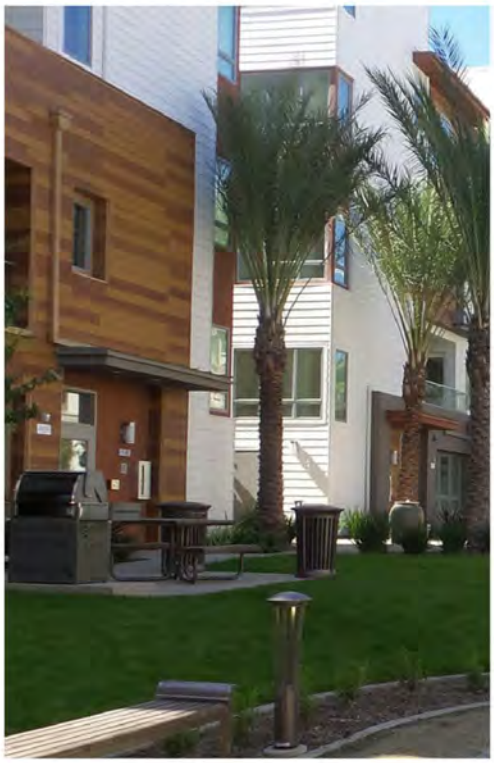
ARCHITECTURAL CHARACTER: MODULAR / RV HOMES 1

Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

ARCHITECTURAL CHARACTER: MODULAR / RV HOMES 2





RESORT LIVING & RETAIL

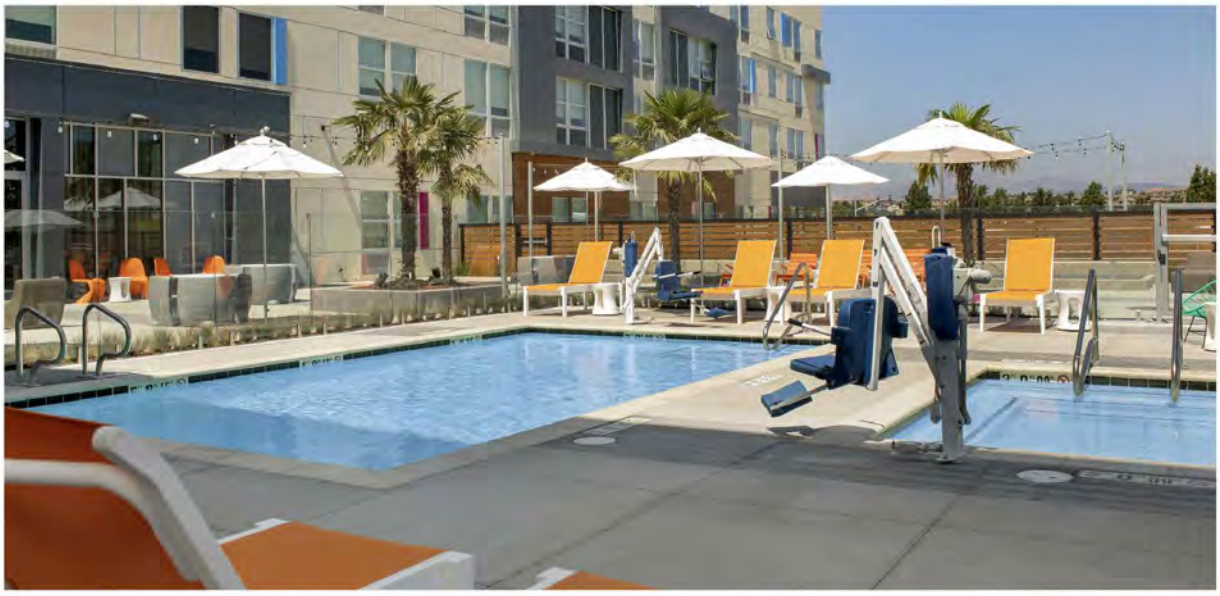
Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

ARCHITECTURAL CHARACTER: RESORT LIVING & RETAIL 1

MSA CONSULTING, INC.
>PLANNING >CIVIL ENGINEERING >LAND SURVEYING
MSACONSULTINGINC.COM

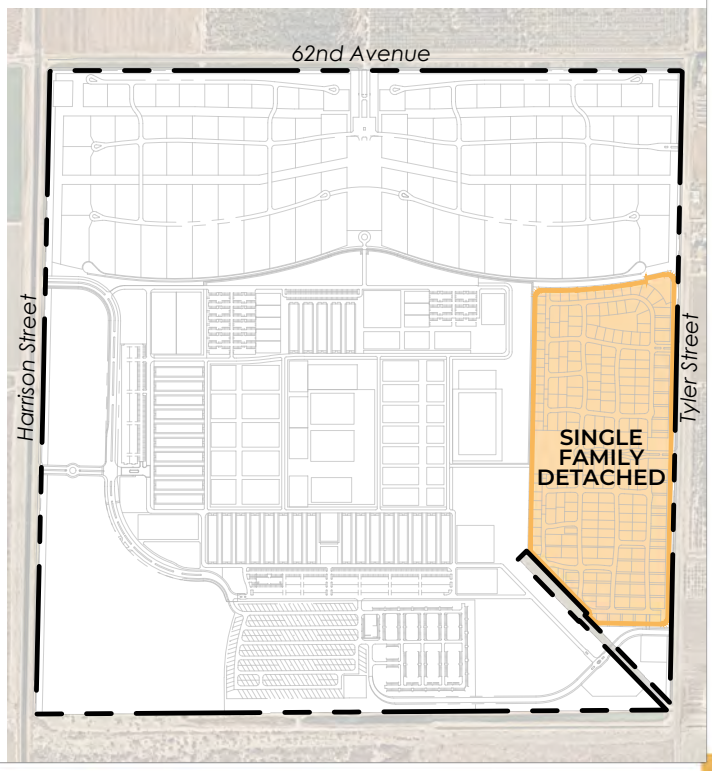
FIGURE 4.7



Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

ARCHITECTURAL CHARACTER: RESORT LIVING & RETAIL 2



SINGLE FAMILY HOMES & TOWNHOMES

Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

ARCHITECTURAL CHARACTER: SINGLE FAMILY DETACHED & TOWNHOMES 1

FIGURE 4.9

Source: MSA Consulting, Inc.

Exhibit Date: February 16, 2023

The community character is further enhanced through landscape elements. Selective plantings reinforce the scale of pedestrian walkways, streetscapes, equestrian areas, and gathering spaces. The landscape design should incorporate the following concepts:

- Landscape treatments should maximize the use of native desert and compatible drought- tolerant plant materials. Species must comply with the County and Coachella Valley Water District water conservation ordinance requirements.
- Encourage the use of plants as a major design element including using contrasting texture and mass planting of bold or fine plant material.
- Use of turf grass should be limited to equestrian uses, functional play, and active use areas.
- Incorporate trees to shade walkways, plazas, standing areas, and recreation spaces.

- Landscaping should be an integral component to the overall project design
- Landscaping should enhance the quality of developments by framing and softening the appearance of buildings, screening undesirable views, buffering incompatible uses and providing shade
- Street frontages along Harrison Street and Ave 64 should provide for a consistent and attractive landscape treatment while also allowing for visibility of retail buildings from public views.
- Primary entries to be enhanced with the use of iconic plantings and signage.
- Trash enclosures shall be screened from public view with walls and or plantings.
- Shading provided by tree groupings will be incorporated into the overall retail commercial area.
- Landscape lighting will be provided to enhance pedestrian areas and nodes along with certain planting groups.
- Retail Commercial Buildings should be designed to incorporate landscape planters into store frontage. This can be done by means of raised planters, sidewalk cutouts, or portable planters.

Sustainability and Water Efficiency

The plant palette throughout the Specific Pan area shall utilize a low maintenance and low water palette. Turf grasses will only be permitted in "use" areas that include open lawn for play/ recreation and for the infiltration portions of detention basins. Annual plant materials are allowed in accent landscaping areas but shall not be allowed in permanent planting areas of the Specific Plan.

The landscaping and irrigation plans and system shall comply with all City ordinances relating to water efficiency and shall be an automatic system with an irrigation timer and two drip or bubbler heads per tree to produce deep root irrigation. The water use calculations for this system will be prepared and submitted per Coachella Valley Water District's (CVWD) irrigation design requirements.

Landscape lighting will include tree and shrub up lights, path lights, and step lights. All lighting will be low voltage and have low maintenance LED fixtures. The selective use of up lights will be limited to high-profile specimen tree and shrubs and will be shielded to reduce glare and hot spots. There shall be zero lumen foot candle for all exterior lighting at any property line of abutting properties and/or public right-of-way. Lighting for landscaping, pathways and stairways, monuments and signs shall be installed as needed for security and safety purposes.

Detention Basis

Detention basins shall include desert riparian trees, desert cactus and succulents, and select groundcovers combined with rock outcroppings. Gathering areas with gabion structures are encouraged around the basins to activate these open spaces. Natural, undulating landforms are preferred over geometrically graded basins.

Any graded area left in an undeveloped condition shall be planted with drought tolerant landscaping and/or decomposed granite if they remain inactive for a period of 6 months following completion of grading. This shall include all pads or portion of the subject parcel and shall include fencing as appropriate. All landscaping and fencing shall remain in place and shall be regularly irrigated and maintained until the property has received authorization from the City to begin initial construction. The final landscape plan for each parcel or Planning Area shall contain detailed information for the planting, irrigation and maintenance of the vacant pad areas and/or undeveloped portions of the parcel.

Landscape Standards

Landscape standards (ex. minimum landscape requirements, parking lot requirements, lighting, minimum number of trees, etc.) within this Specific Plan will be consistent with those outlined in Ordinance 348.

LARGE AND MEDIUM TREES (15 GAL-36" BOX)
BAUHINIA PURPUREA / PURPLE ORCHID TREE
CHORISIA SPECIOSA / SILK FLOSS TREE
OLEA EUROPAEA 'SWANHILL FRUITLESS' / EUROPEAN OLIVE
PARKINSONIA SPECIES
PROSOPIS SPECIES
TIPUANA TIPU / TIPU TREE
SCHINUS MOLLE / CALIFORNIA PEPPER
UPRIGHT TREES (15 GAL-36" BOX)
ACACIA SALICINA / WILLOW ACACIA
ACACIA SALIGNA / ORANGE WATTLE
ACACIA STENOPHYLLA / SHOESTRING ACACIA
ACACIA WILLARDIANA / PALO BLANCO
CALLISTEMON SPECIES
EUCALYPTUS SPECIES
SMALL TREES (15 GAL-36" BOX)
ACACIA ANEURA / MULGA
ACACIA FARNESIANA / SWEET ACACIA
CAESALPINIA CACALACO "SMOOTHIE" / CASCALOTE
CITRUS SPECIES
SMALL TREES (20'-30' HT.)
PHOENIX DACTYLIFERA / DATE PALM
WASHINGTONIA ROBUSTA / MEXICAN FAN PALM
ACCENT PALMS (24"-36" BOX)
BISMARCKIA NOEBIUS / BISMARK PALM
BEAUCARNEA RECURVATA / PONY TAIL PALM
CHAMAEROPS HUMILIS / MEDITERRANEAN FAN PALM
LARGE ACCENTS (5-15 GAL)
GAVE ANGUSTIFOLIA / CENTURY PLANT
DASYLIRION WHEELERI / GREY DESERT SPOON
FEROCACTUS ACANTHODES / COMPASS BARREL
NOLINA NELSONII / BLUE MOLINA
OPUNTIA SANTA-RITA / SANTA RITA PRICKLY PEAR
YUCCA SPECIES
SMALL ACCENTS / CACTI (1 GAL)
ECHINOCACTUS GRUSONII / GOLDEN BARREL CACTUS
HESPERALOE SPECIES

LARGE GRASS (1-5 GAL)
SPOROBOLUS AIROIDES / ALKALI SACATON
SPOROBOLUS WRIGHT / BIG SACATON
MEDIAN/SMALL GRASS (1-5 GAL)
MUHLENBERGIA RIGENS / DEER GRASS
PENSTEMON SP. (RED) / MIXED PENSTEMON SPECIES
LARGE SHRUBS (5 GAL)
CAESALPINIA PULCHERRIMA / RED BIRD OF PARADISE
CASSIA SPECIES
LEUCOPHYLLUM SPECIES
NERIUM OLEANDER / OLEANDER
SIMMONDSIA CHINENSIS / JOJOBA
MEDIUM SHRUBS (5 GAL)
BOUGAINVILLEA SPECIES
CALLISTEMON VIMINALIS 'LITTLE JOHN' / DWARF WEEPING BOTTLE BRUSH
CARISSA MACROCARPA 'GREEN CARPET' / GREEN CARPET NATAL PLUM
DALEA SPECIES
EREMOPHILA SPECIES
JUNIPERUS C. 'BLUE PACIFIC' / BLUE PACIFIC JUNIPER
LANTANA SPECIES
OLEA EUROPAEA 'MONTEA' / LITTLE OLLIE DWARF OLIVE
GROUNDCOVERS (1-5 GAL)
ACACIA REDOLENS 'DESERT CARPET' TM /BANK CATCLAW
DALEA SPECIES
JUNIPERUS SPECIES
LANTANA SPECIES
PORTULACARIA AFRA / ELEPHANT BUSH
PYRACANTHA FORTUNEANA 'GRABERI' / GRABERI PYRACANTHA
VINE (1-5 GAL)
BOUGAINVILLEA X 'BARBARA KARST' / BARBARA KARST BOUGAINVILLEA
ROSA BANKSIAE 'ALBA PLENA' / WHITE LADY BANK'S ROSE
GROUND COVERS
PASTURE
DECOMPOSED GRANITE

Source: Unincorporated Area of Riverside County

Exhibit Date: February 16, 2023

PLANT PALETTE

FIGURE 4.11

CHAPTER 5: SPECIFIC PLAN ZONING

See Specific Plan Zoning Ordinance (Riverside County Ordinance No. 348.XXXX) attached to this Specific Plan.

CHAPTER 6: SPECIFIC PLAN ADMINISTRATION

6.1 Overview

This chapter describes the procedures for administration and implementation of the Thermal Ranch Specific Plan. The Riverside County Planning Department shall have the responsibility for plan administration and implementation as established in this chapter.

6.2 Implementation

Entitlement approvals and construction permits shall be reviewed by all applicable departments and agencies (Planning, Public Works, Building and Safety, Fire, etc.) where necessary to ensure consistency with the Specific Plan and applicable building codes. This Specific Plan establishes the general intent and comprehensive framework for the future development of the Thermal Ranch Project. However, prior to construction, various implementing approvals are required, as noted below:

Plot Plans (PP) – Future development projects within the Specific Plan area shall follow the Plot Plan Permit process as outlined in Ordinance 348. This is intended to ensure that project architecture, landscape, and site design have been reviewed by Planning Commission are found consistent with this Specific Plan. It is expected that multiple Plot Plans may be submitted in phases up to the total buildout allowed by the Specific Plan.

Tentative Parcel Map (TPM)/Tentative Tract Map (TTM) – TPM/TTMs are intended to implement the project and subdivide the property into smaller parcels/lots for development or sale, including the use of Schedule J Maps for financing purposes. TPM/TTMs may be filed with each phase of development as necessary in accordance with the Subdivision Map Act. Each TPM/TTM will require review by the Planning Commission.

6.3 Administration

Administrative Changes - Minor modifications that are consistent with the purpose and intent of the Thermal Ranch Specific Plan are allowed at the discretion of the County Planning Director or designee. Therefore, it is intended that this Specific Plan provide County Staff with the flexibility to interpret the details of project development as well as those items described in general terms in the Specific Plan without requiring a Specific Plan Amendment.

Requests for administrative changes shall be made in writing. If/when it is determined that changes or adjustments are necessary or appropriate, these shall be approved administratively by the County Planning Director or designee. After approval, any such administrative change shall be attached to the Specific Plan as an addendum and may be further changed and amended from time to time as necessary.

Representative examples of such changes may include, but are not limited to:

- The addition of new information to the Specific Plan maps or text that do not substantially change the effect of any regulation. The new information may include more detailed, site-specific information.

- Changes to infrastructure such as drainage systems, roads, water and sewer systems, etc.

- Deviations not exceeding 10% of the development regulations set forth in Chapter 3 of this Specific Plan will be considered on a case-by-case basis, subject to the discretion and approval of the Development Services Director.

Formal Amendments - If it has been determined that the proposed change is not in conformance with the intent of the current Specific Plan approval, the Specific Plan may be amended in accordance with the procedures set forth Article II of the Riverside County Zoning Ordinance (Ordinance 348).

6.4 Interpretation

Uses Not Listed - The County Planning Director or designee may determine that a use not listed is included within, similar to, or comparable to a listed use and, once so determined; it shall be treated in the same manner as a listed use.

Application of Standards - Where there is ambiguity between the Specific Plan and the Zoning Code, the County Planning Director or designee shall review pertinent information and make a determination as to which code or standard applies. All determinations shall be in writing and shall be attached to the Specific Plan as noted under *Administrative Changes*, earlier in this section.

6.5 Funding & Financing

The Thermal Ranch Specific Plan is intended to be developed primarily using private funds. Other forms of financing (CFD) may also be considered.

6.6 Maintenance

Development and infrastructure within the Specific Plan may be maintained through the establishment a homeowner's association ("HOA") through Covenants, Conditions, and Restrictions ("CC&Rs"), a Community Facilities District (CFD), a Lighting, Landscape and Maintenance District (LLMD), or any other mechanism (or combination of) as deemed appropriate by relevant County Staff.

6.7 Enforcement

The enforcement of the provisions of this Specific Plan shall be by the following:

- The County of Riverside Planning Department shall enforce the development standards and regulations set forth herein.

- Any administrative decision or interpretation of this Plan may be appealed to the Planning Commission in accordance with the provisions of Ordinance 348. Likewise, any decision by the Planning Commission may be appealed to the County Board of Supervisors.

- The County of Riverside Planning Department shall administer the provisions of this Specific Plan in accordance with the State of California Government Code, Subdivision Map Act, Ordinance 348, and the County of Riverside General Plan.

- The Specific Plan development procedures, regulations, standards, and specifications shall supersede the relevant provisions of Ordinance 348 as they currently exist or may be amended in the future.

- All regulations, conditions, and programs contained herein shall be deemed separate distinct and independent provisions of this Specific Plan. In the event that any such provision is held invalid or unconstitutional, the validity of all the remaining provisions of this Specific Plan shall not be affected.

Any development regulation and building requirement not addressed in this Specific Plan shall be subject to all relevant County of Riverside ordinances, codes, and regulations.

NOTICE OF PUBLIC HEARING

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

www.rcaluc.org

A PUBLIC HEARING has been scheduled before the Riverside County Airport Land Use Commission (ALUC) to consider the applications described below.

Any person may submit written comments to the ALUC before the hearing or may appear and be heard in support of or opposition to the project at the time of hearing. **Information on how to participate in the hearing will be available on the ALUC website at www.rcaluc.org.** The ALUC holds hearings for local discretionary permits within the Airport Influence Area, reviewing for aeronautical safety, noise and obstructions. ALUC reviews a proposed plan or project solely to determine whether it is consistent with the applicable Airport Land Use Compatibility Plan. For more information please contact **ALUC Planner Paul Rull at (951) 955-6893**.

The County of Riverside Planning Department should be contacted on non-ALUC issues. For more information, please contact County of Riverside Planner Russell Brady at (951) 955-3025.

The proposed project application may be viewed by a prescheduled appointment and on the ALUC website www.rcaluc.org. Written comments may be submitted at the Riverside County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, California 92501, Monday through Friday from 8:00 a.m. to 3:30 p.m., or by e-mail to prull@rivco.org. Individuals with disabilities requiring reasonable modifications or accommodations, please contact Barbara Santos at (951) 955-5132.

PLACE OF HEARING: **Riverside County Administration Center**
4080 Lemon Street, 1st Floor Board Chambers
Riverside California

DATE OF HEARING: **July 13, 2023**

TIME OF HEARING: **9:30 A.M.**

CASE DESCRIPTION:

ZAP1075TH23 – Thermal Ranch, LLC (Representative: Terra Nova Planning & Research) County of Riverside Case Nos. GPA230001 (General Plan Amendment), SP00401 (Specific Plan), CZ2300003 (Change of Zone), TTM38578 (Tentative Tract Map), TTM38531 (Tentative Tract Map), PPA230035 (Plot Plan), PPA230038 (Plot Plan), a proposal to establish the Thermal Ranch Specific Plan on 622.56 acres, which includes 223.1 acres of Equestrian Center, 194.3 acres of Estate Residential, 69.5 acres of Medium Density Residential, 41.1 acres of High Density Residential, 54.4 acres of Hotel/Resort, 21.4 acres of Commercial Retail, proposing overall a total maximum of 1,362 dwelling units, 320 RV spaces, and 285,000 square feet of commercial building area, located southerly of 62nd Avenue, westerly of Tyler Street, northerly of 64th Avenue, and easterly of Harrison Street. The applicant also proposes amending the site's General Plan land use designation from Agriculture to Specific Plan, and change the site's zoning from Heavy Agriculture, 10 acre minimum (A-2-10) and Controlled Development Areas (W-2) to Specific Plan, and to create the zoning ordinance of the Specific Plan. The applicant also proposes to divide the site into 10 parcels (TTM38531), as well as divide the site into 542 lots, including 1 lot for the Equestrian Center, 2 lots for Horse Park Workforce Housing, 2 lots for commercial purposes, 271 lots for single-family detached, and 191 lots for single-family attached, and 75 private open space lots (TTM38578). The applicant also proposes to establish a Horse Park Workforce housing on 41.3 acres which includes 500 units and 301 RV parking stalls (PP230005), as well as establish an Equestrian Center on 223.2 acres which includes 615,689 square feet of building area which includes a Grand VIP Barn, 8 Private Barn buildings, 21 Large Barn buildings, 2 Retail buildings, 5 Retail Barn buildings, and 1 Office building, and non-building areas include grass field, riding, and holding areas. (Airport Compatibility Zones D and E of the Jacqueline Cochran Regional Airport Influence Area).

RIVERSIDE COUNTY
AIRPORT LAND USE COMMISSION

APPLICATION FOR MAJOR LAND USE ACTION REVIEW

ALUC STAFF ONLY

ALUC Case Number: ZAP1091BD23 Date Submitted: 4/18/23

AIA: Bermuda Dunes Zone: E Public Hearing ☐ Staff Review ☑

Applicant

Applicant Full Name: Omar Hussein

Applicant Address: 69-930 Hwy 111, Ste 203 Rancho Mirage, CA 92270

Phone: (214) 923-3246 **Email:** omar@beaconrealtyadvisors.com

Representative/ Property Owner Contact Information

Representative: Luis Gomez (goUrban Development) **Email:** lagomez@gourbandev.com

Phone: (562) 895-3392

Address: 1 World Trade Center, 8th Floor, Long Beach CA 90831

Property Owner: AABC Beacon Jefferson Square, LLC, a North Carolina limited liability company **Email:** omar@beaconrealtyadvisors.com

Phone: (214) 923-3246

Address: 69-930 Hwy 111, Ste 203 Rancho Mirage, CA 92270

Local Jurisdiction Agency

Agency Name: City of La Quinta Phone: (760) 341-4800

Staff Contact: Nicole Criste **Email:** consultingplanner@laquintaca.gov

Address: 78495 Calle Tampico, La Quinta, CA 92253

Local Agency Case No.: Master Project # 2023-0001, SP2022-0004,TTM2022-0003,SDP22022-0015

Project Location

Street Address: N/A Gross Parcel Size.: 5.1 Acres

Assessor's Parcel No.: 604-521-013, 604-521-014

Solar

Is the project proposing solar Panels? Yes ☑ No ☐ If yes, please provide solar glare study. (only if in Zone C or higher)

Data

Site Elevation:(above mean sea level) 59 ft

Height of Building or structures: 45' 4"

What type of drainage basins are being proposed and the square footage: 2 above-ground retention basins (8,100 SF + 14,400 SF) and 1 underground retention basin (4,800 SF)

Notice

A. NOTICE: Failure of an applicant to submit complete or adequate information pursuant to Sections 65940 to 65948 inclusive of the California Government Code, MAY constitute grounds for disapproval of actions, regulations, or permits.

B. REVIEW TIME: Estimated time for "staff level review" is approximately 30 days from date of submittal. Estimated time for "commission level review" is approximately 45 days from date of a complete application submittal to the next available commission hearing meeting.

C. SUBMISSION PACKAGE:

Please submit all application items DIGITALLY via USB or CD:

- Completed ALUC Application Form
- Plans Package: site plans, floor plans, building elevations, grading plans, subdivision maps
- Exhibits of change of zone, general plan amendment, specific plan amendment
- Project description of existing and proposed use

Additionally, please provide:

- ALUC fee payment (Checks made out to Riverside County ALUC)
- Gummed address labels of all surrounding property owners within a 300-foot radius of project site. (Only required if the project is scheduled for a public hearing).

Riverside County Airport Land Use Commission, County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, CA 92501, Phone: 951-955-5132 Fax: 951-955-5177 Website: www.rcaluc.org

RIVERSIDE COUNTY
AIRPORT LAND USE COMMISSION

STAFF REPORT

AGENDA ITEM:	3.5
HEARING DATE:	July13, 2023
CASE NUMBER:	ZAP1574MA23 – Majestic Freeway Business Center, LLC (Representative: T&B Planning)
APPROVING JURISDICTION:	County of Riverside
JURISDICTION CASE NO:	BEL23-02256 (Building Permit)
LAND USE PLAN:	2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan
Airport Influence Area:	March Air Reserve Base
Land Use Policy:	Zone C2
Noise Levels:	Below 60 CNEL contour

RECOMMENDATION: Staff recommends that the Commission find the proposed Building Permit CONSISTENT with the 2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, subject to the conditions included herein.

PROJECT DESCRIPTION: A proposal to construct an 12,000 square foot rooftop solar panel system on a previously approved industrial building on 21.26 acres.

On March 21, 2019, the Commission found consistent ALUC Case ZAP1345MA18, a proposal to construct a 373,368 square foot industrial manufacturing building on 21.26 acres.

PROJECT LOCATION: The site is located southerly of Commerce Center Drive, easterly of Harvill Avenue, westerly of Messenia Lane, and northerly of Perry Street, approximately 4,640 feet southwesterly of the southerly end of Runway 14-32 at March Air Reserve Base.

BACKGROUND:

Non-Residential Land Use Intensity: Pursuant to the Airport Land Use Compatibility Plan for the March Air Reserve Base/Inland Port Airport, the site is located within Compatibility Zone C2, which limits average intensity to 200 people per acre and 500 people per single acre. The proposed rooftop solar panels will not generate any occupancy.

March Air Reserve Base/United States Air Force Input: Given that the project site is located in Zone C2 southwesterly of the southerly runway at March Air Reserve Base, the March Air Reserve Base staff was notified of the proposal to add rooftop solar panels and sent a solar glare hazard

analysis study for their review. On May 23, 2023, the Air Force provided comments concurring with the analysis and conclusions of the glare study.

Prohibited and Discouraged Uses: The applicant does not propose any uses prohibited or discouraged in Compatibility Zone C2.

Flight Hazard Issues: Structure height, electrical interference, and reflectivity/glare are among the issues that solar panels in the airport influence area must address. The project's 12,000 square foot photovoltaic (PV) panel structures would be located on the rooftop of the existing industrial building within Compatibility Zone C2.

Glint and Glare/Reflectivity

Based on the Federal Aviation Administration's Interim Policy for Review of Solar Energy System Projects on Federally Obligated Airports, no glare potential or low potential for temporary after-image ("green" level) are acceptable levels of glare on final approach (within 2 miles from end of runway) for solar facilities located on airport property. However, potential for temporary after-image" ("yellow" level) and potential for permanent eye damage ("red" level) are not acceptable levels of glare on final approach. No glare is permitted at air traffic control towers.

The project proposes 12,000 square feet of solar panels on the existing building rooftop with a fixed tilt of 8.98 degrees with no rotation, and an orientation of 180 degrees. The applicant has submitted a glare analysis utilizing the web-based Forge Solar, a copy of which is attached hereto. The analysis was based on a 2 mile straight in approach (as per FAA Interim Policy standards) to runways 14 and 32, and also based on the traffic patterns as identified by March Air Reserve Base staff (Runway 12/30 General Aviation, Runway 14/32 General Aviation, Runway 14/32 C-17/KC-135, Runway 14/32 Overhead). The analysis utilized a glide slope approach of 3.0 degrees. No glare would affect the Air Traffic Control Tower.

The analysis concluded that some glare would occur on the 2 mile approach to the runways, and some potential for glare was identified within the Air Force traffic pattern. Evaluation of the Air Force traffic patterns indicates that the panels would result in a low potential for temporary after-image ("green" level glare) or no glare. All times are in standard time.

Runway 14/32 General Aviation traffic pattern (total 12,858 minutes of 'green' level glare):

- Runway 14 General, totaling 3,971 minutes of "green" level glare, lasting up to 30 minutes a day, from January to February, April to September, and November to December from 4:00 p.m. to 5:00 p.m.
- Runway 32 General, totaling 8,887 minutes of "green" level glare, lasting up to 45 minutes a day, from September to April from 8:00 a.m. to 9:00 a.m.

Runway 14/32 C-17/KC-135 traffic pattern (totaling 5,246 minutes of 'green' level glare):

- Runway 32 C-17-KC-135, totaling 5,246 minutes of "green" level glare, lasting up to 25 minutes a day, throughout the year from 7:00 a.m. to 8:00 a.m. and 5:00 p.m. to 6:00 p.m.

Runway 14/32 Overhead Aviation traffic pattern (totaling 8,270 minutes of 'green' level glare):

- Runway 32 Overhead, totaling 8,270 minutes of "green" level glare, lasting up to 50 minutes a day, from throughout the year from 7:00 a.m. to 8:00 a.m. and 4:00 p.m. to 5:00 p.m.

The total of 26,374 minutes of "green" level glare represents less than 10 percent of total day light time.

Electrical and Communication Interference

The applicant has indicated that they do not plan to utilize equipment that would interfere with aircraft communications. The PV panels themselves present little risk of interfering with radar transmission due to their low profiles. In addition, solar panels do not emit electromagnetic waves over distances that could interfere with radar signal transmissions, and any electrical facilities that do carry concentrated current will be buried beneath the ground and away from any signal transmission. There are no radar transmission or receiving facilities within the site.

Noise: The March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan depicts the site below 60 CNEL range from aircraft noise. The proposed solar panels are a non-noise sensitive use; therefore, no mitigation measures are necessary.

Part 77: The elevation of Runway 14-32 at its southerly terminus is 1,488 feet above mean sea level (AMSL). At a distance of approximately 4,640 feet from the project to the nearest point on the runway, Federal Aviation Administration (FAA) review would be required for any structures with top of roof exceeding 1,535 feet AMSL. The site's finished floor elevation is 1,522 feet AMSL and existing building height is 50 feet, resulting in a top point elevation of 1,572 feet AMSL. Therefore, review by the FAA Obstruction Evaluation Service was required. However, the height of the solar panels will not significantly increase the overall height of the building.

The applicant previously submitted to FAA OES and a No Hazard to Air Navigation determination was issued on March 14, 2019.

Open Area: None of the Compatibility Zones for the March Air Reserve Base/Inland Port ALUCP require open area specifically.

CONDITIONS:

1. Any outdoor lighting installed shall be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.

2. The following uses/activities are not included in the proposed project and shall be prohibited at this site.

    (a) Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight or circling climb following takeoff or toward an aircraft engaged in a straight or circling final approach toward a landing at an airport, other than a DoD or FAA-approved navigational signal light or visual approach slope indicator.

    (b) Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight

final approach towards a landing at an airport to the extent as to result in a potential for temporary after-image greater than the low ("green") level.

(c) Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses include landscaping utilizing water features, aquaculture, production of cereal grains, sunflower, and row crops, composting operations, wastewater management facilities, artificial marshes, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, and incinerators.)

(d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.

(e) Highly noise-sensitive outdoor nonresidential uses. Examples of noise-sensitive outdoor nonresidential uses that are prohibited include, but are not limited to, major spectator-oriented sports stadiums, amphitheaters, concert halls and drive-in theaters.

(f) Hazards to Flight.

3. The attached "Notice of Airport in Vicinity" shall be provided to all prospective purchasers and occupants of the property, and be recorded as a deed notice.

4. March Air Reserve Base must be notified of any land use having an electromagnetic radiation component to assess whether a potential conflict with Air Base radio communications could result. Sources of electromagnetic radiation include radio wave transmission in conjunction with remote equipment inclusive of irrigation controllers, access gates, etc.

5. All solar arrays installed on the project site shall consist of smooth glass photovoltaic solar panels without anti-reflective coating, a fixed tilt of 8.89 degrees and orientation of 180 degrees. Solar panels shall be limited to a total of 12,000 square feet, and the locations and coordinates shall be as specified in the glare study. Any deviation from these specifications (other than reduction in square footage of panels), including change in orientation, shall require a new solar glare analysis to ensure that the amended project does not result in any glare impacting the air traffic control tower or creation of any "yellow" or "red" level glare in the flight paths, and shall require a new hearing by the Airport Land Use Commission.

6. In the event that any glint, glare, or flash affecting the safety of air navigation occurs as a result of project operation, upon notification to the airport operator of an event, the airport operator shall notify the project operator in writing. Within 30 days of written notice, the project operator shall be required to promptly take all measures necessary to eliminate such glint, glare, or flash. An "event" includes any situation that results in an accident, incident, "near-miss," or specific safety complaint regarding an in-flight experience to the airport operator or to federal, state, or county authorities responsible for the safety of air navigation. The project operator shall work with the airport operator to prevent recurrence of the incidence. Suggested measures may include, but are not limited to, changing the orientation and/or tilt of the source, covering the source at the time of day when events of

glare occur, or wholly removing the source to diminish or eliminate the source of the glint, glare, or flash. For each such event made known to the project operator, the necessary remediation shall only be considered to have been fulfilled when the airport operator states in writing that the situation has been remediated to the airport operator's satisfaction.

7. In the event that any electrical interference affecting the safety of air navigation occurs as a result of project operation, upon notification to the airport operator of an event, the airport operator shall notify the project operator in writing. Within 30 days of written notice, the project operator shall be required to promptly take all measures necessary to eliminate such interference. An "event" includes any situation that results in an accident, incident, "near-miss," report by airport personnel, or specific safety complaint to the airport operator or to federal, state, or county authorities responsible for the safety of air navigation. The project operator shall work with the airport operator to prevent recurrence of the event. For each such event made known to the project operator, the necessary remediation shall only be considered to have been fulfilled when the airport operator states in writing that the situation has been remediated to the airport operator's satisfaction.

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NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances [can vary from person to person. You may wish to consider what airport annoyances], if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. Business & Professions Code Section 11010 (b)(13)(A)

NOTICE

THERE IS AN AIRPORT NEARBY.

THIS STORM WATER BASIN IS DESIGNED TO HOLD STORM WATER FOR ONLY 48 HOURS AND NOT TO ATTRACT BIRDS

PROPER MAINTENANCE IS NECESSARY TO AVOID BIRD STRIKES

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION ALUC

IF THIS BASIN IS OVERGROWN, PLEASE CONTACT:

Name: _____ Phone: _____

LEGEND

Compatibility Zones

- Airport Influence Area Boundary
- Zone A
- Zone B1
- Zone B2
- Zone C1
- Zone C2
- Zone D
- Zone E
- Zone M
- High Terrain Zone
- FAR Part 77 Military Outer Horizontal Surface Limits
- FAR Part 77 Notification Area

Boundary Lines

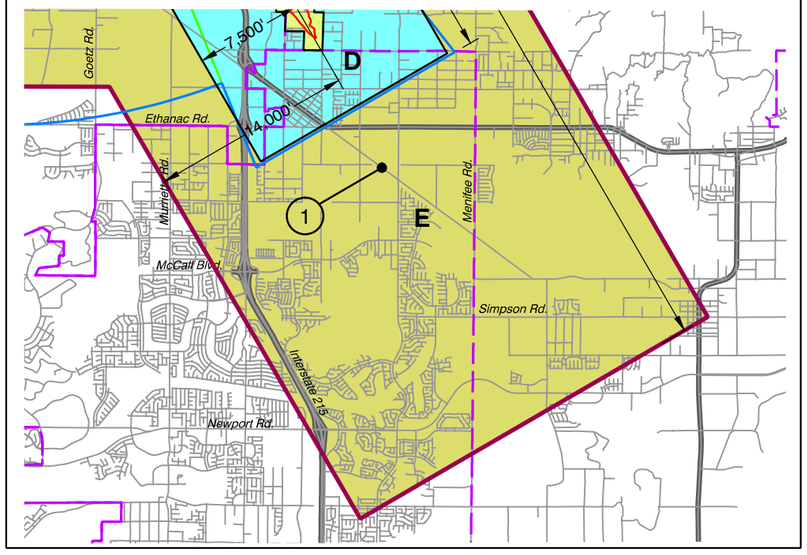
- March Air Reserve Base / Air Force Property
- March Joint Powers Authority Property Line
- County Boundary
- City Limits
- Site-Specific Exceptions (existing local agency commitments to development projects)

1. March JPA: March Business Center/Meridian
2. Perris: Harvest Landing
3. Perris: Park West
4. Moreno Valley: Affordable Housing
5. March JPA: Ben Clark Training Center
6. Riverside: Ridge Crest Subdivision

(1) Point at which aircraft on Runway 32 ILS approach descend below 3,000 feet above runway end. Airport Elevation is 1,535 feet MSL.

(2) Point at which departing aircraft typically reach 3,000 feet above runway end.

INSET



Note:
All dimensions are measured from runway ends and centerlines.

N
0 2 4 MILES

Base map source: County of Riverside 2013

SEE INSET AT RIGHT

Prepared by Mead & Hunt, Inc. (June 2013)

X:\18190-10\114627.01\TECH\CAD\MAR-compatibility2013.dwg Dec 10, 2014 - 1:38pm

Riverside County
Airport Land Use Commission

March Air Reserve Base / Inland Port Airport
Land Use Compatibility Plan

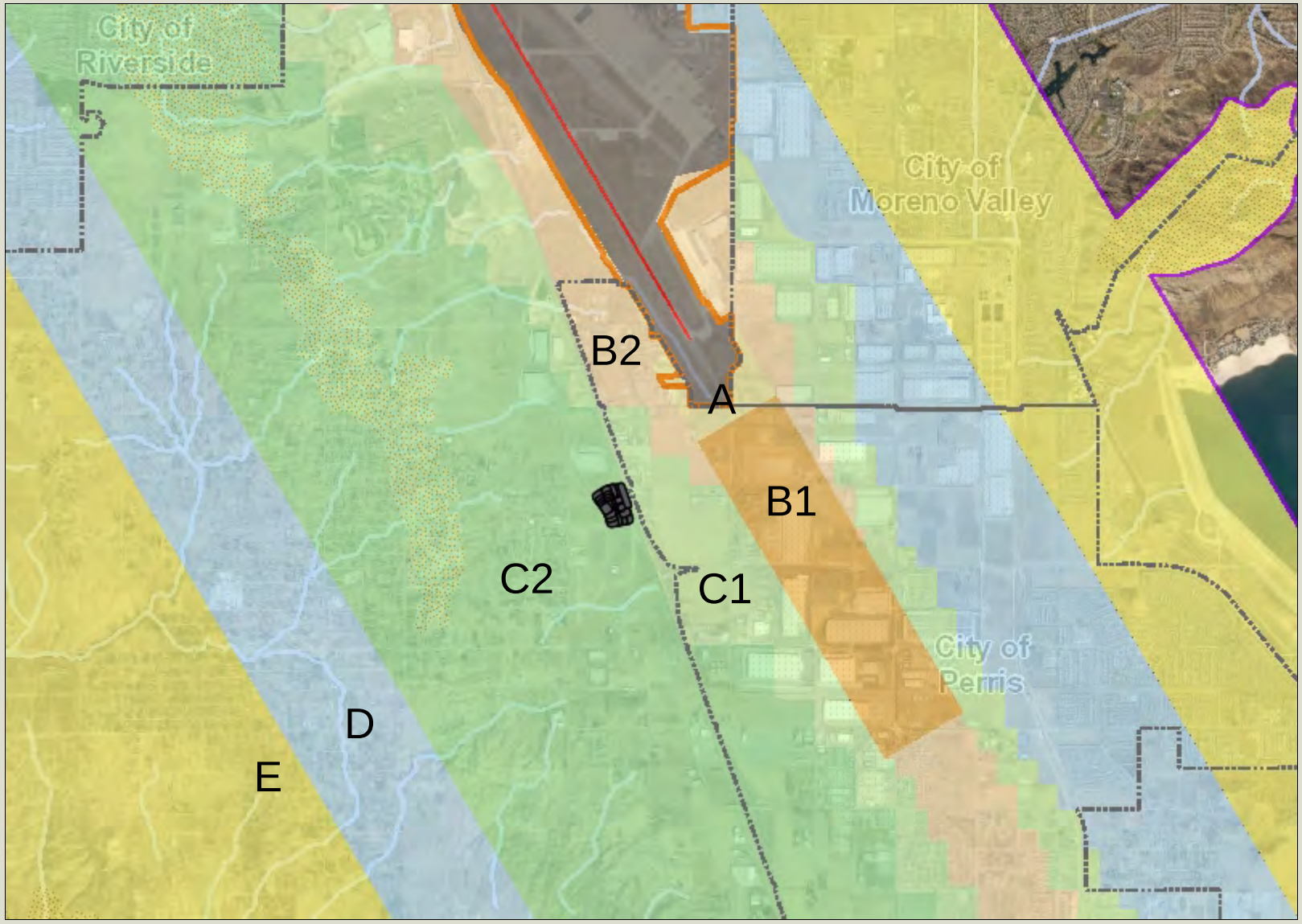
(Adopted November 13, 2014)

Map MA-1

Compatibility Map

March Air Reserve Base / Inland Port Airport

Map My County Map



Legend

- Runways
- Airports
- Airport Influence Areas
- Airport Compatibility Zones
  - OTHER COMPATIBILITY ZONE
  - A
  - A-EXC1
  - B1
  - B1-APZ I
  - B1-APZ I-EXC1
  - B1-APZ II
  - B1-APZ II-EXC1
  - B1-EXC1
  - B2
  - B2-EXC1
  - C
  - C1
  - C1-EXC1
  - C1-EXC3
  - C1-EXC4
  - C1-HIGHT
  - C2
  - C2-EXC1
  - C2-EXC2
  - C2-EXC3
  - C2-EXC5
  - C2-EXC6

RCIT

0 6,064 12,127 Feet

IMPORTANT Maps and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of Riverside makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.

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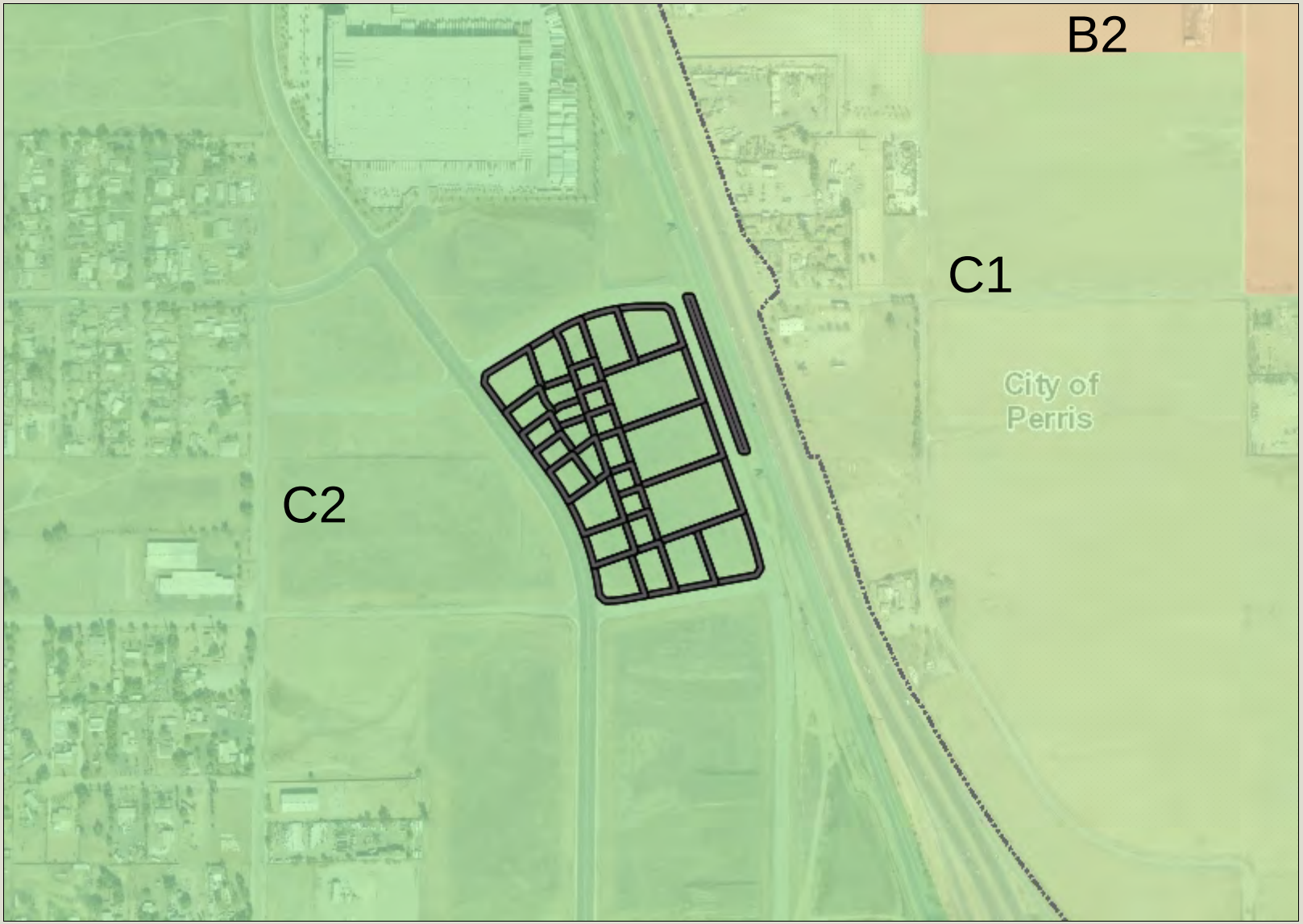
Notes

Map My County Map



Legend

- Runways
- Airports
- Airport Influence Areas
- Airport Compatibility Zones
  - OTHER COMPATIBILITY ZONE
  - A
  - A-EXC1
  - B1
  - B1-APZ I
  - B1-APZ I-EXC1
  - B1-APZ II
  - B1-APZ II-EXC1
  - B1-EXC1
  - B2
  - B2-EXC1
  - C
  - C1
  - C1-EXC1
  - C1-EXC3
  - C1-EXC4
  - C1-HIGHT
  - C2
  - C2-EXC1
  - C2-EXC2
  - C2-EXC3
  - C2-EXC5
  - C2-EXC6

RCIT

0 758 1,516 Feet

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Map My County Map

Legend

- Blueline Streams
- City Areas
- World Street Map

0 758 1,516 Feet

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City Areas

World Street Map

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0 12,127 24,254 Feet

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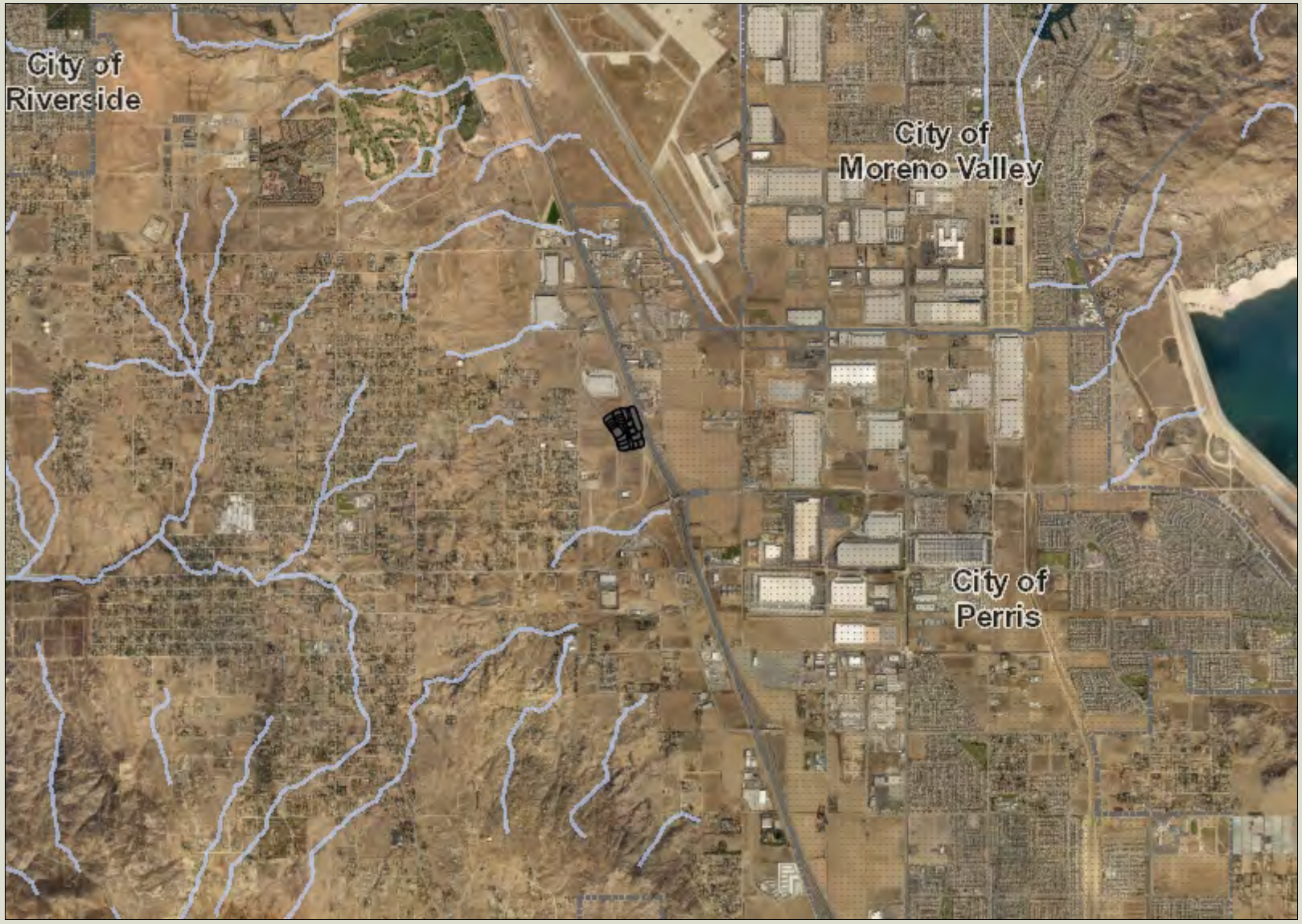
Map My County Map



Legend

- Blueline Streams
- City Areas
- World Street Map

0 6,064 12,127 Feet

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Notes

Map My County Map

Legend

- Blueline Streams
- City Areas
- World Street Map

0 1,516 3,032 Feet

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Notes

Technical Memorandum

To: Brett Anderson, Commerce Construction Co., L.P.
From: Nick Johnson, Johnson Aviation, Inc.
Date: May 12, 2023

Subject: Solar Glare Analysis – Solar Photovoltaic (PV) Installation, Majestic Freeway Business Center – Building 11

A. Findings

The findings of this Solar Glare Analysis are that the Proposed Project **PASSES** the FAA's recommended solar glare tests and **PASSES** these same tests for four critical flight paths required by the March Air Reserve Base. This Technical Memorandum outlines the study of the potential solar PV Project and substantiates these findings.

B. Introduction

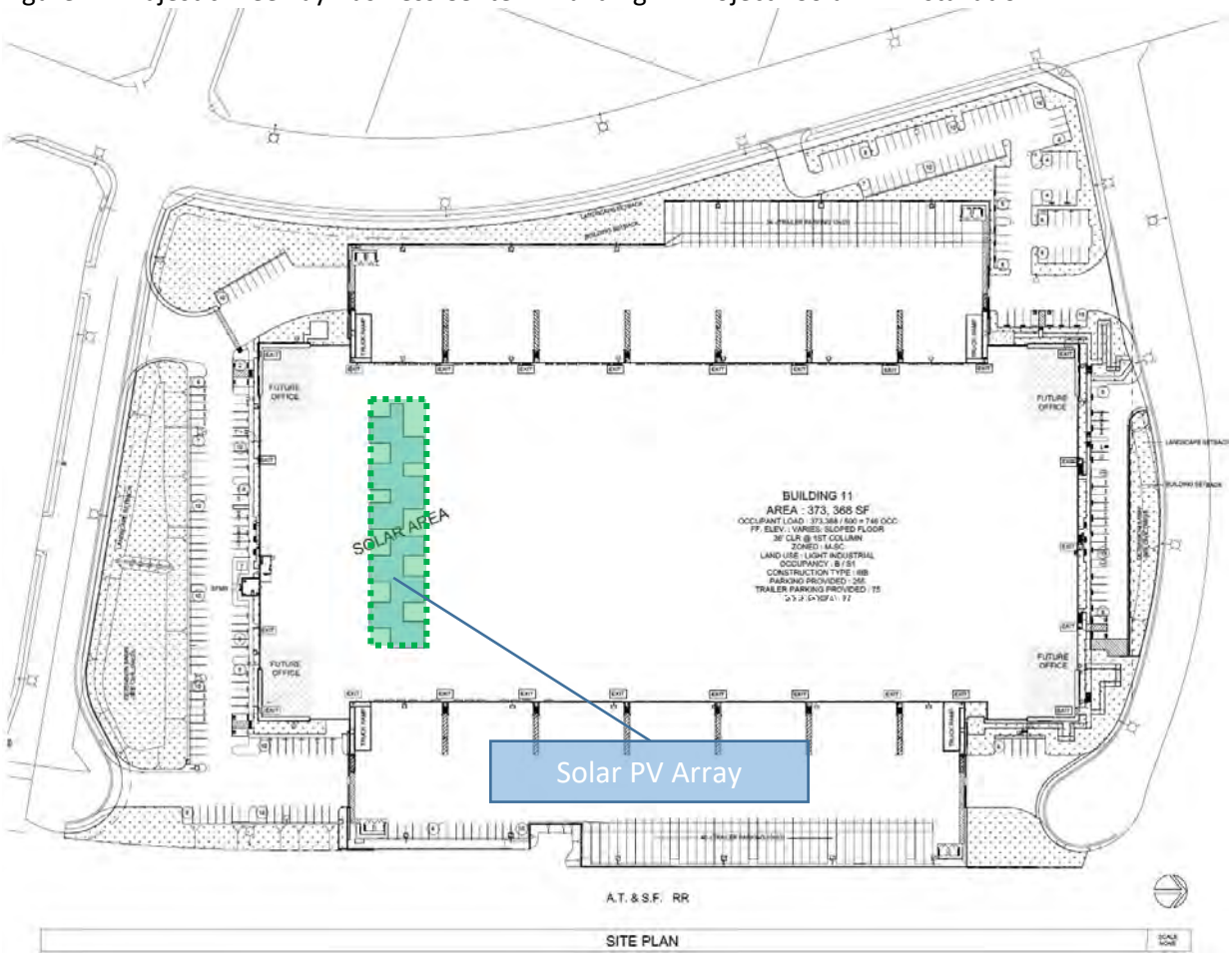
The purpose of this technical memorandum is to assess the airport compatibility of a potential solar PV installation on the roof of the Majestic Freeway Business Center – Building 11 Project (Project). The Project site is located west of Messenia Lane, east of Harvill Avenue, south of Commerce Center Drive, and north of Perry Street in the City of Perris (City) and within the March Air Reserve Base (March ARB) airport influence area (AIA) (See Figure 1). The analysis and findings of this memo are intended for review and acceptance by the City, Riverside County Airport Land Use Commission (ALUC) and the March ARB staff.

Figure 1: Project Location

C. Project Description

Majestic Freeway Business Center – Building 11, the Project Owner, is planning to develop a roof-top solar PV installation on the Project site. The building is planned for a total of 373,368 square feet. The potential solar PV installation is studied to cover approximately 12,000 square feet of the warehouse portion of the roof area (See Figure 2).

Figure 2: Majestic Freeway Business Center – Building 11 Project –Solar PV Installation



D. Standard of Review

This study and its findings have been prepared consistent with the Federal Aviation Administration's (FAA) policy to eliminate hazards to air navigation that may arise as the result of implementing solar energy facilities on and near airports. The FAA adopted an Interim Policy[1] for Solar PV project review in 2013 and completed a final solar glare policy in 2021[2]. In both the 2013 Interim Policy and the 2021 Final Policy, off-airport solar arrays are not required to meet the FAA's policies, but they are strongly encouraged to consider the requirements of this policy guidance when siting systems. Neither the FAA nor the US Department of Defense (DOD) control land use off airport or base property. Both entities encourage collaboration with local land use jurisdictions like the ALUC and the City.

[1] Background on the Interim Policy, FAA Review of Solar Energy System Projects on Federally Obligated Airports, Federal Register, October 23, 2013.

[2] Federal Aviation Administration Policy: Review of Solar Energy System Projects on Federally-Obligated Airports, 86 Fed. Reg. 25801 (May 11, 2021), https://www.federalregister.gov/documents/2021/05/11/2021-09862/federal-aviation-administration-policy-review-of-solar-energy-system-projects-on-federally-obligated

As solar PV was being implemented on and near airports in recent years, the FAA was finding that solar PV reflections of sunlight glint and glare were affecting pilots' vision, particularly on final approach to runways, and was also impacting some air traffic controllers' vision when controlling aircraft near airports. In conjunction with Sandia National Laboratories, the FAA developed a computer analysis tool to measure the potential impact of reflected glint and glare from Solar PV installations. The analysis of this impact is achieved through use of the Solar Glare Hazard Assessment Tool (SGHAT). At the time of the Interim Policy, Sandia Labs produced the tool to meet the analysis requirement. Since then, Sandia Labs has licensed the tool to other providers to sell commercially for solar glare analysis. ForgeSolar licensed the SGHAT tool and incorporated its software into their Glare Analysis tool. Johnson Aviation, Inc. uses the ForgeSolar Glare Analysis tool under subscription license from Sims Industries d/b/a ForgeSolar.

The following is the Standard for Measuring Ocular Impact from the FAA's 2013 Interim Policy:

> Standard for Measuring Ocular Impact
> FAA adopts the Solar Glare Hazard Analysis Plot as the standard for measuring the ocular impact of any proposed solar energy system on a federally obligated airport. To obtain FAA approval to revise an airport layout plan to depict a solar installation and/or a "no objection" to a Notice of Proposed Construction Form 7460-1, the airport sponsor will be required to demonstrate that the proposed solar energy system meets the following standards:
>
> 1. No potential for glint or glare in the existing or planned Airport Traffic Control Tower (ATCT) cab; and
> 2. No potential for glare or "low potential for after-image" along the final approach path for any existing landing threshold or future landing thresholds (including any planned interim phases of the landing thresholds) as shown on the current FAA-approved Airport Layout Plan (ALP). The final approach path is defined as two (2) miles from fifty (50) feet above the landing threshold using a standard three (3) degree glidepath.
> 3. Ocular impact must be analyzed over the entire calendar year in one (1) minute intervals from when the sun rises above the horizon until the sun sets below the horizon.

After significant additional study of the issue, the FAA concluded in its final 2021 Policy that less restrictive analysis can achieve the same goals for limiting solar PV glare. The following are the revised FAA 2021 Policy limitations:

> This policy does not apply to:
>
> 1. Solar energy systems on airports that do not have an ATCT,
>
> 2. Airports that are not federally-obligated, or
>
> 3. Solar energy systems not located on airport property.
>
> Though this policy does not apply to proponents of solar energy systems located off airport property, they are encouraged to consider ocular impact for proposed systems in proximity to airports with ATCTs. In these cases, solar energy system proponents should coordinate with the local airport sponsor.

In addition to the FAA's standards for runway final approach paths and air traffic control tower visibility, the March ARB staff in conjunction with the Riverside County ALUC staff have established a series of air traffic patterns for the two runways located at the Base. Their concern is to ensure that land uses around the base are compatible with its air operations and that solar PV installations will not create a hazard to air navigation as a result of reflected sunlight and the associated potential glare. March ARB staff have provided four sets of geographic coordinates to define the standard traffic patterns listed below:

- FAA 2013 Policy Review (See Attachment A-1)
- FAA 2021 Policy Review (See Attachment A-2)
- Runway 12/30 General Aviation Traffic Pattern (See Attachment B)
- Runway 14/32 General Aviation Traffic Pattern (See Attachment C)
- Runway 14/32 C-17/KC-135 Traffic Pattern (See Attachment D)
- Runway 14/32 Overhead Traffic Pattern (See Attachment E)

E. Solar Glare Analysis Reports

The following pages of this Technical Memorandum provide the solar glare analysis reports for each of the suggested and required studies. The FAA standard study of the final approach paths to the runway ends and the Air Traffic Control Tower analysis is included in each individual report. The six reports are grouped by the flight path studies required by the March ARB and ALUC staff using the SGHAT program.

Attachment A-1
2013 FAA Policy Review

FORGESOLAR GLARE ANALYSIS

Project: **Majestic Freeway Business Center - Building 11**
18740 Harvill Ave, Perris, CA

Site configuration: **18740 Harvill-All Final Approaches**
Analysis conducted by Nick Johnson (nick.johnson@johnson-aviation.com) at 16:49 on 14 May, 2023.

U.S. FAA 2013 Policy Adherence

The following table summarizes the policy adherence of the glare analysis based on the 2013 U.S. Federal Aviation Administration Interim Policy 78 FR 63276. This policy requires the following criteria be met for solar energy systems on airport property:

- No "yellow" glare (potential for after-image) for any flight path from threshold to 2 miles
- No glare of any kind for Air Traffic Control Tower(s) ("ATCT") at cab height.
- Default analysis and observer characteristics (see list below)

ForgeSolar does not represent or speak officially for the FAA and cannot approve or deny projects. Results are informational only.

COMPONENT	STATUS	DESCRIPTION
Analysis parameters	PASS	Analysis time interval and eye characteristics used are acceptable
2-mile flight path(s)	PASS	Flight path receptor(s) do not receive yellow glare
ATCT(s)	PASS	Receptor(s) marked as ATCT do not receive glare

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

FAA Policy 78 FR 63276 can be read at https://www.federalregister.gov/d/2013-24729

SITE CONFIGURATION

Analysis Parameters

DNI: peaks at 1,000.0 W/m^2
Time interval: 1 min
Ocular transmission coefficient: 0.5
Pupil diameter: 0.002 m
Eye focal length: 0.017 m
Sun subtended angle: 9.3 mrad
Site Config ID: 90538.15957
Methodology: V2

PV Array(s)

Name: Rooftop Solar PV
Axis tracking: Fixed (no rotation)
Tilt: 8.98°
Orientation: 180.0°
Rated power: -
Panel material: Smooth glass without AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.849434	-117.256507	1521.00	50.00	1571.00
2	33.849706	-117.255644	1521.00	50.00	1571.00
3	33.849545	-117.255570	1521.00	50.00	1571.00
4	33.849273	-117.256433	1521.00	50.00	1571.00

Flight Path Receptor(s)

Name: RWY 12 Final
Description: None
Threshold height: 50 ft
Direction: 135.0°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°

Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.890258	-117.260681	1500.00	50.00	1550.00
Two-mile	33.898508	-117.270608	1500.00	1300.00	2800.00

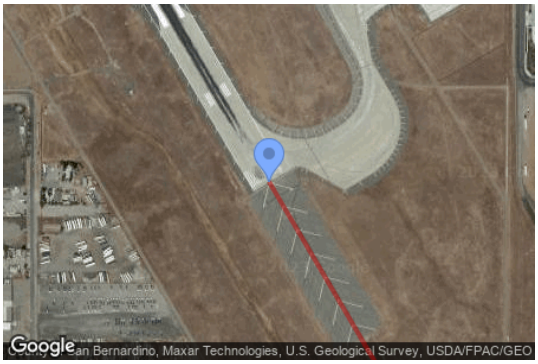
Name: RWY 14 Final
Description: None
Threshold height: 50 ft
Direction: 149.5°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°

Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.896431	-117.270636	1500.00	50.00	1550.00
Two-mile	33.906486	-117.277783	1500.00	1500.00	3000.00

Name: RWY 30 Final
Description: None
Threshold height: 50 ft
Direction: 315.0°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°

Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.884319	-117.253536	1500.00	50.00	1550.00
Two-mile	33.876069	-117.243611	1500.00	1300.00	2800.00

Name: RWY 32 Final
Description: None
Threshold height: 50 ft
Direction: 329.5°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°



Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.864994	-117.248281	1500.00	50.00	1550.00
Two-mile	33.854942	-117.241136	1500.00	1500.00	3000.00

Discrete Observation Receptors

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
1-ATCT	1	33.891572	-117.251203	1511.00	118.00

Map image of 1-ATCT

GLARE ANALYSIS RESULTS

Summary of Glare

PV Array Name	Tilt (°)	Orient (°)	"Green" Glare min	"Yellow" Glare min	Energy kWh
Rooftop Solar PV	8.98	180.0	0	0	-

Total annual glare received by each receptor

Receptor	Annual Green Glare (min)	Annual Yellow Glare (min)
RWY 12 Final	0	0
RWY 14 Final	0	0
RWY 30 Final	0	0
RWY 32 Final	0	0
1-ATCT	0	0

Results for: Rooftop Solar PV

Receptor	Green Glare (min)	Yellow Glare (min)
RWY 12 Final	0	0
RWY 14 Final	0	0
RWY 30 Final	0	0
RWY 32 Final	0	0
1-ATCT	0	0

Flight Path: RWY 12 Final

0 minutes of yellow glare
0 minutes of green glare

Flight Path: RWY 14 Final

0 minutes of yellow glare
0 minutes of green glare

Flight Path: RWY 30 Final

0 minutes of yellow glare
0 minutes of green glare

Flight Path: RWY 32 Final

0 minutes of yellow glare
0 minutes of green glare

Point Receptor: 1-ATCT

0 minutes of yellow glare
0 minutes of green glare

Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions.
Several calculations utilize the PV array centroid, rather than the actual glare spot location, due to V1 algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual results and glare occurrence may differ.
Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
Refer to the Help page at **www.forgesolar.com/help/** for assumptions and limitations not listed here.

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Attachment A-2
2021 FAA Policy Review

FORGESOLAR GLARE ANALYSIS

Project: **Majestic Freeway Business Center - Building 11**
18740 Harvill Ave, Perris, CA

Site configuration: **18740 Harvill-All Final Approaches**

Client: Commerce Construction Co., LP

Created 14 May, 2023
Updated 14 May, 2023
Time-step 1 minute
Timezone offset UTC-8
Minimum sun altitude 0.0 deg
DNI peaks at 1,000.0 W/m^2
Site ID 90538.15957

Ocular transmission coefficient 0.5
Pupil diameter 0.002 m
Eye focal length 0.017 m
Sun subtended angle 9.3 mrad
PV analysis methodology V2

Glare Policy Adherence

The following table estimates the policy adherence of this glare analysis according to the **2021** U.S. Federal Aviation Administration Policy:

Review of Solar Energy System Projects on Federally-Obligated Airports

This policy may require the following criteria be met for solar energy systems on airport property:

- No glare of any kind for Air Traffic Control Tower(s) ("ATCT") at cab height.
- Default analysis and observer characteristics, including 1-minute time step.

ForgeSolar is not affiliated with the U.S. FAA and does not represent or speak officially for the U.S. FAA. ForgeSolar cannot approve or deny projects - results are informational only. Contact the relevant airport and FAA district office for information on policy and requirements.

COMPONENT	STATUS	DESCRIPTION
Analysis parameters	PASS	Analysis time interval and eye characteristics used are acceptable
ATCT(s)	PASS	Receptor(s) marked as ATCT do not receive glare

The referenced policy can be read at https://www.federalregister.gov/d/2021-09862

Component Data

This report includes results for PV arrays and Observation Point ("OP") receptors marked as ATCTs. Components that are not pertinent to the policy, such as routes, flight paths, and vertical surfaces, are excluded.

PV Arrays

Name: Rooftop Solar PV
Axis tracking: Fixed (no rotation)
Tilt: 8.98°
Orientation: 180.0°
Rated power: -
Panel material: Smooth glass without AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.849434	-117.256507	1521.00	50.00	1571.00
2	33.849706	-117.255644	1521.00	50.00	1571.00
3	33.849545	-117.255570	1521.00	50.00	1571.00
4	33.849273	-117.256433	1521.00	50.00	1571.00

Observation Point ATCT Receptors

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
1-ATCT	1	33.891572	-117.251203	1511.00	118.00

Map image of 1-ATCT

Glare Analysis Results

Summary of Results No glare predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
Rooftop Solar PV	8.98	180.0	0	0.0	0	0.0	-

Total annual glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
1-ATCT	0	0.0	0	0.0

PV: Rooftop Solar PV

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
1-ATCT	0	0.0	0	0.0

Rooftop Solar PV and 1-ATCT

Receptor type: ATCT Observation Point
No glare found

Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
The algorithm does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results. However, we have validated our models against several systems, including a PV array causing glare to the air-traffic control tower at Manchester-Boston Regional Airport and several sites in Albuquerque, and the tool accurately predicted the occurrence and intensity of glare at different times and days of the year.
Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare. This primarily affects V1 analyses of path receptors.
Random number computations are utilized by various steps of the annual hazard analysis algorithm. Predicted minutes of glare can vary between runs as a result. This limitation primarily affects analyses of Observation Point receptors, including ATCTs. Note that the SGHAT/ ForgeSolar methodology has always relied on an analytical, qualitative approach to accurately determine the overall hazard (i.e. green vs. yellow) of expected glare on an annual basis.
The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.
The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
The variable direct normal irradiance (DNI) feature (if selected) scales the user-prescribed peak DNI using a typical clear-day irradiance profile. This profile has a lower DNI in the mornings and evenings and a maximum at solar noon. The scaling uses a clear-day irradiance profile based on a normalized time relative to sunrise, solar noon, and sunset, which are prescribed by a sun-position algorithm and the latitude and longitude obtained from Google maps. The actual DNI on any given day can be affected by cloud cover, atmospheric attenuation, and other environmental factors.
The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.
The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
Refer to the Help page at **www.forgesolar.com/help/** for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

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Attachment B
March ARB Runway 12/30 General Aviation Traffic Pattern Analysis

FORGESOLAR GLARE ANALYSIS

Project: **Majestic Freeway Business Center - Building 11**
18740 Harvill Ave, Perris, CA

Site configuration: **18740 Harvill-MARB Runway 12-30 GA Analysis**

Client: Commerce Construction Co., LP

Created 14 May, 2023
Updated 14 May, 2023
Time-step 1 minute
Timezone offset UTC-8
Minimum sun altitude 0.0 deg
DNI peaks at 1,000.0 W/m^2
Category 500 kW to 1 MW
(1,000 kW / 8 acre limit)
Site ID 90539.15957

Ocular transmission coefficient 0.5
Pupil diameter 0.002 m
Eye focal length 0.017 m
Sun subtended angle 9.3 mrad
PV analysis methodology V2

Summary of Results No glare predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
Rooftop Solar PV	8.98	180.0	0	0.0	0	0.0	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 12 GA Pattern Route	0	0.0	0	0.0
RWY 30 GA Pattern Route	0	0.0	0	0.0
RWY 12 Final	0	0.0	0	0.0
RWY 30 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

Component Data

PV Arrays

Name: Rooftop Solar PV
Axis tracking: Fixed (no rotation)
Tilt: 8.98°
Orientation: 180.0°
Rated power: -
Panel material: Smooth glass without AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.849434	-117.256507	1521.00	50.00	1571.00
2	33.849706	-117.255644	1521.00	50.00	1571.00
3	33.849545	-117.255570	1521.00	50.00	1571.00
4	33.849273	-117.256433	1521.00	50.00	1571.00

Route Receptors

Name: RWY 12 GA Pattern Route
Path type: One-way (toward increasing index)
Observer view angle: 50.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.884319	-117.253536	1500.00	50.00	1550.00
2	33.876069	-117.243611	1500.00	1300.00	2800.00
3	33.876081	-117.235119	1500.00	1300.00	2800.00
4	33.880814	-117.229467	1500.00	1300.00	2800.00
5	33.887897	-117.229483	1500.00	1300.00	2800.00
6	33.910333	-117.256469	1500.00	1300.00	2800.00
7	33.910322	-117.264967	1500.00	1300.00	2800.00
8	33.905592	-117.270622	1500.00	1300.00	2800.00
9	33.898508	-117.270608	1500.00	1300.00	2800.00
10	33.890258	-117.260681	1500.00	50.00	1550.00

Name: RWY 30 GA Pattern Route
Path type: One-way (toward increasing index)
Observer view angle: 50.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.890258	-117.260681	1500.00	50.00	1550.00
2	33.898508	-117.270608	1500.00	1300.00	2800.00
3	33.905592	-117.270622	1500.00	1300.00	2800.00
4	33.910322	-117.264967	1500.00	1300.00	2800.00
5	33.910333	-117.256469	1500.00	1300.00	2800.00
6	33.887897	-117.229483	1500.00	1300.00	2800.00
7	33.880814	-117.229467	1500.00	1300.00	2800.00
8	33.876081	-117.235119	1500.00	1300.00	2800.00
9	33.876069	-117.243611	1500.00	1300.00	2800.00
10	33.884319	-117.253536	1500.00	50.00	1550.00

Flight Path Receptors

Name: RWY 12 Final
Description: None
Threshold height: 50 ft
Direction: 135.0°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°

Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.890258	-117.260681	1500.00	50.00	1550.00
Two-mile	33.898508	-117.270608	1500.00	1300.00	2800.00

Name: RWY 30 Final
Description: None
Threshold height: 50 ft
Direction: 315.0°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°

Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.884319	-117.253536	1500.00	50.00	1550.00
Two-mile	33.876069	-117.243611	1500.00	1300.00	2800.00

Discrete Observation Point Receptors

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
1-ATCT	1	33.891572	-117.251203	1511.00	118.00

Map image of 1-ATCT

Glare Analysis Results

Summary of Results No glare predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
Rooftop Solar PV	8.98	180.0	0	0.0	0	0.0	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 12 GA Pattern Route	0	0.0	0	0.0
RWY 30 GA Pattern Route	0	0.0	0	0.0
RWY 12 Final	0	0.0	0	0.0
RWY 30 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

PV: Rooftop Solar PV no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 12 GA Pattern Route	0	0.0	0	0.0
RWY 30 GA Pattern Route	0	0.0	0	0.0
RWY 12 Final	0	0.0	0	0.0
RWY 30 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

Rooftop Solar PV and Route: RWY 12 GA Pattern Route

No glare found

Rooftop Solar PV and Route: RWY 30 GA Pattern Route

No glare found

Rooftop Solar PV and FP: RWY 12 Final

No glare found

Rooftop Solar PV and FP: RWY 30 Final

No glare found

Rooftop Solar PV and 1-ATCT

No glare found

Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
The algorithm does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results. However, we have validated our models against several systems, including a PV array causing glare to the air-traffic control tower at Manchester-Boston Regional Airport and several sites in Albuquerque, and the tool accurately predicted the occurrence and intensity of glare at different times and days of the year.
Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare. This primarily affects V1 analyses of path receptors.
Random number computations are utilized by various steps of the annual hazard analysis algorithm. Predicted minutes of glare can vary between runs as a result. This limitation primarily affects analyses of Observation Point receptors, including ATCTs. Note that the SGHAT/ ForgeSolar methodology has always relied on an analytical, qualitative approach to accurately determine the overall hazard (i.e. green vs. yellow) of expected glare on an annual basis.
The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.
The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
The variable direct normal irradiance (DNI) feature (if selected) scales the user-prescribed peak DNI using a typical clear-day irradiance profile. This profile has a lower DNI in the mornings and evenings and a maximum at solar noon. The scaling uses a clear-day irradiance profile based on a normalized time relative to sunrise, solar noon, and sunset, which are prescribed by a sun-position algorithm and the latitude and longitude obtained from Google maps. The actual DNI on any given day can be affected by cloud cover, atmospheric attenuation, and other environmental factors.
The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.
The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
Refer to the Help page at **www.forgesolar.com/help/** for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

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Attachment C
March ARB Runway 14/32 General Aviation Traffic Pattern Analysis

FORGESOLAR GLARE ANALYSIS

Project: **Majestic Freeway Business Center - Building 11**
18740 Harvill Ave, Perris, CA

Site configuration: **18740 Harvill-MARB Runway 14-32 GA Analysis**

Client: Commerce Construction Co., LP

Created 14 May, 2023
Updated 14 May, 2023
Time-step 1 minute
Timezone offset UTC-8
Minimum sun altitude 0.0 deg
DNI peaks at 1,000.0 W/m^2
Category 500 kW to 1 MW
(1,000 kW / 8 acre limit)
Site ID 90540.15957

Ocular transmission coefficient 0.5
Pupil diameter 0.002 m
Eye focal length 0.017 m
Sun subtended angle 9.3 mrad
PV analysis methodology V2

Summary of Results

Glare with low potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
Rooftop Solar PV	8.98	180.0	12,858	214.3	0	0.0	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 14 GA Pattern Route	3,971	66.2	0	0.0
RWY 32 GA Pattern Route	8,887	148.1	0	0.0
RWY 14 Final	0	0.0	0	0.0
RWY 32 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

Component Data

PV Arrays

Name: Rooftop Solar PV
Axis tracking: Fixed (no rotation)
Tilt: 8.98°
Orientation: 180.0°
Rated power: -
Panel material: Smooth glass without AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.849434	-117.256507	1521.00	50.00	1571.00
2	33.849706	-117.255644	1521.00	50.00	1571.00
3	33.849545	-117.255570	1521.00	50.00	1571.00
4	33.849273	-117.256433	1521.00	50.00	1571.00

Route Receptors

Name: RWY 14 GA Pattern Route
Path type: One-way (toward increasing index)
Observer view angle: 50.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.864994	-117.248281	1500.00	50.00	1550.00
2	33.854942	-117.241136	1500.00	1500.00	3000.00
3	33.848078	-117.243236	1500.00	1500.00	3000.00
4	33.844669	-117.250119	1500.00	1500.00	3000.00
5	33.846422	-117.258344	1500.00	1500.00	3000.00
6	33.897972	-117.295011	1500.00	1500.00	3000.00
7	33.904833	-117.292903	1500.00	1500.00	3000.00
8	33.908242	-117.286017	1500.00	1500.00	3000.00
9	33.906486	-117.277783	1500.00	1500.00	3000.00
10	33.896431	-117.270636	1500.00	50.00	1550.00

Name: RWY 32 GA Pattern Route
Path type: One-way (toward increasing index)
Observer view angle: 50.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.896431	-117.270636	1500.00	50.00	1550.00
2	33.906486	-117.277783	1500.00	1500.00	3000.00
3	33.908242	-117.286017	1500.00	1500.00	3000.00
4	33.904833	-117.292903	1500.00	1500.00	3000.00
5	33.897972	-117.295011	1500.00	1500.00	3000.00
6	33.846422	-117.258344	1500.00	1500.00	3000.00
7	33.844669	-117.250119	1500.00	1500.00	3000.00
8	33.848078	-117.243236	1500.00	1500.00	3000.00
9	33.854942	-117.241136	1500.00	1500.00	3000.00
10	33.864994	-117.248281	1500.00	50.00	1550.00

Flight Path Receptors

Name: RWY 14 Final
Description: None
Threshold height: 50 ft
Direction: 149.5°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°

Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.896431	-117.270636	1500.00	50.00	1550.00
Two-mile	33.906486	-117.277783	1500.00	1500.00	3000.00

Name: RWY 32 Final
Description: None
Threshold height: 50 ft
Direction: 329.5°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°

Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.864994	-117.248281	1500.00	50.00	1550.00
Two-mile	33.854942	-117.241136	1500.00	1500.00	3000.00

Discrete Observation Point Receptors

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
1-ATCT	1	33.891572	-117.251203	1511.00	118.00

Map image of 1-ATCT

Glare Analysis Results

Summary of Results Glare with low potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
Rooftop Solar PV	8.98	180.0	12,858	214.3	0	0.0	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 14 GA Pattern Route	3,971	66.2	0	0.0
RWY 32 GA Pattern Route	8,887	148.1	0	0.0
RWY 14 Final	0	0.0	0	0.0
RWY 32 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

PV: Rooftop Solar PV low potential for temporary after-image

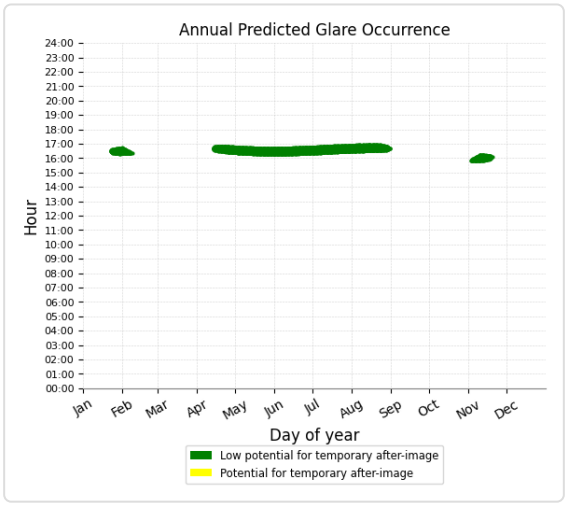
Receptor results ordered by category of glare

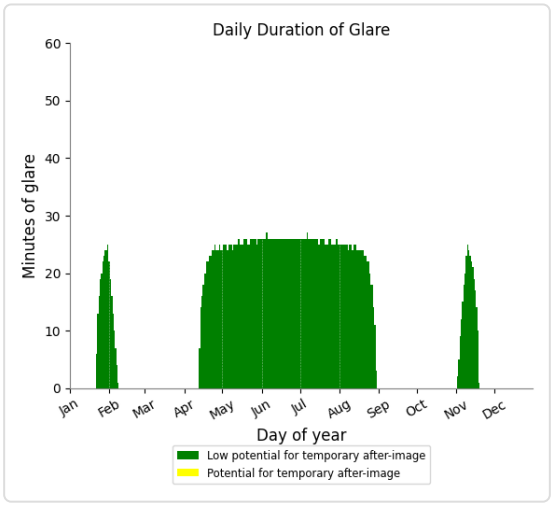
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 14 GA Pattern Route	3,971	66.2	0	0.0
RWY 32 GA Pattern Route	8,887	148.1	0	0.0
RWY 14 Final	0	0.0	0	0.0
RWY 32 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

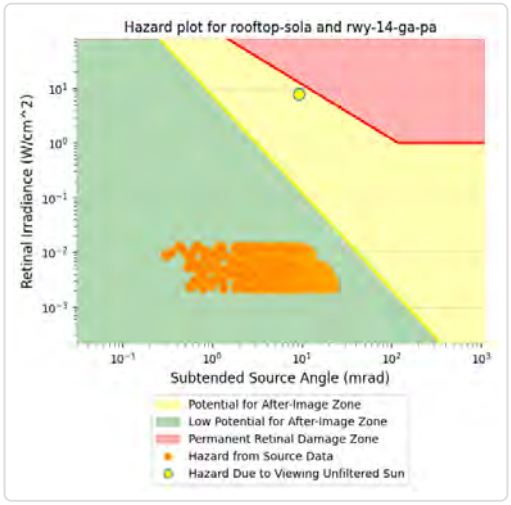
Rooftop Solar PV and Route: RWY 14 GA Pattern Route

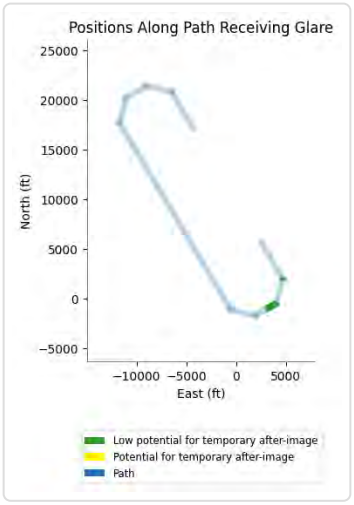
Yellow glare: none

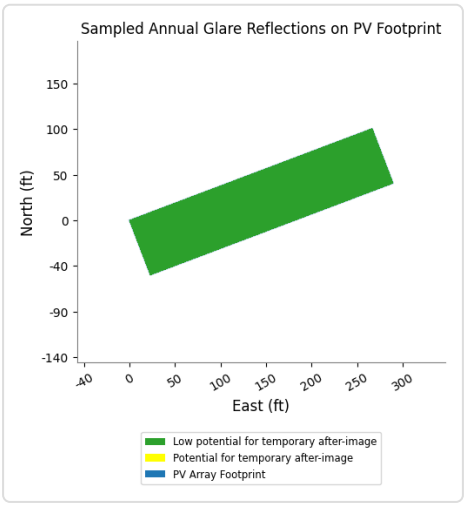
Green glare: 3,971 min.







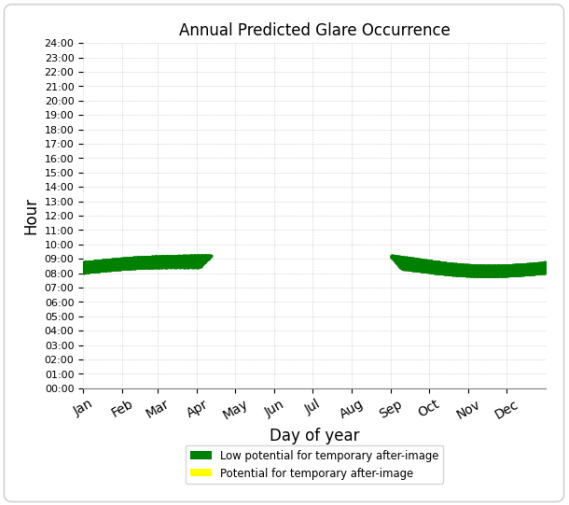


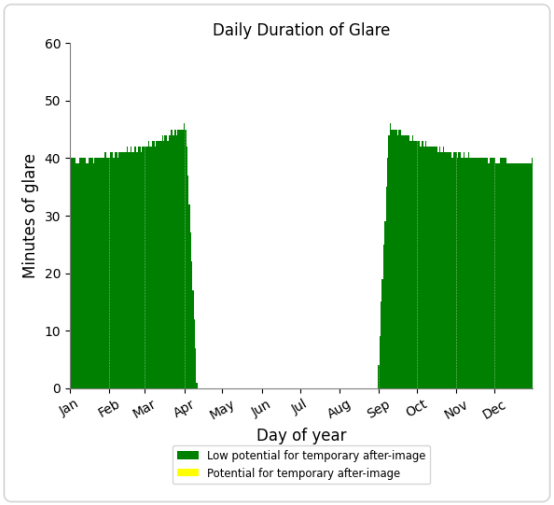


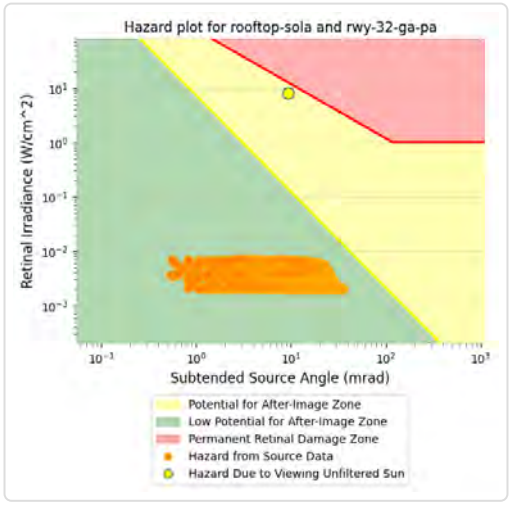
Rooftop Solar PV and Route: RWY 32 GA Pattern Route

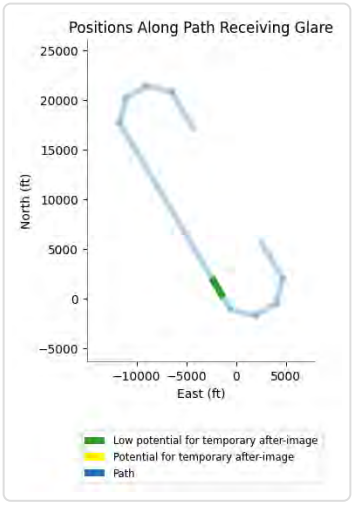
Yellow glare: none

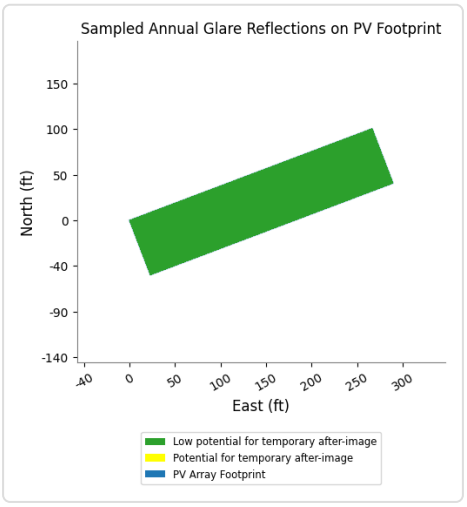
Green glare: 8,887 min.











Rooftop Solar PV and FP: RWY 14 Final

No glare found

Rooftop Solar PV and FP: RWY 32 Final

No glare found

Rooftop Solar PV and 1-ATCT

No glare found

Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
The algorithm does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results. However, we have validated our models against several systems, including a PV array causing glare to the air-traffic control tower at Manchester-Boston Regional Airport and several sites in Albuquerque, and the tool accurately predicted the occurrence and intensity of glare at different times and days of the year.
Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare. This primarily affects V1 analyses of path receptors.
Random number computations are utilized by various steps of the annual hazard analysis algorithm. Predicted minutes of glare can vary between runs as a result. This limitation primarily affects analyses of Observation Point receptors, including ATCTs. Note that the SGHAT/ ForgeSolar methodology has always relied on an analytical, qualitative approach to accurately determine the overall hazard (i.e. green vs. yellow) of expected glare on an annual basis.
The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.
The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
The variable direct normal irradiance (DNI) feature (if selected) scales the user-prescribed peak DNI using a typical clear-day irradiance profile. This profile has a lower DNI in the mornings and evenings and a maximum at solar noon. The scaling uses a clear-day irradiance profile based on a normalized time relative to sunrise, solar noon, and sunset, which are prescribed by a sun-position algorithm and the latitude and longitude obtained from Google maps. The actual DNI on any given day can be affected by cloud cover, atmospheric attenuation, and other environmental factors.
The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.
The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
Refer to the Help page at **www.forgesolar.com/help/** for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

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Attachment D
March ARB Runway 14/32 C-17/KC-135 Traffic Pattern Analysis

FORGESOLAR GLARE ANALYSIS

Project: **Majestic Freeway Business Center - Building 11**
18740 Harvill Ave, Perris, CA

Site configuration: **18740 Harvill-MARB RWY 14-32 C-17 Analysis**

Client: Commerce Construction Co., LP

Created 14 May, 2023
Updated 14 May, 2023
Time-step 1 minute
Timezone offset UTC-8
Minimum sun altitude 0.0 deg
DNI peaks at 1,000.0 W/m^2
Category 500 kW to 1 MW
(1,000 kW / 8 acre limit)
Site ID 90541.15957

Ocular transmission coefficient 0.5
Pupil diameter 0.002 m
Eye focal length 0.017 m
Sun subtended angle 9.3 mrad
PV analysis methodology V2

Summary of Results

Glare with low potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
Rooftop Solar PV	8.98	180.0	5,246	87.4	0	0.0	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 14 C-17 - KC-135 Pattern Route	0	0.0	0	0.0
RWY 32 C-17 - KC-135 Pattern Route	5,246	87.4	0	0.0
RWY 14 Final	0	0.0	0	0.0
RWY 32 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

Component Data

PV Arrays

Name: Rooftop Solar PV
Axis tracking: Fixed (no rotation)
Tilt: 8.98°
Orientation: 180.0°
Rated power: -
Panel material: Smooth glass without AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.849434	-117.256507	1521.00	50.00	1571.00
2	33.849706	-117.255644	1521.00	50.00	1571.00
3	33.849545	-117.255570	1521.00	50.00	1571.00
4	33.849273	-117.256433	1521.00	50.00	1571.00

Route Receptors

Name: RWY 14 C-17 - KC-135 Pattern Route
Path type: One-way (toward increasing index)
Observer view angle: 50.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.864994	-117.248281	1500.00	50.00	1550.00
2	33.836269	-117.227869	1500.00	1500.00	3000.00
3	33.821961	-117.228367	1500.00	1500.00	3000.00
4	33.813147	-117.244350	1500.00	1500.00	3000.00
5	33.819225	-117.262269	1500.00	1500.00	3000.00
6	33.908131	-117.325528	1500.00	1500.00	3000.00
7	33.922394	-117.325047	1500.00	1500.00	3000.00
8	33.931244	-117.309014	1500.00	1500.00	3000.00
9	33.925156	-117.291061	1500.00	1500.00	3000.00
10	33.896431	-117.270636	1500.00	50.00	1550.00

Name: RWY 32 C-17 - KC-135 Pattern Route
Path type: One-way (toward increasing index)
Observer view angle: 50.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.896431	-117.270636	1500.00	50.00	1550.00
2	33.925156	-117.291061	1500.00	1500.00	3000.00
3	33.931244	-117.309014	1500.00	1500.00	3000.00
4	33.922394	-117.325047	1500.00	1500.00	3000.00
5	33.908131	-117.325528	1500.00	1500.00	3000.00
6	33.819225	-117.262269	1500.00	1500.00	3000.00
7	33.813147	-117.244350	1500.00	1500.00	3000.00
8	33.821961	-117.228367	1500.00	1500.00	3000.00
9	33.836269	-117.227869	1500.00	1500.00	3000.00
10	33.864994	-117.248281	1500.00	50.00	1550.00

Flight Path Receptors

Name: RWY 14 Final
Description: None
Threshold height: 50 ft
Direction: 149.5°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°

Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.896431	-117.270636	1500.00	50.00	1550.00
Two-mile	33.906486	-117.277783	1500.00	1500.00	3000.00

Name: RWY 32 Final
Description: None
Threshold height: 50 ft
Direction: 329.5°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°

Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.864994	-117.248281	1500.00	50.00	1550.00
Two-mile	33.854942	-117.241136	1500.00	1500.00	3000.00

Discrete Observation Point Receptors

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
1-ATCT	1	33.891572	-117.251203	1511.00	118.00

Map image of 1-ATCT

Glare Analysis Results

Summary of Results

Glare with low potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
Rooftop Solar PV	8.98	180.0	5,246	87.4	0	0.0	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 14 C-17 - KC-135 Pattern Route	0	0.0	0	0.0
RWY 32 C-17 - KC-135 Pattern Route	5,246	87.4	0	0.0
RWY 14 Final	0	0.0	0	0.0
RWY 32 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

PV: Rooftop Solar PV

low potential for temporary after-image

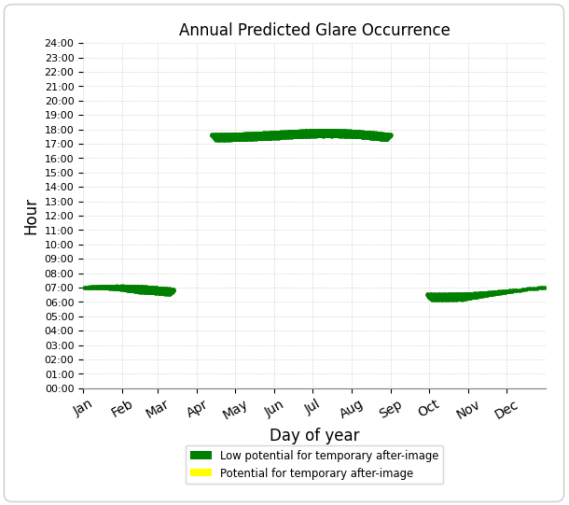
Receptor results ordered by category of glare

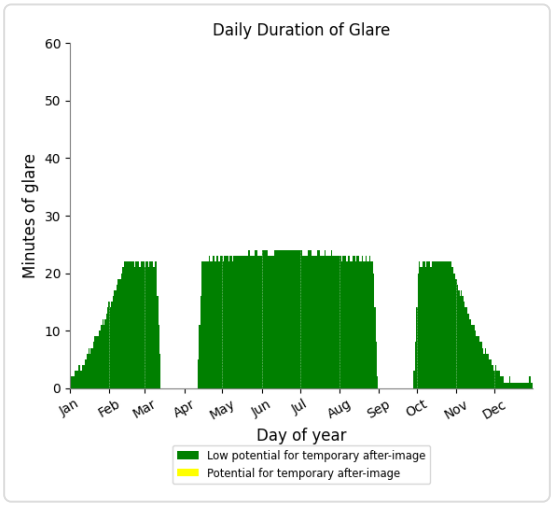
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 32 C-17 - KC-135 Pattern Route	5,246	87.4	0	0.0
RWY 14 C-17 - KC-135 Pattern Route	0	0.0	0	0.0
RWY 14 Final	0	0.0	0	0.0
RWY 32 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

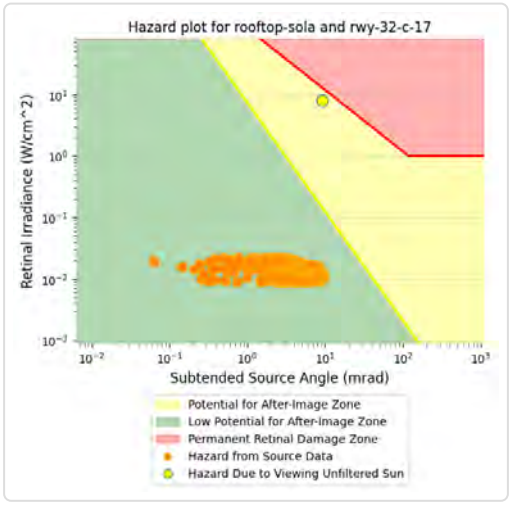
Rooftop Solar PV and Route: RWY 32 C-17 - KC-135 Pattern Route

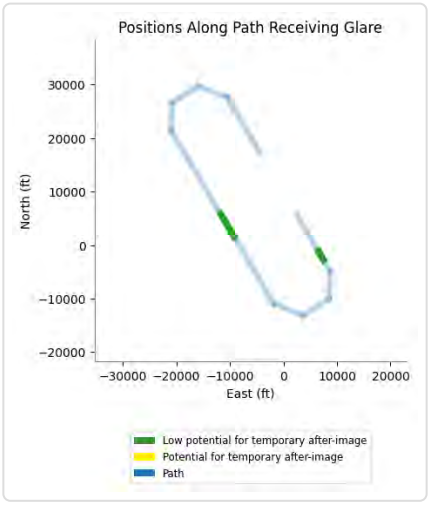
Yellow glare: none

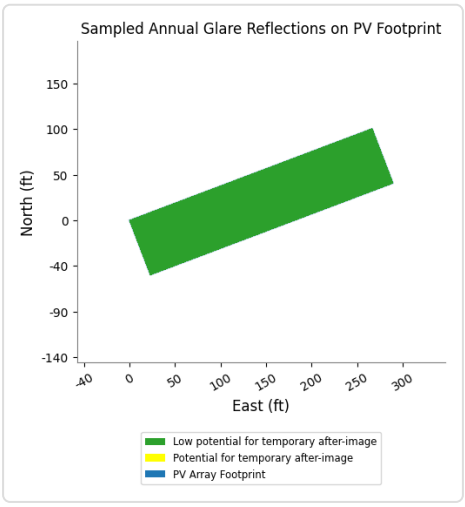
Green glare: 5,246 min.











Rooftop Solar PV and Route: RWY 14 C-17 - KC-135 Pattern Route

No glare found

Rooftop Solar PV and FP: RWY 14 Final

No glare found

Rooftop Solar PV and FP: RWY 32 Final

No glare found

Rooftop Solar PV and 1-ATCT

No glare found

Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
The algorithm does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results. However, we have validated our models against several systems, including a PV array causing glare to the air-traffic control tower at Manchester-Boston Regional Airport and several sites in Albuquerque, and the tool accurately predicted the occurrence and intensity of glare at different times and days of the year.
Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare. This primarily affects V1 analyses of path receptors.
Random number computations are utilized by various steps of the annual hazard analysis algorithm. Predicted minutes of glare can vary between runs as a result. This limitation primarily affects analyses of Observation Point receptors, including ATCTs. Note that the SGHAT/ ForgeSolar methodology has always relied on an analytical, qualitative approach to accurately determine the overall hazard (i.e. green vs. yellow) of expected glare on an annual basis.
The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.
The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
The variable direct normal irradiance (DNI) feature (if selected) scales the user-prescribed peak DNI using a typical clear-day irradiance profile. This profile has a lower DNI in the mornings and evenings and a maximum at solar noon. The scaling uses a clear-day irradiance profile based on a normalized time relative to sunrise, solar noon, and sunset, which are prescribed by a sun-position algorithm and the latitude and longitude obtained from Google maps. The actual DNI on any given day can be affected by cloud cover, atmospheric attenuation, and other environmental factors.
The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.
The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
Refer to the Help page at **www.forgesolar.com/help/** for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

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Attachment E
March ARB Runway 14/32 Overhead Traffic Pattern Analysis

FORGESOLAR GLARE ANALYSIS

Project: **Majestic Freeway Business Center - Building 11**
18740 Harvill Ave, Perris, CA

Site configuration: **18740 Harvill-MARB RWY 14-32 Overhead Analysis**

Client: Commerce Construction Co., LP

Created 14 May, 2023
Updated 14 May, 2023
Time-step 1 minute
Timezone offset UTC-8
Minimum sun altitude 0.0 deg
DNI peaks at 1,000.0 W/m^2
Category 500 kW to 1 MW
(1,000 kW / 8 acre limit)
Site ID 90542.15957

Ocular transmission coefficient 0.5
Pupil diameter 0.002 m
Eye focal length 0.017 m
Sun subtended angle 9.3 mrad
PV analysis methodology V2

Summary of Results

Glare with low potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
Rooftop Solar PV	8.98	180.0	8,270	137.8	0	0.0	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 14 Overhead Route	0	0.0	0	0.0
RWY 32 Overhead Route	8,270	137.8	0	0.0
RWY 14 Final	0	0.0	0	0.0
RWY 32 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

Component Data

PV Arrays

Name: Rooftop Solar PV
Axis tracking: Fixed (no rotation)
Tilt: 8.98°
Orientation: 180.0°
Rated power: -
Panel material: Smooth glass without AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.849434	-117.256507	1521.00	50.00	1571.00
2	33.849706	-117.255644	1521.00	50.00	1571.00
3	33.849545	-117.255570	1521.00	50.00	1571.00
4	33.849273	-117.256433	1521.00	50.00	1571.00

Route Receptors

Name: RWY 14 Overhead Route
Path type: One-way (toward increasing index)
Observer view angle: 50.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.968036	-117.322128	1500.00	2000.00	3500.00
2	33.880706	-117.259453	1500.00	2000.00	3500.00
3	33.863564	-117.293808	1500.00	2000.00	3500.00
4	33.908131	-117.325528	1500.00	2000.00	3500.00
5	33.925156	-117.291061	1500.00	2000.00	3500.00
6	33.896431	-117.270636	1500.00	50.00	1550.00

Name: RWY 32 Overhead Route
Path type: One-way (toward increasing index)
Observer view angle: 50.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.793375	-117.196878	1500.00	2000.00	3500.00
2	33.880706	-117.259453	1500.00	2000.00	3500.00
3	33.863564	-117.293808	1500.00	2000.00	3500.00
4	33.819225	-117.262269	1500.00	2000.00	3500.00
5	33.836269	-117.227869	1500.00	2000.00	3500.00
6	33.864994	-117.248281	1500.00	50.00	1550.00

Flight Path Receptors

Name: RWY 14 Final
Description: None
Threshold height: 50 ft
Direction: 149.5°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°

Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.896431	-117.270636	1500.00	50.00	1550.00
Two-mile	33.906486	-117.277783	1500.00	2000.00	3500.00

Name: RWY 32 Final
Description: None
Threshold height: 50 ft
Direction: 329.5°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°

Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.864994	-117.248281	1500.00	50.00	1550.00
Two-mile	33.854942	-117.241136	1500.00	2000.00	3500.00

Discrete Observation Point Receptors

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
1-ATCT	1	33.891572	-117.251203	1511.00	118.00

Map image of 1-ATCT

Glare Analysis Results

Summary of Results

Glare with low potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
Rooftop Solar PV	8.98	180.0	8,270	137.8	0	0.0	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 14 Overhead Route	0	0.0	0	0.0
RWY 32 Overhead Route	8,270	137.8	0	0.0
RWY 14 Final	0	0.0	0	0.0
RWY 32 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

PV: Rooftop Solar PV

low potential for temporary after-image

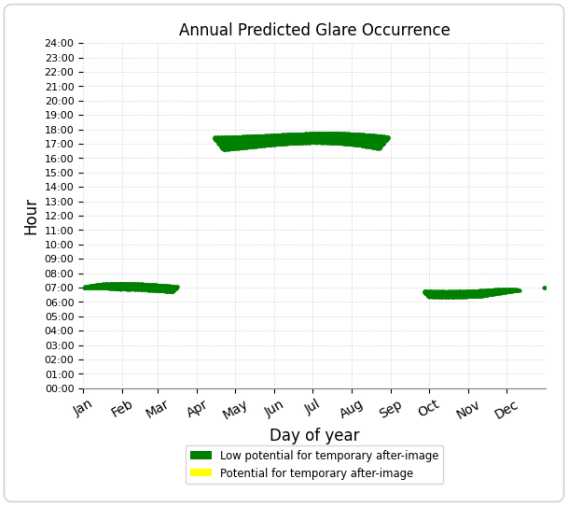
Receptor results ordered by category of glare

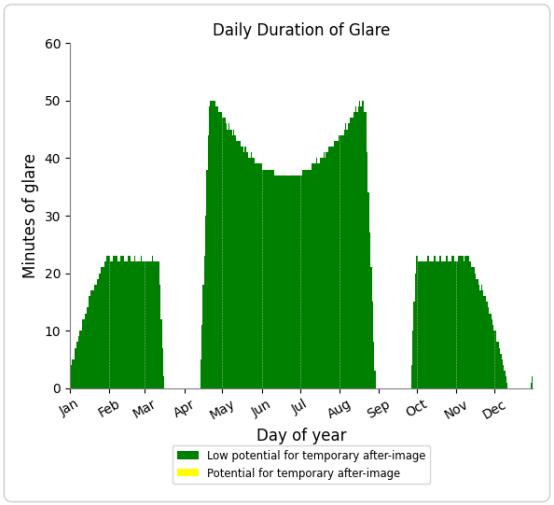
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 32 Overhead Route	8,270	137.8	0	0.0
RWY 14 Overhead Route	0	0.0	0	0.0
RWY 14 Final	0	0.0	0	0.0
RWY 32 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

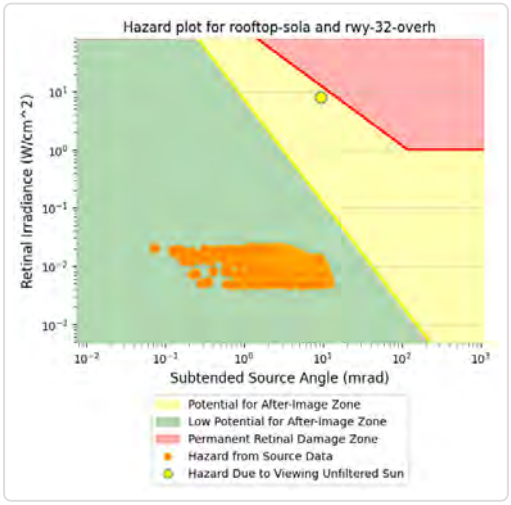
Rooftop Solar PV and Route: RWY 32 Overhead Route

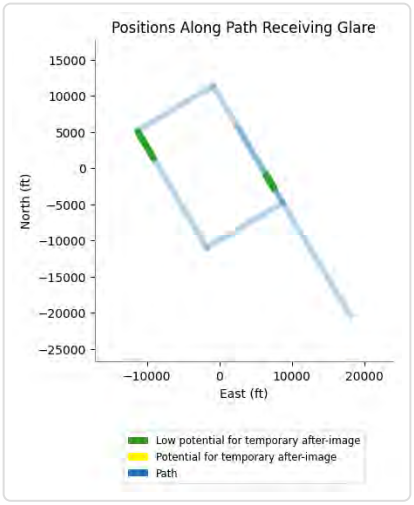
Yellow glare: none

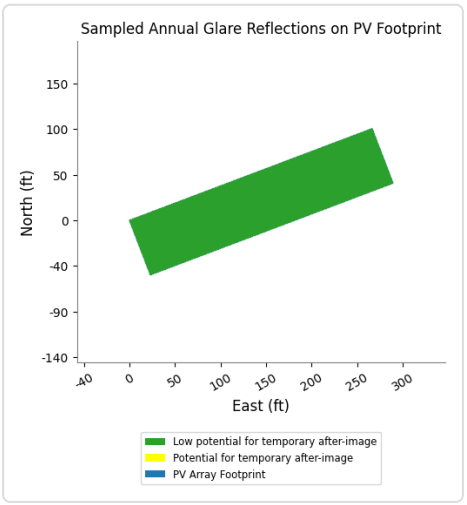
Green glare: 8,270 min.











Rooftop Solar PV and Route: RWY 14 Overhead Route

No glare found

Rooftop Solar PV and FP: RWY 14 Final

No glare found

Rooftop Solar PV and FP: RWY 32 Final

No glare found

Rooftop Solar PV and 1-ATCT

No glare found

Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
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The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.
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The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.
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Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
Refer to the Help page at **www.forgesolar.com/help/** for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

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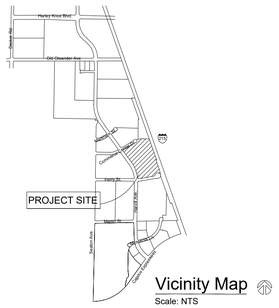
PROPOSED SOLAR SYSTEM DRAWN FOR:

MAJESTIC FREEWAY BUSINESS CENTER
BUILDING 11
18740 HARVILL AVE.
PERRIS, CA. 92570
APN: 314-290-017

VICINTY MAP



Vicinity Map
Scale: NTS

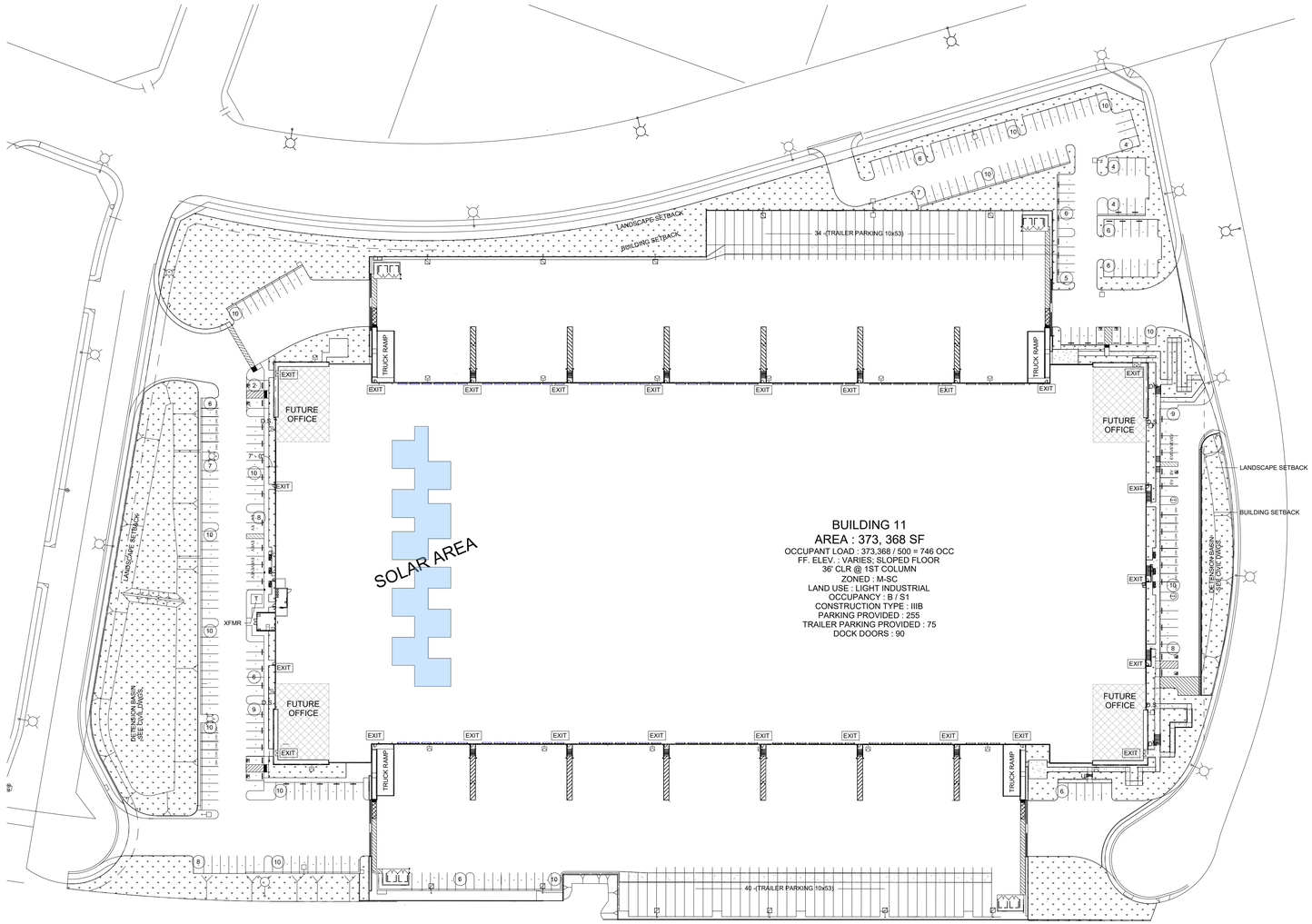
GENERAL NOTE

This building complies with TITLE 24 and the following model codes:

2022 California Building Codes (CBC)
2022 California Plumbing Codes (CPC)
2022 California Mechanical Codes
2022 California Fire Codes (CFC)
2022 California Electrical Codes
2022 California Energy Code
2022 California Green Building Code

SUPPLEMENTS

STRUCTURAL CALCULATIONS
PANELCLAW



A.T. & S.F. RR

SITE PLAN — SCALE NONE

SHEET INDEX

SOLAR ELECTRIACL SHEETS

SHEET	DESCRIPTION	# OF #
PV1	COVER SHEET	1 -7
PV2	SOLAR LAYOUT PLAN	2 -7
PV3	ELECTRICAL PLAN	3 -7
PV4	SINGLE-LINE PLAN	4 -7
PV5	PANEL STRINGING PLAN	5 -7
PV6	DATASHEETS	6 -7
PV7	DATASHEETS	7 -7
PC1-PC9	PANELCLAW RACKING DRAWING SET	1 -9

PROJECT DATA

APN:	314-290-017
LOT SIZE:	21.50 ± ACRES
OWNER:	MAJESTIC FREEWAY BUSINESS CENTER LLC 13191 CROSSROADS PKWY. NO. 6TH FLR CITY OF INDUSTRY, CA. 91746
PROJECT LOCATION:	18740 HARVILL AVE. PERRIS, CA. 92570
OCCUPACY:	S-1, B
CONSTRUCTION TYPE:	III - B
NO. OF STORIES:	1
SPRINKLERS:	YES
DESCRIPTION OF USE:	LIGHT INDUSTRIAL
GOVERNING AGENCY:	COUNTY OF RIVERSIDE
GENERAL CONTRACTOR:	PANELIZED STRICTURES INC. 5731 STODDARD ROAD MODESTO, CA. 95356
APPLICABLE CODES:	2022 CBC, CMC, CFC, CPC TITLE 24 AND 2022 CEC

PROJECT NOTES

1. ALL SITE, PROJECT, AND BUILDING DETAILS ARE PROVIDED BY CUSTOMER OR GENERATED VIA SATELLITE IMAGERY FROM INFORMATION PROVIDED BY CUSTOMER. PANELCLAW IS NOT RESPONSIBLE FOR SITE INACCURACIES THAT COULD LEAD TO CHANGES TO THESE DRAWING DETAILS AND ARRAY LAYOUT CONFIGURATIONS. ALL INFORMATION CONTAINED WITHIN THESE DOCUMENTS ARE TO BE FIELD VERIFIED BY CUSTOMER AND INSTALLER. ANY CHANGES OR MODIFICATIONS TO THESE DOCUMENTS, CONTAINED INFORMATION, OR FINAL ARRAY AND MOUNTING SYSTEM INSTALLATIONS MUST BE SUBMITTED TO PANELCLAW AND OTHER PROJECT AUTHORITIES FOR APPROVAL.

2. REFER TO AND FOLLOW THE APPROPRIATE PANELCLAW INSTALLATION MANUALS AND PROCEDURES DURING THE INSTALLATION PROCESS. NOT FOLLOWING SUCH PROCEDURES AND METHODS COULD RESULT IN DAMAGE TO THE COMPONENTS OR MAY VOID THE PRODUCT WARRANTY.

3. ARRAY SETBACKS: ALL ARRAYS ARE REQUIRED TO BE SETBACK 4-FEET FROM ALL ROOF EDGES UNLESS OTHERWISE SPECIFIED AND CALLED OUT ON THE ARRAY DIAGRAMS ON THIS PAGE OR ON ADDITIONAL ARRAY BALLAST PAGES

4. REFER TO THE SPECIFIC ARRAY BALLAST SHEETS FOR BALLASTING REQUIREMENTS BASED ON THE PROVIDED SITE INFORMATION

5. SYSTEM PSF INCLUDES ALL PANELCLAW RACKING COMPONENTS, MECHANICAL ATTACHMENTS (IF APPLICABLE), PV MODULE AND BALLAST BLOCKS. FOR MAXIMUM SYSTEM POINT LOAD SUMMARY (PLS), REFER TO CALCULATIONS.

6. PANELCLAW AND/OR PANELCLAW CONSULTING ENGINEERS ARE NOT RESPONSIBLE FOR DETERMINING THE ADEQUACY OF THE STRUCTURE TO SUPPORT LOADS IMPOSED BY THE ARRAY AND MOUNTING SYSTEM. SUPPORT STRUCTURE TO BE CHECKED BY OTHERS

7. ALWAYS ALLOW 6" CLEARANCE BETWEEN NEIGHBORING SUBARRAYS, 6" BETWEEN SUBARRAYS AND ALL FIXED ROOF OBJECTS AND 4' BETWEEN SUBARRAYS AND ROOF EDGES. REFER TO LOCAL FIRE CODES AND ELECTRICAL CODES FOR ADDITIONAL REQUIREMENTS WHICH MAY GOVERN DESIGN. SUBARRAYS THAT USE A SEISMIC ANALYSIS METHOD OF DELTA MPV PER SEAOC OR ASCE 7-16 HAVE THEIR OWN CLEARANCE REQUIREMENTS. REFER TO THE BALLAST LAYOUT SHEETS WITHIN THIS DOCUMENT FOR DETAILS.

8. BALLAST BLOCK DIMENSIONS MUST CONFORM TO THE FOLLOWING SPECIFICATIONS: 3-3/4" THICK MAX., 7-5/8" ± 1/8" WIDTH, 15-5/8" ± 1/8" LENGTH.

9. IF AN ARRAY CLEARANCES TABLE APPEARS BELOW ON THIS PAGE, THE DESIGN UTILIZES THIRD PARTY SEISMIC NON-LINEAR RESPONSE ANALYSIS TO ESTIMATE MAXIMUM ARRAY SEISMIC DISPLACEMENT. THE PREDICTED MOVEMENT IS ONLY AN ESTIMATE. PANELCLAW IS NOT RESPONSIBLE OR LIABLE FOR ANY DAMAGES OR COSTS ASSOCIATED WITH PV ARRAY MOVEMENT INCLUDING MOVEMENT IN EXCESS OF THE CLEARANCES NOTED IN THIS DOCUMENT OR ANY REQUIREMENT TO REPOSITION THE ARRAYS IF MOVEMENT OCCURS.

10. DEFLECTORS MUST BE INSTALLED WHEN WINDS ARE EXPECTED TO EXCEED APPROX. 25% OF WIND SPEED DOCUMENTED IN SITE DESIGN CRITERIA TABLE. DEFLECTORS ARE REQUIRED ON ALL MODULES UNLESS OTHERWISE NOTED ON BALLAST LAYOUT PAGES.

ROOF LOADING NOTES

1607.13.5PHOTOVOLTAIC PANEL SYSTEMS.
ROOF STRUCTURES THAT PROVIDE SUPPORT FOR PHOTOVOLTAIC PANEL SYSTEMS SHALL BE DESIGNED IN ACCORDANCE WITH SECTIONS 1607.13.5.1 THROUGH 1607.13.5.4, AS APPLICABLE.

1607.13.5.1ROOF LIVE LOAD.
ROOF STRUCTURES THAT SUPPORT PHOTOVOLTAIC PANEL SYSTEMS SHALL BE DESIGNED TO RESIST EACH OF THE FOLLOWING CONDITIONS:

1.APPLICABLE UNIFORM AND CONCENTRATED ROOF LOADS WITH THE PHOTOVOLTAIC PANEL SYSTEM DEAD LOADS.

EXCEPTION: ROOF LIVE LOADS NEED NOT BE APPLIED TO THE AREA COVERED BY PHOTOVOLTAIC PANELS WHERE THE CLEAR SPACE BETWEEN THE PANELS AND THE ROOF SURFACE IS 24 INCHES (610 MM) OR LESS.

PANELIZED STRUCTURES, INC.
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5731 STODDARD RD. MODESTO, CA. 95356 N.V. LIC. #0035215 CA LIC. #652369

Job: MAJESTIC FREEWAY BUSINESS CENTER
BUILDING 11
Location: 18740 HARVILL AVE. PERRIS, CA. 92570
COVER SHEET

NO.	REVISION	DATE
1		
2		
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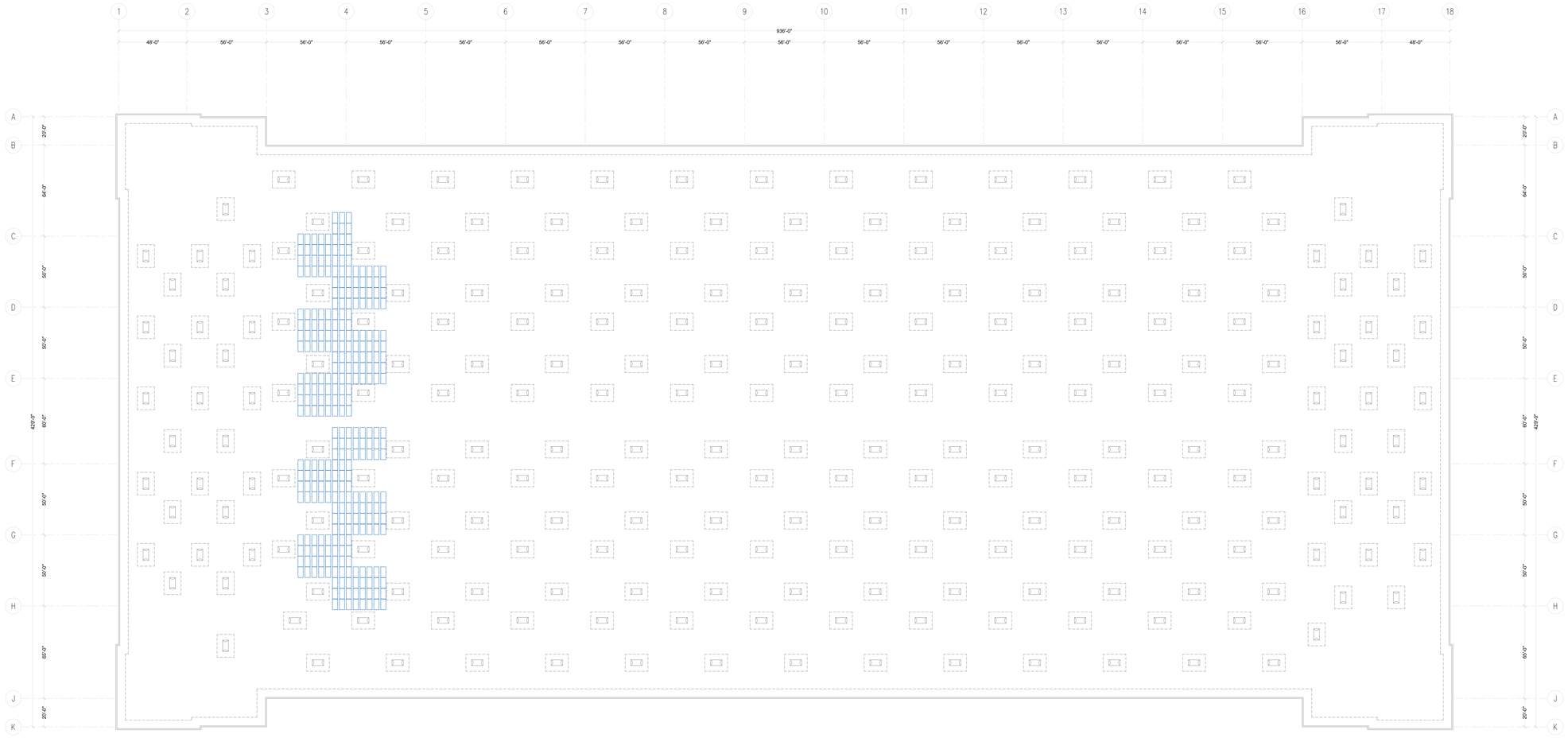
DWG DATE: 1-25-23
APPROVALS SENT DATE:
DRAWN BY: ESD
CHECKED BY: TP
SCALE: NONE
FINAL PLANS DATE:
JOB:

SHEET PV1 OF -

COVER SHEET



SYSTEM INFORMATION	
Total # of JA Solar JAM72D30-540/MB	308
Annual Energy Yield Estimated	286,569.36kWh
Total System kW	166.32kW

Licensed Electrician
Pinnacle Structures, Inc.
Tim Pfisterer
CA 652369
NV 0074404

LAYOUT PLAN

SCALE: - 1" = 40'-0"

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NV LIC. #0035215

Job: MAJESTIC FREEWAY BUSINESS CENTER
BUILDING 11
Location: 18740 HARVILL AVE. PERRIS, CA. 92570

LAYOUT PLAN

NO.	REVISION	DATE
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DWG DATE: 1-25-23
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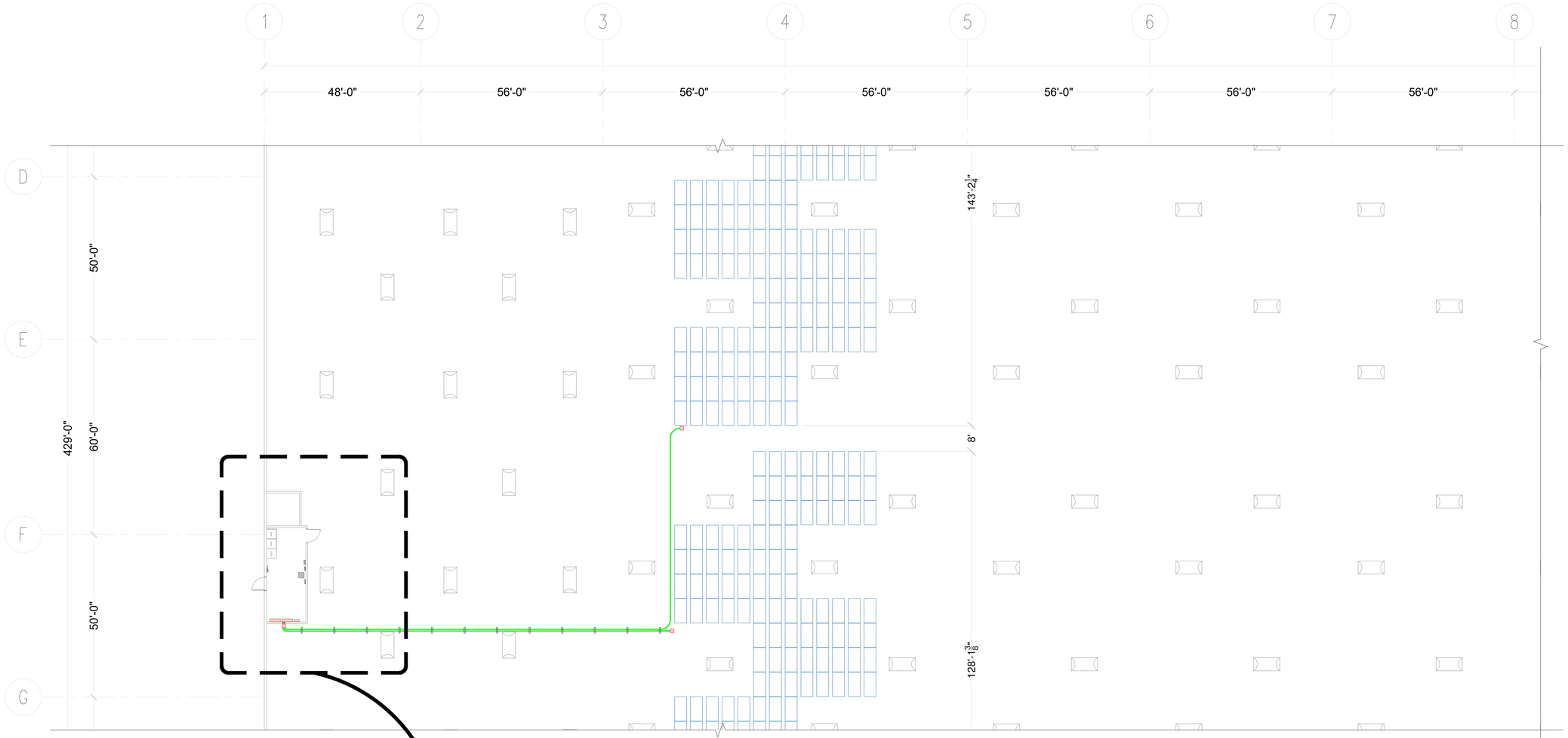

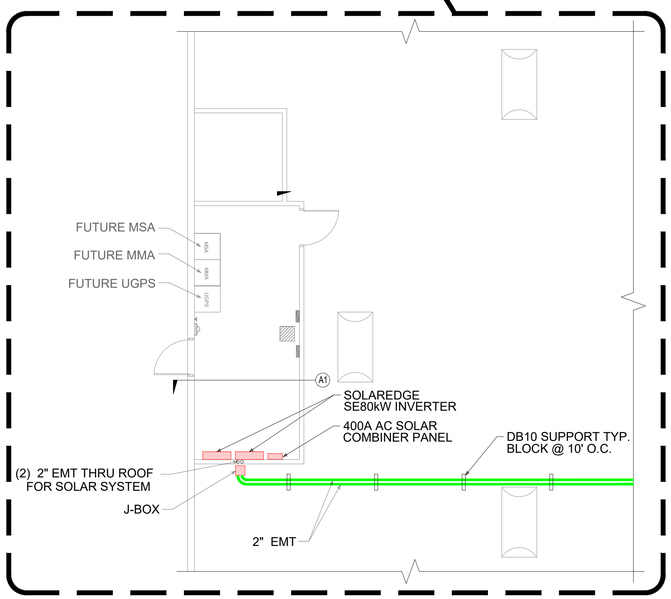

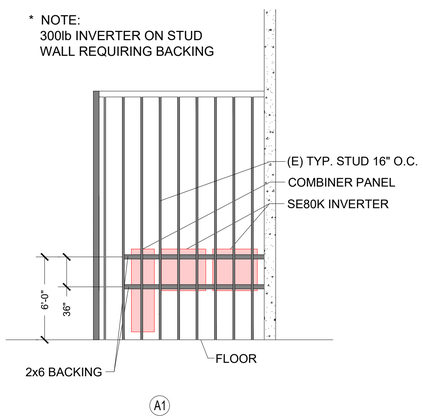

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ELECTRICAL PLAN

SCALE: - NONE

PANELIZED STRUCTURES, INC.
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5731 STODDARD Rd., MODESTO, CA. 95356
NV LIC. #0035215 CA LIC. #652369

Job: MAJESTIC FREEWAY BUSINESS CENTER
BUILDING 11

Location: 18740 HARVILL AVE. PERRIS, CA. 92570

ELECTRIACL PLAN

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DWG DATE: 1-25-23
APPROVALS SENT DATE::
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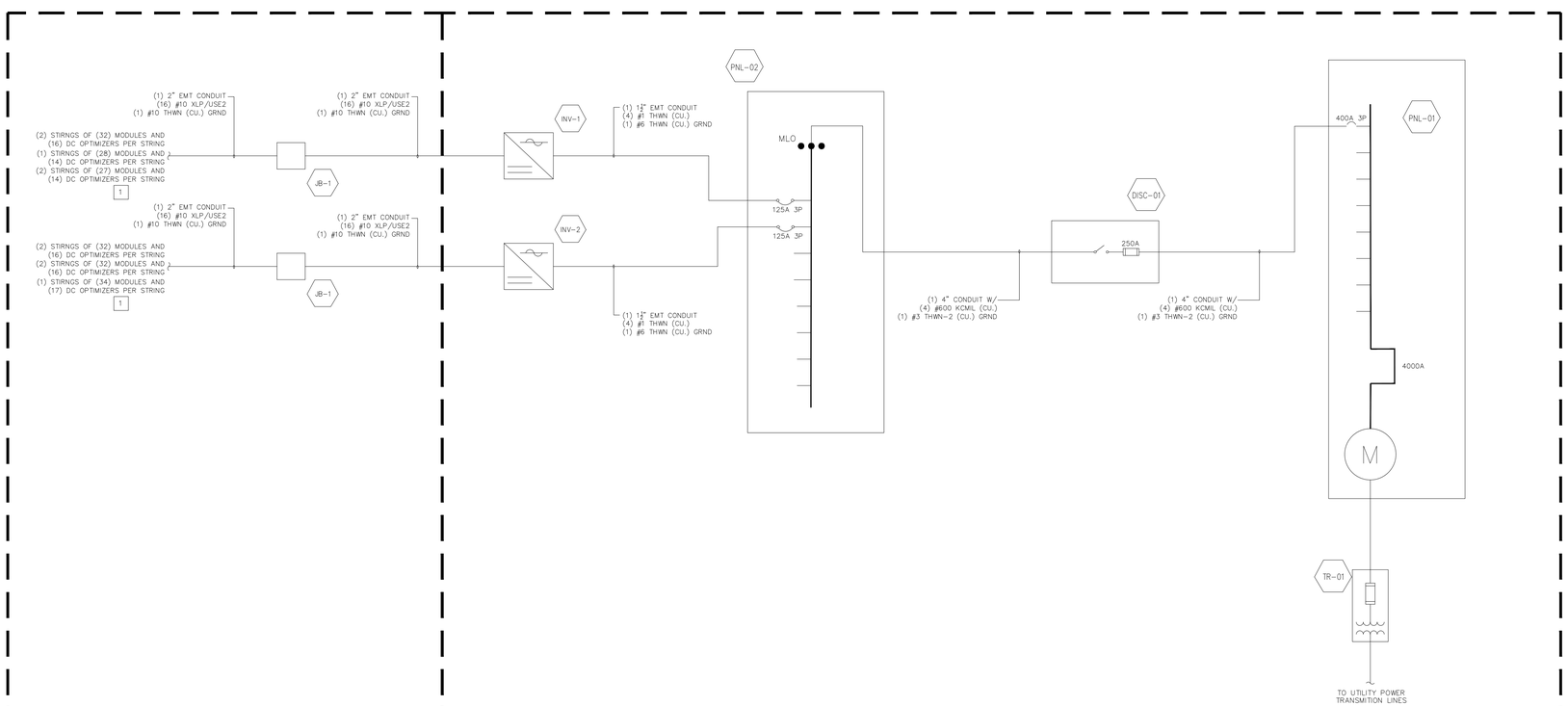
SCALE: NONE
FINAL PLANS DATE:
JOB:

SHEET PV3 OF -

SOLAR SYSTEM EQUIPMENT SUMMARY		
NAME	DESCRIPTION	ELECTRICAL DETAILS
JB-01	JUNCTION BOX @ ROOF TOP	3R, WEATHERPROOF J BOX
PNL-01	(E) 4000A METER/MAIN	4000A MAIN, 480/277V, 3PH, 4W, DIST. 65,000 AIC
PNL-02	(N) PV 400A DISTR.	400A, 480/277V, MLO
TR-01	(E) PAD MOUNT TRANSFORMER	-
INV-01	SE80KUS	80kW, 480/277V, 96.5A
INV-02	SE80KUS	80kW, 480/277V, 96.5A

SOLAR SYSTEM ELECTRICAL SPECIFICATIONS			
DESIGN TEMPERATURES (ASHRAE)			
MINIMUM DESIGN TEMPERATURE (°C)	1	MAXIMUM DESIGN TEMPERATURE (°C)	24
MODULE SPECIFICATIONS			
MAKE & MODEL (QUANTITY)	JA SOLAR – JAM72D30-540/MB (308)		
STC RATING (W)	540W	PTC RATING (W)	–
OPEN CIRCUIT VOLTAGE (V)	49.60V	SHORT CIRCUIT CURRENT (A)	13.86A
MAX. POWER POINT VOLTAGE (V)	41.64	MAX. POWER POINT CURRENT (A)	12.97A
SERIES FUSE RATING (A)	30A	TEMPERATURE COEFFICIENT VOC	-0.275%/°C
MAX. MODULES IN SERIES	28	MAX. DC SYSTEM VOLTAGE (V)	1500V
INVERTER SPECIFICATIONS			
MAKE & MODEL (QUANTITY)	SOLAREDGE SE80KUS (2)		
NOMINAL VOLTAGE (V)	480V	MAX. OUTPUT CURRENT	96.5A

[1] DO NOT CONNECT EITHER POLE OF THE DC CIRCUIT TO THE DC EQUIPMENT GROUNDING CONDUCTOR.



PV SIGNAGE

LABELS FOR INVERTERS

GRID-TIED PHOTOVOLTAIC POWER SOURCE
SOLAREDGE SE80KUS

INVERTER MAX DC OPERATING CURRENT: 96.5 A

INVERTER OPERATING VOLTAGE: 1000 VDC
SYSTEM VOLTAGE: 794 VDC

MAXIMUM INVERTER OUTPUT: 80 kW
96.45 A
480 VAC

LABEL FOR MAIN SERVICE

THIS ELECTRICAL SYSTEM IS ALSO SERVICED BY A PHOTOVOLAIC SYSTEM.

LABEL FOR JUNCTION BOXES, COMBINER BOXES, SOLAR LOAD CENTERS AND DISCONNECTS

WARNING: ELECTRIC SHOCK HAZARD. DO NOT TOUCH TERMINALS. TERMINALS ON BOTH THE LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION.

LABEL FOR INVERTER

WARNING: IF GROUND FAULT IS INDICATED, THE NORMALLY GROUNDED CONDUCTORS MAY BE ENERGIZED AND UN-GROUNGED.

LABEL FOR SOLAR BACK-FED BREAKER

SOLAR INPUT BREAKER

LABEL FOR SOLAR DC DISCONNECT

SOLAR DISCONNECT

BASIC NOTES AND SPECIFICATIONS:

ALL ELECTRICAL SHALL BE INSTALLED IN COMPLIANCE WITH THE 2019 C.E.C., C.B.C., C.P.C., AMD C.M.C.

CONDUITS:
1. ALL UNDERGROUND CONDUITS SHALL BE PVC SCHEDULE 40. ALL UNDERGROUND CONDUITS RAN OUTSIDE OF CONCRETE SLAB SHALL HAVE MIN. 24" COVER.
2. CONDUIT SHALL BE EMT, SCH 40 PVC., OR LIQUID TIGHT FLEXIBLE CONDUIT MAY BE USED FOR FINAL CONNECTIONS TO EQUIPMENT
3. ALL UNDERGROUND CONDUITS TO HAVE WARNING TAPE 12" ABOVE

CONDUCTORS:
1. ALL CONDUCTORS SHALL BE THHN/THWN, COPPER UNLESS NOTED OTHERWISE.
2. ALL GROUNDED PV CONDUCTORS TO BE WHITE IN COLOR
3. 480V NEUTRAL CONDUCTORS TO BE GRAY IN COLOR

DEVICES & EQUIPMENT:
1. ALL EQUIPMENT SHALL BE LISTED BY A NATIONALLY RECONIZED TESTING LABORATORY AND PROPERLY LABELED TO UL STANDARD. CEC artical 110-2

NOTES:

1. COMBINER BOX NEMA 3R SERIES STRING FUSES IN COMBINER BOXES SHALL BE 600 VDC RATED 15 AMP MIDGET STYLE FUSES, LITTELFUSE KLKD OR EQUIVALENT.
2. SERIES STRINGS SHALL BE COMPRISED OF QTY. (30 OR 32) MODULES WIRED IN SERIES. SERIES CONNECTIONS TO BE MADE VIA MODULE QUICK CONNECTS.
3. ALL AC AND DC GROUNDING CONDUCTORS SHALL CONNECT TO THE PREMISES GROUNDING ELECTRODE SYSTEM.
4. INVERTERS ARE EQUIPPED WITH THE CAPACITY TO DETECT AND INTERRUPT DC GROUND FAULTS.
5. NO MORE THAN QTY. (20) PV SERIES STRINGS OUTPUT CONDUCTORS SHALL BE RUN IN THE SAME CONDUIT IN ABOVE GROUND RACEWAY.

SHEET NOTES:

1. ALL SUPPLIED EQUIPMENT IS UL LISTED.
2. EQUIPMENT TO BE INSTALLED PER LISTING OR LABELING AND NEC REQUIREMENTS.
3. EACH MODULE IS GROUNDED TO EACH RACK THROUGH MANUFACTURER PROVIDED PARTS.
4. GROUNDING CONDUCTOR CONNECTED TO EACH RACK ASSEMBLY AND RACEWAY
5. ALL FITTINGS USED OUTDOORS SHALL BE THE CURRENT LISTED RAIN-TIGHT TYPE.

UTILITY NOTES:

1. INSTALLATION SHALL MEET ALL APPLICABLE SAFETY AND PERFORMANCE STANDARDS ESTABLISHED BY THE NEC, IEEE, AND NRTL's SUCH AS UL, AND WHERE APPLICABLE, RULES OF THE PUC REGARDING SAFETY AND RELIABILITY, AS WELL AS MEET ALL UTILITY REQUIREMENTS
2. UTILITY WILL ENSURE THAT THE METERING AT THE POINT OF INTERCONNECTION WILL ACCURATELY MEASURE ELECTRICITY FLOW IN BOTH DIRECTIONS. IF REPLACEMENT IS NECESSARY, THE APPLICANT SHALL BE RESPONSIBLE FOR SUCH COST.
3. APPLICANT SHALL MAKE PROVISION FOR INSTALLATION OF A UTILITY METER DEDICATED TO MEASURING THE OUTPUT OF THE GENERATION (PROVIDE AND INSTALL WIRING AND UTILITY SPECIFIED METER SOCKET AND WIRING). UTILITY WILL REIMBURSE THE CUSTOMER FOR THE REASONABLE ASSOCIATED COST AND WILL PROVIDE THE METER.
4. ARRANGEMENTS UTILIZING TRANSFER SWITCHES OR ALTERNATIVES TO THE ARRANGEMENT SHOWN ABOVE WILL BE CONSIDERED UPON SUBMISSION OF A DIAGRAM AND EXPLANATION OF THE PROPOSED DEVIATIONS.
5. LARGE COMMERCIAL AND INDUSTRIAL CUSTOMERS USING CT STYLE INSTALLATIONS (400 AMPS AND ABOVE) WILL NEED TO CONTACT UTILITY ENGINEERING FOR REQUIREMENTS.
6. BUILT-IN INVERTER DISCONNECT SWITCHES ARE NOT AN ACCEPTABLE ALTERNATIVE TO THE EXTERNAL KNIFE BLADE DC SWITCH

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SINGLE LINE DIAGRAM

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NV LIC. #0035215 CA LIC. #652369

Job: MAJESTIC FREEWAY BUSINESS CENTER
BUILDING 11
Location: 18740 HARVILL AVE. PERRIS, CA. 92570
SINGLE LINE DIAGRAM

NO.	REVISION	DATE
1		
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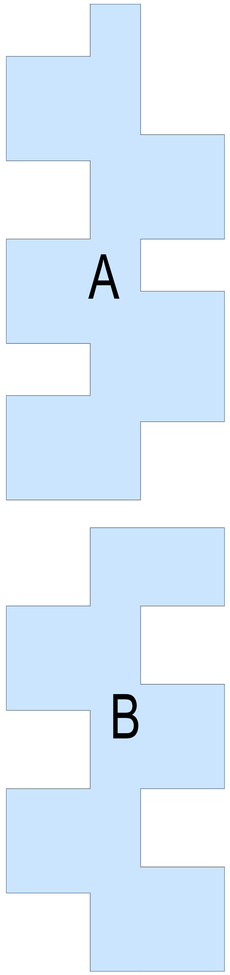
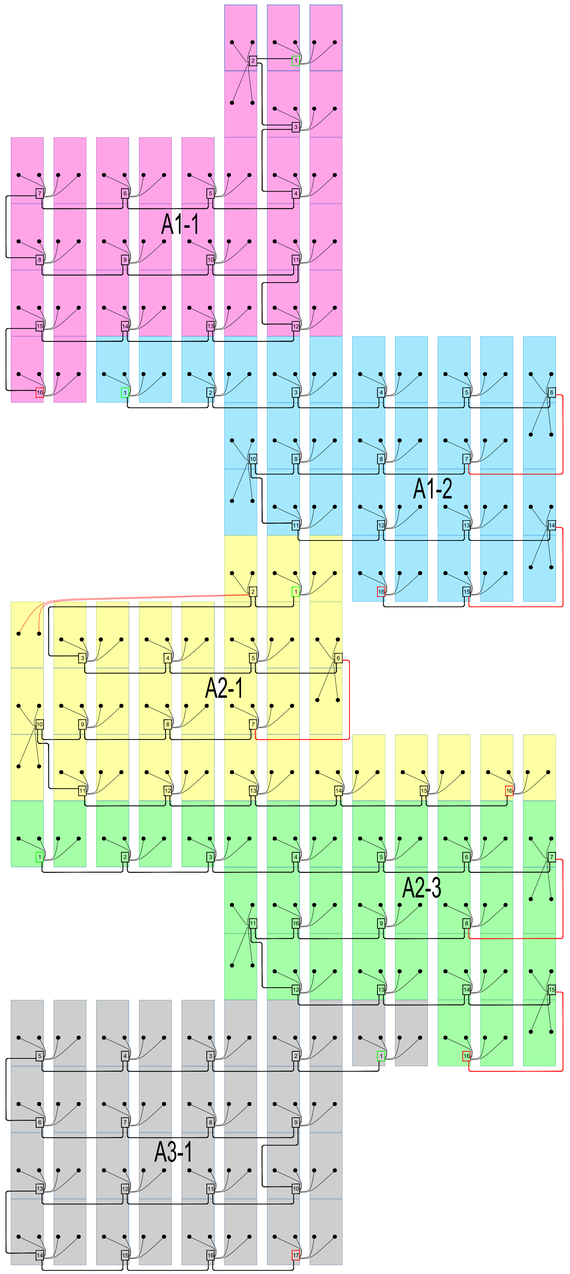
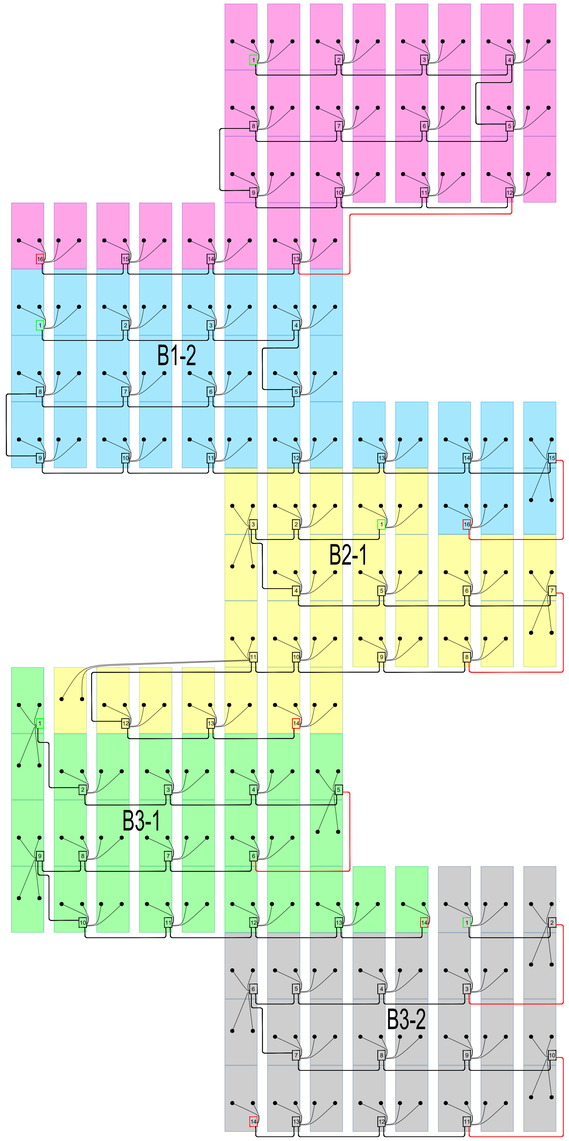
DWG DATE: 1-25-23
APPROVALS SENT DATE::
DRAWN BY: ESD
CHECKED BY: TP
SCALE: NONE
FINAL PLANS DATE:
JOB:

SHEET PV4 OF -





ARRAY A STRINGING



ARRAY B STINGING

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MODULE STRINGING PLAN

SCALE: - NONE

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5731 STODDARD RD. MODESTO, CA. 95356 NV LIC. #0035215 CA LIC. #652369

Job: MAJESTIC FREEWAY BUSINESS CENTER
BUILDING 11
Location: 18740 HARVILL AVE. PERRIS, CA. 92570

MODULE STRINGING PLAN

NO.	REVISION	DATE
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DWG DATE: 1-25-23
APPROVALS SENT DATE::
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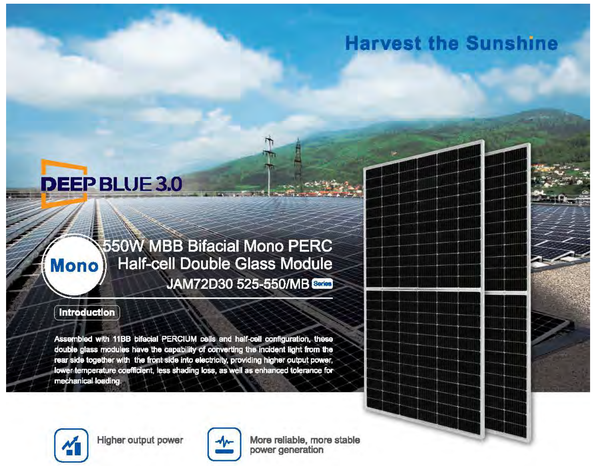
SCALE: NONE
FINAL PLANS DATE:
JOB:

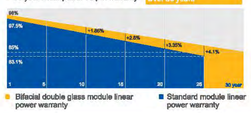
SHEET PV5 OF -



- Higher output power
- More reliable, more stable power generation
- Less shading effect
- Lower temperature coefficient

Superior Warranty

- 12-year product warranty
- 30-year linear power output warranty



- Bifacial double glass module linear power warranty
- Standard module linear power warranty

Comprehensive Certificates

- IEC 61215, IEC 61730,UL 61215, UL 61730
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- ISO 45001: 2018 Occupational health and safety management systems
- IEC TS 62941: 2016 Terrestrial photovoltaic (PV) modules – Guidelines for increased confidence in PV module design qualification and type approval

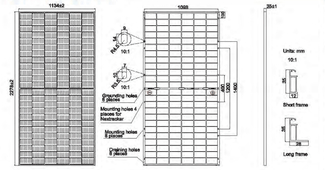
JA SOLAR

www.jasolar.com
Specifications subject to technical changes and tests.
JA Solar reserves the right of final interpretation.

JA SOLAR

JAM72D30 525-550/MB Series

MECHANICAL DIAGRAMS



Remark: customized frame color and cable length available upon request

SPECIFICATIONS

Cell	Mono
Weight	31.8kg±3%
Dimensions	2278±2mm×1134±2mm×35±1mm
Cable Cross Section Size	4mm² (IEC), 12 AWG(UL)
No. of cells	144(6×24)
Junction Box	IP68, 3 diodes
Connector	MC4-EVO2
Cable Length (Including Connector)	Portrait:300mm(+)/400mm(-); Landscape:1300mm(+)/1300mm(-)
Front Glass/Back Glass	2.0mm/2.0mm
Packaging Configuration	31pcs/Pallet 589pcs/40HQ Container

ELECTRICAL PARAMETERS AT STC

TYPE	JAM72D30 -525/MB	JAM72D30 -530/MB	JAM72D30 -535/MB	JAM72D30 -540/MB	JAM72D30 -545/MB	JAM72D30 -550/MB
Rated Maximum Power(Pmax) [W]	525	530	535	540	545	550
Open Circuit Voltage(Voc) [V]	49.15	49.30	49.45	49.60	49.75	49.90
Maximum Power Voltage(Vmp) [V]	41.15	41.31	41.47	41.64	41.80	41.96
Short Circuit Current(Isc) [A]	13.65	13.72	13.79	13.86	13.93	14.00
Maximum Power Current(Imp) [A]	12.76	12.83	12.90	12.97	13.04	13.11
Module Efficiency [%]	20.3	20.5	20.7	20.9	21.1	21.3
Power Tolerance	0~+5W					
Temperature Coefficient of Isc(α_Isc)	+0.045%/°C					
Temperature Coefficient of Voc(β_Voc)	-0.275%/°C					
Temperature Coefficient of Pmax(γ_Pmp)	-0.350%/°C					
STC	Irradiance 1000W/m², cell temperature 25°C, AM1.5G					

Remark: Electrical data in this catalog do not refer to a single module and they are not part of the offer.They only serve for comparison among different module types.

ELECTRICAL CHARACTERISTICS WITH 10% SOLAR IRRADIATION RATIO

TYPE	JAM72D30 -525/MB	JAM72D30 -530/MB	JAM72D30 -535/MB	JAM72D30 -540/MB	JAM72D30 -545/MB	JAM72D30 -550/MB
Rated Max Power(Pmax) [W]	582	587	572	578	583	589
Open Circuit Voltage(Voc) [V]	49.54	49.67	49.80	49.93	50.03	50.21
Max Power Voltage(Vmp) [V]	41.14	41.31	41.47	41.65	41.78	41.95
Short Circuit Current(Isc) [A]	14.61	14.68	14.76	14.83	14.91	14.98
Max Power Current(Imp) [A]	13.65	13.73	13.80	13.88	13.95	14.03
Irradiation Ratio(rear/front)	10%					

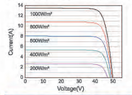
*For NexTracker Installations, Maximum Static Load, Front is 2400Pa while Maximum Static Load, Back is 2400Pa.
**Bifaciality=Pmax,rear/Rated Pmax,front

OPERATING CONDITIONS

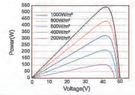
Maximum System Voltage	1500V DC
Operating Temperature	-40°C~+85°C
Maximum Series Fuse Rating	30A
Maximum Static Load,Front* Maximum Static Load,Back*	5400Pa(112 lb/ft²) 2400Pa(50 lb/ft²)
NOCT	45±2°C
Bifaciality**	70%±10%
Fire Performance	UL Type 29

CHARACTERISTICS

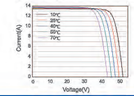
Current-Voltage Curve JAM72D30-540/MB



Power-Voltage Curve JAM72D30-540/MB



Current-Voltage Curve JAM72D30-540/MB



Premium Cells, Premium Modules

Version No. : Global_EN_20211115A

clawFR® 10°

Flat Roof Racking Specialists

PanelClaw® is the only major racking provider in North America focused exclusively on flat roof racking. Our 11+ years of focus on flat roof result in a competitive advantage for our partners. No one knows more about flat roof racking than PanelClaw; no one delivers a more thoroughly tested and reliable platform; and no one matches our level of service. Our mission is to accelerate the deployment of flat roof PV and the best way to do this is to continue to lower its life-cycle cost while maintaining the highest levels of reliability. The clawFR platform is the result of this experience and commitment to flat roof.

PANELCLAW®

SYSTEM COMPONENTS

Applications
< 5° slope flat roofs (up to 7° possible w/engineering review)

Roof Type Compatibility
Membrane, tar and gravel, ballasted, BUR, concrete, asphalt (not compatible with metal roofs)

3 Shade Ratio Options
1.7:1 | 2.0:1 | 2.5:1

Platform Load
~ 2.0 - ~ 12.0 psf

Module Orientation
Landscape

Module Attachment
Airy point flange mounted

Basic Wind Speed
Up to 190 mph
(>190 mph by approval)

Wind Exposure Category
B and C (D required engineering review)

USGS Seismic Categories
A, B, C, D (others require engineering review)

Building Height
No building height limitations

Corrosion Resistance
ZAM coating provides 5x better resistance than G90

Warranty and Certifications
25 year warranty

ANSI/UL 2703-2015 Listed
System Fire Rating
Class A with Type 1 and Type 2 modules

Intelligent Componet Design

- A single Ballast Rail part number covers all compatible 60 and 72 cell modules
- The Base does not change with module changes
- The wind deflector has 2 part numbers that cover all 72 cell module lengths
- The Module Connector and Deflector each have 2 part numbers have cover all compatible 72 cell modules

Safety and Reliability

clawFR has been tested well beyond code requirements in the US. In addition to wind tunnel testing and ANSI/UL 2703-2015 listing, we have completed a battery of reliability and performance tests which can all be found at panelclaw.com.

PANELCLAW®
(978) 688.4900 | sales@panelclaw.com
panelclaw.com Made in USA

Engineered for Speed

- Single M6 bold hardware kit
- No tool module attachment method
- 90 degree single-module tilt-up feature
- Flexible order of operations installation process allows for optimized coordination of building trades on the roof
- Integrated roof protection pads
- 10" plus access ways between modules
- Only 1 ground lug required per array

O&M Features

Construction designed specifically for O&M, and to assist providers

- Recessed Deflector allows for easy access to module connections and optimizer equipment
- ZAM coating with 5x better corrosion resistance than G90
- If mechanical roof attachments are needed, they are always placed in the North/South module gaps for easy O&M inspection

clawFR® 10°

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PANELIZED STRUCTURES, INC.
COMMERCIAL ROOF CONSTRUCTION PHONE (209) 343-8650/FAX (209) 343-8655
5731 STODDARD RD. MODESTO, CA. 95356
NV LIC. #0035215 CA LIC. #652369

Job: MAJESTIC FREEWAY BUSINESS CENTER
BUILDING 11
Location: 18740 HARVILL AVE. PERRIS, CA. 92570
DATASHEETS

NO.	REVISION	DATE
1		
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DWG DATE: 1-25-23
APPROVALS SENT DATE::
DRAWN BY: ESD
CHECKED BY: TP
SCALE: NONE
FINAL PLANS DATE:
JOB:

SHEET PV6 OF -

Three Phase Inverter with Synergy Technology

For the 277/480V Grid for North America

SE80KUS / SE100KUS / SE110KUS/ SE120KUS

Applicable to inverter with Part Numbers	SExxK-US08Ixxxx				
	SE80KUS	SE100KUS	SE110KUS	SE120KUS	
OUTPUT					
Rated AC Active Output Power	80000	100000	110000	120000	W
Maximum AC Apparent Output Power	80000	100000	120000	120000	VA
AC Output Line Connections	3W + PE, 4W + PE				
Supported Grids	WYE: TN-C, TN-S, TN-C-S, TT, IT; Delta: IT				
AC Output Voltage Minimum-Nominal-Maximum[1] (L-N)	244 – 277 – 305				Vac
AC Output Voltage Minimum-Nominal-Maximum[1] (L-L)	422.5 – 480 – 529				Vac
AC Frequency Min-Nom-Max[1]	59.3 – 60 – 60.5				Hz
Maximum Continuous Output Current	96.5	120	145		Aac
GFDI Threshold	1				A
Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds	Yes				
Total Harmonic Distortion	≤ 3				%
Power Factor Range	+/-0.2 to 1				
INPUT					
Maximum DC Power (Module STC) Inverter / Synergy Unit	120000 / 60000	150000 / 50000	180000 / 60000		W
Transformer-less, Ungrounded	Yes				
Maximum Input Voltage DC+ to DC-	1000				Vdc
Operating Voltage Range	850 – 1000				Vdc
Maximum Input Current	2 x 48.25	3 x 40	3 x 48.25		Adc
Reverse-Polarity Protection	Yes				
Ground-Fault Isolation Detection	167kΩ sensitivity per Synergy Unit[2]				
CEC Weighted Efficiency	98.5				%
Nighttime Power Consumption	< 8	< 12			W
ADDITIONAL FEATURES					
Supported Communication Interfaces[3]	2x RS485, Ethernet, Wi-Fi (optional), Cellular (optional)				
Smart Energy Management	Export Limitation				
Inverter Commissioning	With the SetApp mobile application using built-in Wi-Fi access point for local connection				
Arc Fault Protection	Built-in, User Configurable (According to UL1699B)				
Photovoltaic Rapid Shutdown System	NEC 2014, 2017 and 2020, Built-in				
PID Rectifier	Nighttime, built-in				
RS485 Surge Protection (ports 1+2)	Type II, field replaceable, integrated				
AC, DC Surge Protection	Type II, field replaceable, integrated				
DC Fuses (Single Pole)	25A, integrated				
DC SAFETY SWITCH					
DC Disconnect	Built-in				
STANDARD COMPLIANCE					
Safety	UL1699B, UL1741, UL1741 SA, UL1998, CSA C22.2#107.1, Canadian AFCI according to T.I.L. M-07				
Grid Connection Standards	IEEE 1547, Rule 21, Rule 14 (HI)				
Emissions	FCC part 15 class A				

(1) For other regional settings please contact SolarEdge support
(2) Where permitted by local regulations
(3) For specifications of the optional communication options, visit https://www.solaredge.com/products/communication or the Resource Library webpage: https://www.solaredge.com/downloadself, to download the relevant product datasheet

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CE RoHS

Three Phase Inverter with Synergy Technology

For the 277/480V Grid for North America

SE80KUS / SE100KUS / SE110KUS/ SE120KUS

Applicable to inverter with Part Numbers	SExxK-US08Ixxxx				
	SE80KUS	SE100KUS	SE110KUS	SE120KUS	
INSTALLATION SPECIFICATIONS					
Number of Synergy Units per Inverter	2	3			
AC Max Conduit Size	2 ½"				in
Max AWG Line / PE	4/0 / 1/0				
DC Max Conduit Size	1 x 3" ; 2 x 2"				in
DC Input Inverter / Synergy Unit	4 pairs: 6-12 AWG	12 / 4 pairs; 6-12 AWG			
Dimensions (H x W x D)	Synergy Unit: 22 x 12.9 x 10.75 / 558 x 328 x 273 Synergy Manager: 14.17 x 22.4 x 11.6 / 360 x 560 x 295				in/m
Weight	Synergy Unit: 70.4 / 32 Synergy Manager: 39.6 / 18				lb/kg
Operating Temperature Range	-40 to +140 / -40 to +60[4]				F / °C
Cooling	Fan (user replaceable)				dBA
Noise	< 67				
Protection Rating	NEMA 3R				
Mounting	Brackets provided				

(4) For power de-rating information refer to https://www.solaredge.com/sites/default/files/se-temperature-derating-note.pdf

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CE RoHS

Three Phase Inverter

with Synergy Technology

For the 277/480V Grid for North America

SE80KUS / SE100KUS / SE110KUS / SE120KUS

INVERTERS

Powered by unique pre-commissioning process for rapid system installation

- Pre-commissioning feature for automated validation of system components and wiring during the site installation process and prior to grid connection
- Easy 2-person installation with lightweight, modular design (each inverter consists of 2 or 3 Synergy units and one Synergy Manager)
- Independent operation of each Synergy unit enables higher uptime and easy serviceability
- Built-in thermal sensors detect faulty wiring ensuring enhanced protection and safety
- Built-in arc fault protection and rapid shutdown
- Built-in PID mitigation for maximized system performance
- Monitored* and field-replaceable surge protection devices, to better withstand surges caused by lightning or other events
- Built-in module-level monitoring with Ethernet or cellular communication for full system visibility

*Applicable only for DC and AC SPDs

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Three Phase Inverters for the 277/480V Grid[1]

for North America

SE30KUS / SE40KUS

MODEL NUMBER APPLICABLE TO INVERTERS WITH PART NUMBER	SE30KUS	SE40KUS SEXXK-USX8IXXXX	UNITS
OUTPUT			
Rated AC Power Output	30000	40000	W
Maximum Apparent AC Output Power	30000	40000	VA
AC Output Line Connections	3W + PE, 4W + PE		
AC Output Voltage Minimum-Nominal-Maximum[2] (L-N)	244 – 277 – 305		Vac
AC Output Voltage Minimum-Nominal-Maximum[2] (L-L)	422.5 – 480 – 529		Vac
AC Frequency Min-Nom-Max[2]	59.3 – 60 – 60.5		Hz
Maximum Continuous Output Current (per Phase)	36.25	48.25	Aac
GFDI Threshold	1		A
Utility Monitoring, Islanding Protection, Country Configurable Set Points	Yes		
Total Harmonic Distortion	≤ 3		%
Power Factor Range	+/- 0.85 to 1		
INPUT			
Maximum DC Power (Module STC)	52500	70000	W
Transformer-less, Ungrounded	Yes		
Maximum Input Voltage DC+ to DC-	1000		Vdc
Operating Voltage Range	840 – 1000		Vdc
Maximum Input Current	36.25	48.25	Adc
Maximum Input Short Circuit Current	55		Adc
Reverse-Polarity Protection	Yes		
Ground-Fault Isolation Detection	167kΩ Sensitivity[3]		
CEC Weighted Efficiency	98.5		%
Night-time Power Consumption	<4		W
ADDITIONAL FEATURES			
Supported Communication Interfaces	2 x RS485, Ethernet, Cellular (optional)		
Inverter Commissioning	With the SetApp mobile application using built-in access point for local connection		
Arc Fault Protection	Integrated, User Configurable (According to UL1699B)		
Rapid Shutdown	NEC2014, NEC2017 and NEC2020 compliant/certified		
RS485 Surge Protection Plug-in	Supplied with the inverter, Built-in		
DC Surge Protection	Type II, field replaceable, Built-in		
AC Surge Protection	Type II, field replaceable, Built-in		
DC Fuses (Single Pole)	25A, Built-in		
Smart Energy Management	Export Limitation		
DC SAFETY SWITCH			
DC Disconnect	Integrated		
STANDARD COMPLIANCE			
Safety	UL1741, UL1741 SA, UL1741 SB, UL1699B, CSA C22.2, Canadian AFCI according to T.I.L. M-07		
Grid Connection Standards	IEEE1547-2018, Rule 21, Rule 14 (HI)		
Emissions	FCC Part 15 class A		
INSTALLATION SPECIFICATIONS			
AC Output Conduit Size / AWG Range	¾" or 1" / 6 – 10 AWG		
DC Input Conduit Size / AWG Range	¾" or 1" / 6 – 12 AWG		
Number of DC Inputs Pairs	4		
Dimensions with Safety Switch (H x W x D)	31.8 x 12.5 x 11.8 / 808 x 317 x 300		in / mm
Weight with Safety Switch	78.2 / 35.5		lb / kg
Cooling	Fans (user replaceable)		
Noise	< 62		dBA
Operating Temperature Range	-40 to +140 / -40 to +60(4)		°F / °C
Protection Rating	NEMA 3R		
Mounting	Bracket provided		

(1) For 120/208V inverters refer to the Three Phase Inverters for the 120/208V Grid for North America datasheet
(2) For other regional settings please contact SolarEdge support.
(3) Where permitted by local regulations.
(4) For power de-rating information refer to the Temperature De-rating – Technical Note (North America)

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CE

The best choice for SolarEdge enabled systems

- Specifically designed to work with power optimizers
- Quick and easy inverter commissioning directly from a smartphone using SolarEdge SetApp
- Fixed voltage inverter for superior efficiency (98.5%) and longer strings
- Built-in type 2 DC and AC Surge Protection, to better withstand lightning events
- Small, lightest in its class, and easy to install outdoors or indoors on provided bracket
- Integrated arc fault protection and rapid shutdown for NEC 2014 and 2017, per articles 690.11 and 690.12
- Built-in module level monitoring with Ethernet, wireless, or cellular communication for full system visibility
- Integrated safety switch
- UL1741 SA and SB certified, for CPUC Rule 21 grid compliance

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Power Optimizer

For North America

P1101

POWER OPTIMIZER

PV power optimization at the module level

The most cost-effective solution for commercial and large field installations

- Specifically designed to work with SolarEdge inverters
- Up to 25% more energy
- Superior efficiency (99.5%)
- Balance of System cost reduction; 50% less cables, fuses, and combiner boxes; over 2x longer string lengths possible
- Fast installation with a single bolt
- Advanced maintenance with module-level monitoring
- Module-level voltage shutdown for installer and firefighter safety
- Meets NEC requirements for arc fault protection (AFCI) and Photovoltaic Rapid Shutdown System (PVRSS)

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Power Optimizer

For North America

P1101

Power Optimizer Model (Typical Module Compatibility)	P1101 (for up to 2 x high power or bi-facial modules)	Units
INPUT		
Rated Input DC Power[(1)]	1100	W
Connection Method	Single input for series connected modules	
Absolute Maximum Input Voltage (Voc at lowest temperature)	125	Vdc
MPPT Operating Range	12.5 – 105	Vdc
Maximum Short Circuit Current (Isc)	14.1	Adc
Maximum Short Circuit Current per Input (Isc)	-	Adc
Maximum Efficiency	99.5	%
Weighted Efficiency	98.6	%
Overvoltage Category	II	
OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREDGE INVERTER)		
Maximum Output Current	15	Adc
Maximum Output Voltage	80	Vdc
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREDGE INVERTER OR SOLAREDGE INVERTER OFF)		
Safety Output Voltage per Power Optimizer	1 ± 0.1	Vdc
STANDARD COMPLIANCE		
Photovoltaic Rapid Shutdown System	Compliant with NEC 2014, 2017, 2020	
EMC	FCC Part 15 Class A, IEC61000-6-2, IEC61000-6-3	
Safety	IEC62109-1 (class II safety), UL1741, UL3741	
Material	UL94 V-0, UV resistant	
RoHS	Yes	
INSTALLATION SPECIFICATIONS		
Compatible SolarEdge Inverters	All commercial three phase inverters	
Maximum Allowed System Voltage	1000	Vdc
Dimensions (W x L x H)	129 x 162 x 59 / 5.1 x 6.4 x 2.32	mm / in
Weight	1064 / 2.34	gr / lb
Input Connector	MC4[(2)]	
Input Wire Length Options: 1 / 2 / 3	1.6 / 5.2	m / ft
Output Wire Type / Connector	Double-insulated; MC4	
Output Wire Length	2.4 / 7.8	m / ft
Operating Temperature Range[(3)]	-40 to +85 / -40 to +185	°C / °F
Protection Rating	IP68 / NEMA6P	
Relative Humidity	0 – 100	%

(1) Rated power of the module at STC will not exceed the Power Optimizer "Rated Input DC Power". Modules with up to +5% power tolerance are allowed.
(2) For other connector types please refer to the Power Optimizer Input Connector Compatibility Technical Note.
(3) For ambient temperatures above +70°C / +158°F power de-rating is applied. Refer to Power Optimizer De-Rating Application Note for more details.

PV System Design Using a SolarEdge Inverter[4][5][6]		208V Grid SE10K	208V Grid SE17.3K*	277/480V Grid SE33K	277/480V Grid SE40K*	
Compatible Power Optimizers		P1101				
Minimum String Length	Power Optimizers	8	10	14	14	
	PV Modules	15	19	27	27	
Maximum String Length	Power Optimizers	30	30	30	30	
	PV Modules	60	60	60	60	
Maximum Continuous Power per String		7200	8820	15300	15300	W
Maximum Allowed Connected Power per String[(6)]		1 string – 8400 2 strings or more – 9800	1 string – 10020 2 strings or more – 12020	1 string – 17550 2 strings or more – 20300	2 strings or less – 17550 3 strings or more – 20300	W
Parallel Strings of Different Lengths or Orientations		Yes				
Maximum Difference in Number of Power Optimizers Allowed Between the Shortest and Longest String Connected to the Same Inverter Unit		5 Power Optimizers				

* The same rules apply for Synergy units of equivalent power ratings, that are part of the modular Synergy Technology inverter.
(4) For each string, a Power Optimizer may be connected to a single PV module if 1) each Power Optimizer is connected to a single PV module or 2) it is the only Power Optimizer connected to a single PV module in the string.
(5) Design with three phase 208V inverters is limited. Use the SolarEdge Designer for verification.
(6) To connect more STC power per string, design your project using SolarEdge Designer.

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RoHS Intertek

DATASHEETS

SCALE: - NONE

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5731 STODDARD RD. MODESTO, CA. 95356 NV LIC. #0035215 CA LIC. #652369

Job: MAJESTIC FREEWAY BUSINESS CENTER BUILDING 11

Location: 18740 HARVILL AVE. PERRIS, CA. 92570

DATASHEETS

NO.	REVISION	DATE
1		
2		
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DWG DATE: 1-25-23

APPROVALS SENT DATE::

DRAWN BY: ESD

CHECKED BY: TP

SCALE: NONE

FINAL PLANS DATE:

JOB:

SHEET PV7 OF -

Site Design Criteria - Flat Roof PV System Basis of Design	
Roof Live Load (psf)	20(see footnote 1)
Ground Snow Pg (psf)	0
Flat Roof Snow Pf (psf)	0
Snow Importance Factor (Is)	1.0
Wind Design Data	
Basic Wind Speed (mph)	96
Risk Category	II
Wind Exposure	C
Earthquake Design Data	
Risk Category	II
Importance Factor (Ie)	1.00
Component Importance Factor (Ip)	1.0
Mapped Acceleration Parameter (Ss)	1.500
Mapped Acceleration Parameter(S1)	0.566
Seismic Site Class	D
Design Spectral Acceleration Parameter (Sds)	1.200
Design Spectral Acceleration Parameter (Sd1)	0.654
Seismic Design Category (SDC)	D
Basic seismic-force-resisting system(s)	ASCE 7 sec. 13.6.12
Base Design Shear = Fp x W	0.58 W
Response Modification Factor (R)	2.5
Analysis Procedure	ASCE 7 sec. 13.6.12
Design Code (with local amendments)	2022 CBC
-	ASCE 7 - 16
ALTERNATE DESIGN METHOD	
-	SEAOC PV2

1. Roof Live Load only applicable to areas not covered by PV modules. Reference SEAOC Design Guidelines

GENERAL NOTES:

1. ALL SITE, PROJECT, AND BUILDING DETAILS ARE PROVIDED BY CUSTOMER OR GENERATED VIA SATELLITE IMAGERY FROM INFORMATION PROVIDED BY CUSTOMER. PANELCLAW IS NOT RESPONSIBLE FOR SITE INACCURACIES THAT COULD LEAD TO CHANGES TO THESE DRAWING DETAILS AND ARRAY LAYOUT CONFIGURATIONS. ALL INFORMATION CONTAINED WITHIN THESE DOCUMENTS ARE TO BE FIELD VERIFIED BY CUSTOMER AND INSTALLER. ANY CHANGES OR MODIFICATIONS TO THESE DOCUMENTS, CONTAINED INFORMATION, OR FINAL ARRAY AND MOUNTING SYSTEM INSTALLATIONS MUST BE SUBMITTED TO PANELCLAW AND OTHER PROJECT AUTHORITIES FOR APPROVAL.
2. REFER TO AND FOLLOW THE APPROPRIATE PANELCLAW INSTALLATION MANUALS AND PROCEDURES DURING THE INSTALLATION PROCESS. NOT FOLLOWING SUCH PROCEDURES AND METHODS COULD RESULT IN DAMAGE TO THE COMPONENTS OR MAY VOID THE PRODUCT WARRANTY.
3. ARRAY SETBACKS: ALL ARRAYS ARE REQUIRED TO BE SETBACK 4-FEET FROM ALL ROOF EDGES UNLESS OTHERWISE SPECIFIED AND CALLED OUT ON THE ARRAY DIAGRAMS ON THIS PAGE OR ON ADDITIONAL ARRAY BALLAST PAGES
4. REFER TO THE SPECIFIC ARRAY BALLAST SHEETS FOR BALLASTING REQUIREMENTS BASED ON THE PROVIDED SITE INFORMATION
5. SYSTEM PSF INCLUDES ALL PANELCLAW RACKING COMPONENTS, MECHANICAL ATTACHMENTS (IF APPLICABLE), PV MODULE AND BALLAST BLOCKS. FOR MAXIMUM SYSTEM POINT LOAD SUMMARY (PLS), REFER TO CALCULATIONS.
6. PANELCLAW AND/OR PANELCLAW CONSULTING ENGINEERS ARE NOT RESPONSIBLE FOR DETERMINING THE ADEQUACY OF THE STRUCTURE TO SUPPORT LOADS IMPOSED BY THE ARRAY AND MOUNTING SYSTEM. SUPPORT STRUCTURE TO BE CHECKED BY OTHERS
7. ALWAYS ALLOW 6" CLEARANCE BETWEEN NEIGHBORING SUBARRAYS, 6" BETWEEN SUBARRAYS AND ALL FIXED ROOF OBJECTS AND 4' BETWEEN SUBARRAYS AND ROOF EDGES. REFER TO LOCAL FIRE CODES AND ELECTRICAL CODES FOR ADDITIONAL REQUIREMENTS WHICH MAY GOVERN DESIGN. SUBARRAYS THAT USE A SEISMIC ANALYSIS METHOD OF DELTA MPV PER SEAOC OR ASCE 7-16 HAVE THEIR OWN CLEARANCE REQUIREMENTS. REFER TO THE BALLAST LAYOUT SHEETS WITHIN THIS DOCUMENT FOR DETAILS.
8. BALLAST BLOCK DIMENSIONS MUST CONFORM TO THE FOLLOWING SPECIFICATIONS: 3-3/4" THICK MAX., 7-5/8" ± 1/8" WIDTH, 15-5/8" ± 1/8" LENGTH.
9. IF AN ARRAY CLEARANCES TABLE APPEARS BELOW ON THIS PAGE, THE DESIGN UTILIZES THIRD PARTY SEISMIC NON-LINEAR RESPONSE ANALYSIS TO ESTIMATE MAXIMUM ARRAY SEISMIC DISPLACEMENT. THE PREDICTED MOVEMENT IS ONLY AN ESTIMATE. PANELCLAW IS NOT RESPONSIBLE OR LIABLE FOR ANY DAMAGES OR COSTS ASSOCIATED WITH PV ARRAY MOVEMENT INCLUDING MOVEMENT IN EXCESS OF THE CLEARANCES NOTED IN THIS DOCUMENT OR ANY REQUIREMENT TO REPOSITION THE ARRAYS IF MOVEMENT OCCURS.
10. DEFLECTORS MUST BE INSTALLED WHEN WINDS ARE EXPECTED TO EXCEED APPROX. 25% OF WIND SPEED DOCUMENTED IN SITE DESIGN CRITERIA TABLE. DEFLECTORS ARE REQUIRED ON ALL MODULES UNLESS OTHERWISE NOTED ON BALLAST LAYOUT PAGES.

SHEET INDEX	
NO.	DESCRIPTION
PC-1	COVER SHEET
PC-2	PROJECT SUMMARY
PC-3	ARRAY SITE MAP
PC-4	TYPICAL ARRAY DIMENSIONS
PC-5	ASSEMBLIES
PC-6	RACKING COMPONENTS
PC-7	BALLAST LEGEND
PC-8 TO PC-9	BALLAST LAYOUT - 1 TO 2

REQUIRED ARRAY CLEARANCES PER ASCE 7-16		
CONDITION	**MINIMUM SEPARATION**	**DISTANCE (IN.)**
BETWEEN SEPARATE SOLAR ARRAYS OF SIMILAR CONSTRUCTION	(0.5) (Mpv)	6
BETWEEN A SOLAR ARRAY AND A FIXED OBJECT ON THE ROOF OR SOLAR ARRAY OF DIFFERENT CONSTRUCTION	(Mpv)	11
BETWEEN A SOLAR ARRAY AND A ROOF EDGE WITH A QUALIFYING PARAPET	(Mpv)	11
BETWEEN A SOLAR ARRAY AND A ROOF EDGE WITHOUT A QUALIFYING PARAPET	(2.0) (Mpv) >= 4ft	48
NOTE: SUFFICIENT SLACK IN ARRAY ELECTRICAL WIRING MUST BE PROVIDED TO ACCOMMODATE ALL POTENTIAL ARRAY MOVEMENT.		

THIS CONSTRUCTION SET PROVIDES THE RACKING LAYOUT FOR ALL ARRAYS WITH NUMBER OF BALLAST BLOCKS AND/OR MECHANICAL ATTACHMENTS BASED ON THE APPROVED STRUCTURAL CALCULATIONS FOR THE COMPLETED INSTALLED CONDITION OF THE SOLAR ARRAY. THE INSTALLER IS RESPONSIBLE FOR THE SAFETY AND CARE OF THE ARRAY DURING ALL PHASES OF INSTALLATION. THEREFORE, THE INSTALLER MUST MONITOR THE WEATHER FORECAST AND TAKE NECESSARY PRECAUTIONS (SEE GENERAL NOTE #10) TO TEMPORARILY SHORE/BRACE ALL ARRAYS DURING CONSTRUCTION UNTIL INSTALLATION IS COMPLETED IN CONFORMANCE WITH THIS APPROVED CONSTRUCTION SET AND THE PRODUCT INSTALLATION MANUAL (SEE GENERAL NOTE #2). THE INSTALLER HAS SOLE RESPONSIBILITY FOR THE MEANS, METHODS, AND TECHNIQUES OF CONSTRUCTION OF THE SOLAR ARRAY FOR COMPLIANCE WITH LAWS, REGULATIONS, AND CODES, AND FOR THE SAFETY OF CONSTRUCTION APPLICABLE TO THIS WORK.

APPROVED FOR CONSTRUCTION

STAMP:

REGISTERED PROFESSIONAL ENGINEER
TROY E. TURLEY
S 4993
STRUCTURAL
STATE OF CALIFORNIA
3/16/2023

THIS DRAWING HAS BEEN PREPARED BY OTHERS AND REVIEWED BY:

CARUSO TURLEY SCOTT, INC.
CONSULTING STRUCTURAL ENGINEERS
FOR CORRECTNESS OF STRUCTURAL ITEMS ONLY
CTS PROJECT NUMBER 23-0242-2706

PANELCLAW®

RACKING CONSTRUCTION SET

1600 OSGOOD ST. SUITE 2023
NORTH ANDOVER, MA 01845
TEL: 978.688.4900
www.panelclaw.com

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REV	DESCRIPTION	DATE	CHECK	PREP
0	Initial Ballast Map Layout	2023-03-08		RH

SCALE:
0" 1/2" 1" 2"
ORIGINAL SIZE 36"X24"
SHEET SIZE ARCH "D"

PREPARED FOR:
Panelized Structures Inc.

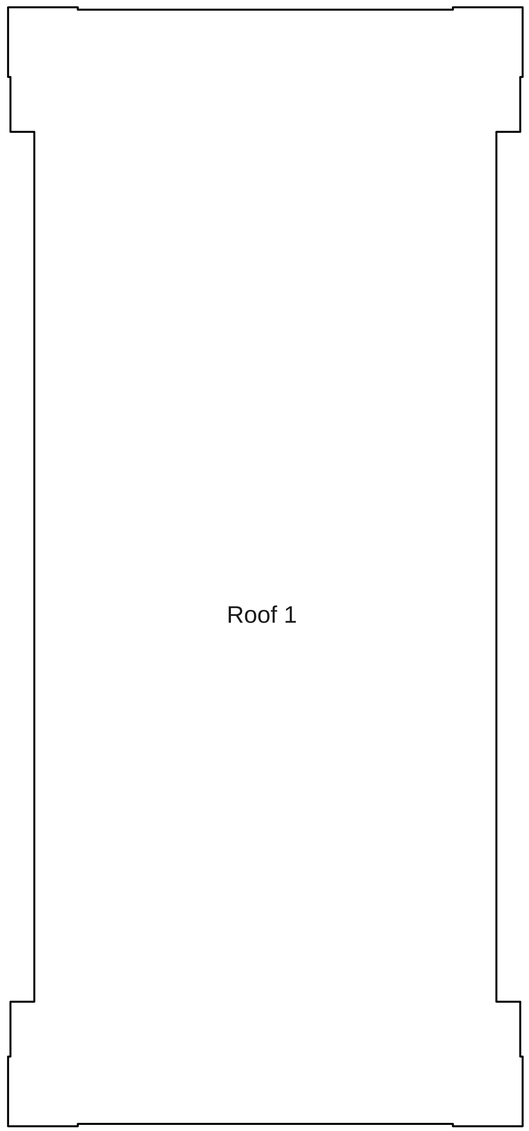
PROJECT:
Majestic Freeway Business Center 11

LOCATION:
18740 Harvill Avenue, Perris, CA, USA

SHEET TITLE:
COVER SHEET

REVISION: 0

SHEET: PC-1



SITE MAP

SCALE: NTS

A
PC-2

PROJECT SUMMARY	
MODULE TYPE	JA SOLAR JAM72D30-540/MB
MODULE DIMENSIONS (IN.)	89.69 X 44.65 X 1.38
NUMBER OF MODULES	308
MODULE WATTAGE (W STC)	540
SYSTEM SIZE (kW STC)	166.32
SYSTEM WEIGHT (LB)	36018
SYSTEM AREA (SQ FT.)	11161
AGGREGATE SYSTEM LOAD (PSF)	3.23
NUMBER OF ARRAYS	2
ARRAY TILT (DEG)	8.98

clawFR 10 Degree - 35 cm

PROJECT PART QUANTITY

ITEM	PART NUMBER	QTY
Base	500050203	688
BASE, 03, CFR		
Module Connector	500050704	616
MODULE CONNECTOR, 1150, 10D, CFR		
Rail	2000895	798
RAIL, 2500, CFR		
Cam	5000500	616
CAM, 10D, CFR		
Cam Claw	2000673	616
CAM CLAW, CFR		
Deflector	200088705	308
DEFLECTOR, 10D, 2300, CFR		
Bolt	2000697	3016
BLT, HEX FLG, TRI, M6X16, GR8.8, PATCH		
Base Pad	2000678	0
PAD, BASE, CFR		
CONCRETE MASONRY UNIT	N/A	295
BLOCK, CONCRETE, 32.6 LB. - Xin x 8in x 16in NOMINAL, PARTNER SUPPLIED, SEE INSTALLATION MANUAL		

APPROVED FOR CONSTRUCTION

STAMP:

REGISTERED PROFESSIONAL ENGINEER
TROY E. TURLEY
S 4993
STRUCTURAL
STATE OF CALIFORNIA

3/16/2023

THIS DRAWING HAS BEEN PREPARED BY OTHERS AND REVIEWED BY:

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CONSULTING STRUCTURAL ENGINEERS
FOR CORRECTNESS OF STRUCTURAL ITEMS ONLY
CTS PROJECT NUMBER 23-0242-2706

PANELCLAW®

RACKING CONSTRUCTION SET

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REV	DESCRIPTION	DATE	PREP	CHECK
0	Initial Ballast Map Layout	2023-03-08	RH	

SCALE:
0" 1/2" 1" 2"
ORIGINAL SIZE 36"X24"
SHEET SIZE ARCH "D"

PREPARED FOR:
Panelized Structures Inc.

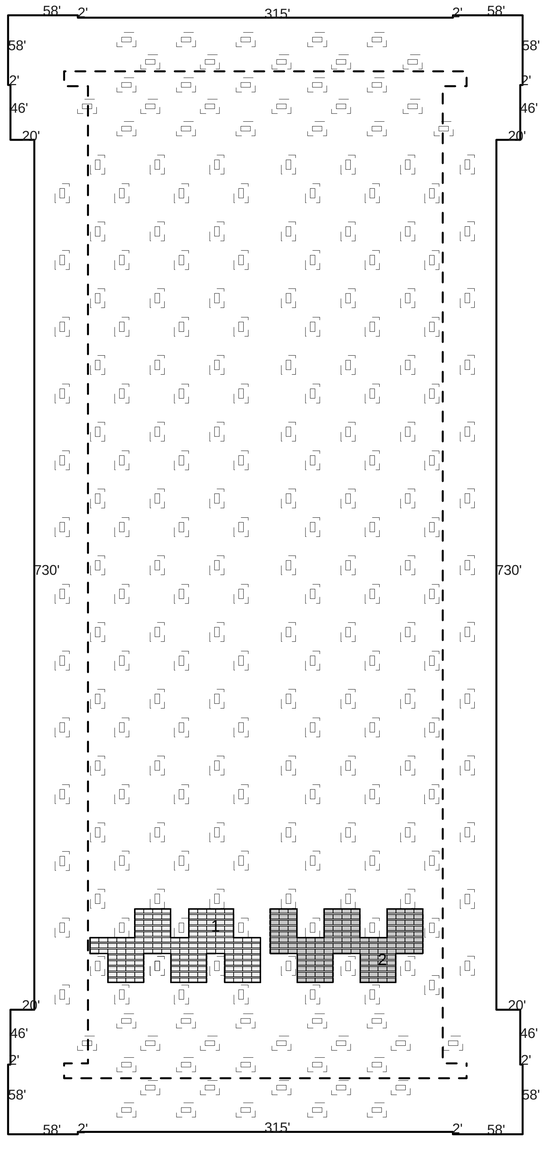
PROJECT:
Majestic Freeway Business Center 11

LOCATION:
18740 Harvill Avenue, Perris, CA, USA

SHEET TITLE:
PROJECT SUMMARY

REVISION: 0

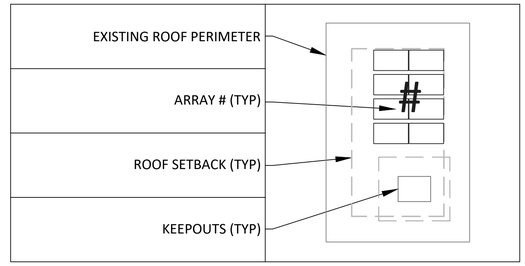
SHEET: PC-2



ARRAY SITE MAP

SCALE: NTS

A
PC- 3

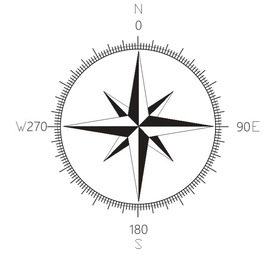


ROOF NAME	ROOF SETBACK (FT.)	ROOF HEIGHT (FT)	PARAPET HEIGHT (FT)	ROOF TILT (DEG)
Roof 1	45.00	45.00	4.0	2

KEEPOUT NAME	KEEPOUT CLEARANCE (FT.)	KEEPOUT HEIGHT (IN.)
Group 1	4	36

NOTES:

1. ALL DIMENSIONS SHOWN ARE BASED UPON INFORMATION PROVIDED TO PANELCLAW. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION OF THE SOLAR ARRAY. NOTIFY PANELCLAW OF ANY DISCREPANCIES.



APPROVED FOR CONSTRUCTION

STAMP:

REGISTERED PROFESSIONAL ENGINEER
TROY E. TURLEY
S 4993
STRUCTURAL
STATE OF CALIFORNIA

3/16/2023

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FOR CORRECTNESS OF STRUCTURAL ITEMS ONLY
CTS PROJECT NUMBER 23-0242-2706

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REV	DESCRIPTION	PREP	CHECK	DATE
0	Initial Ballast Map Layout	RH		2023-03-08

SCALE:

0" 1/2" 1" 2"

ORIGINAL SIZE 36"X24"
SHEET SIZE ARCH "D"

PREPARED FOR:

Panelized Structures Inc.

PROJECT:

Majestic Freeway Business Center 11

LOCATION:

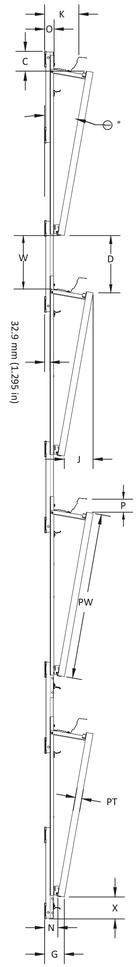
18740 Harvill Avenue, Perris, CA, USA

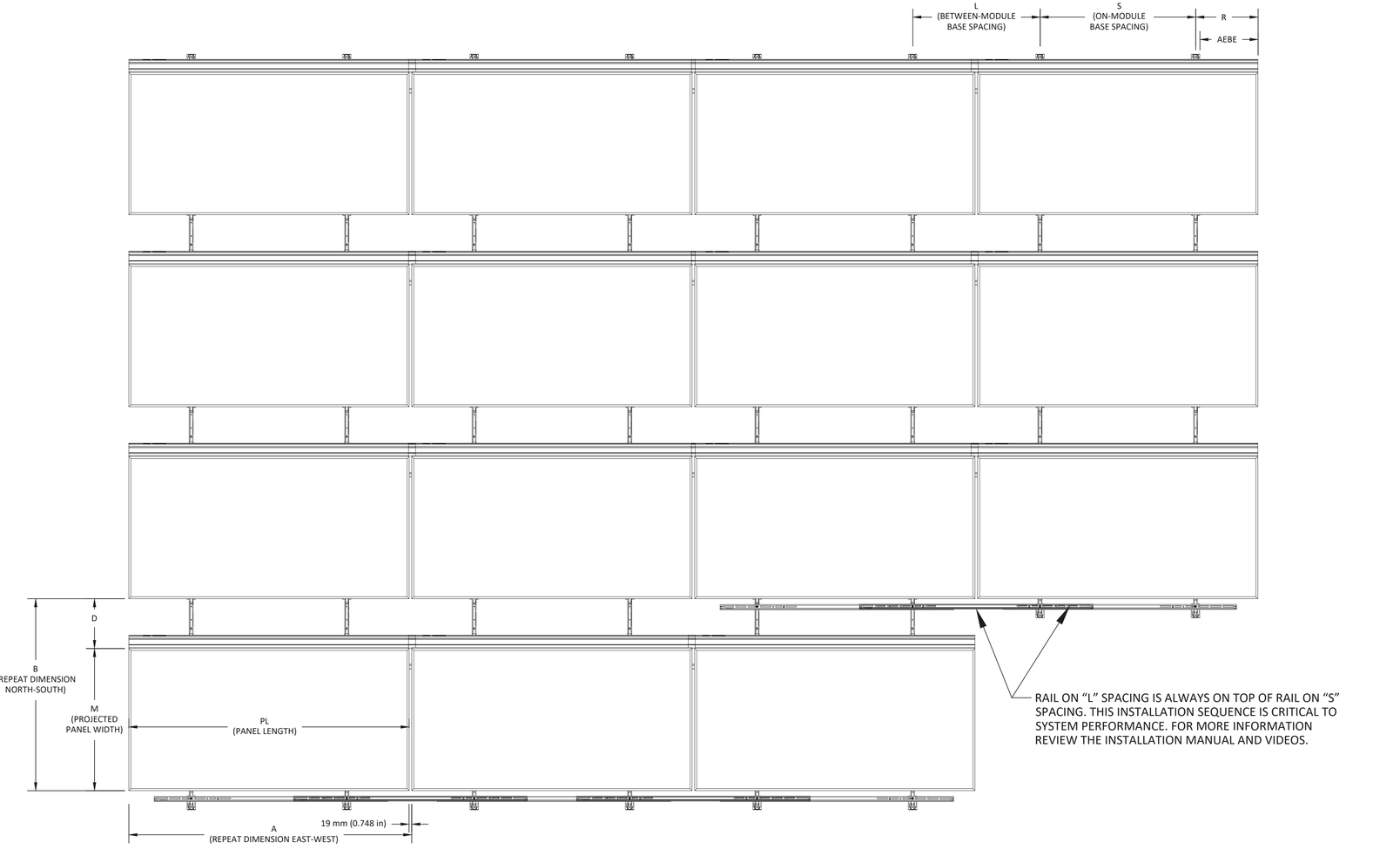
SHEET TITLE:

ARRAY SITE MAP

REVISION: 0

SHEET: PC-3





RAIL ON "L" SPACING IS ALWAYS ON TOP OF RAIL ON "S" SPACING. THIS INSTALLATION SEQUENCE IS CRITICAL TO SYSTEM PERFORMANCE. FOR MORE INFORMATION REVIEW THE INSTALLATION MANUAL AND VIDEOS.

ARRAY CROSS SECTION VIEW

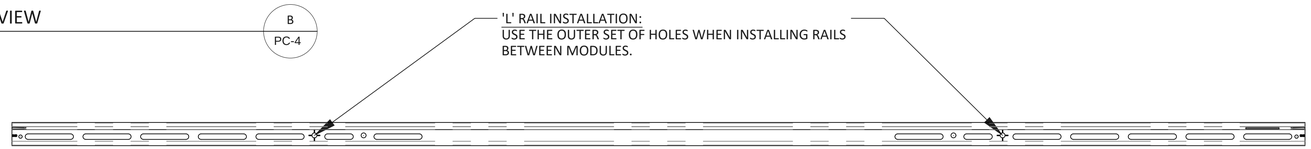
SCALE: NTS

A PC-4

ARRAY TOP VIEW

SCALE: NTS

B PC-4



RAIL DETAIL

SCALE: NTS

C PC-4

INSTALLATION MEASUREMENTS					
		AEBE	S	L	CAM SPACING*
UNITS	mm	460	1247	1050	60
	inches	18 1/16	49 1/8	41 5/16	2 3/8
*CAM SPACING SHOWN ON ASSEMBLIES PAGE.					

MODULE DIMENSIONS				
		PL	PW	PT
UNITS	mm	2278	1134	35
	inches	89.69	44.65	1.38

INSTALLED ARRAY DIMENSIONS																		
		A	B	C	D	G	J	K	M	N	O	P	R	W	X	Theta (DEG)	D/J (#:1)	G.C.R.*
UNITS	mm	2297	1471	123	351	116	177	211	1120	82	61	87	490	335	136	8.98	1.98	0.77
	inches	90.43	57.92	4.84	13.82	4.58	6.97	8.30	44.10	3.21	2.39	3.42	19 1/4	13.21	5.35	8.98	1.98	0.77
* G.C.R = (PW) / B																		

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STAMP:

REGISTERED PROFESSIONAL ENGINEER
TROY E TURLEY
S 4993
STRUCTURAL
STATE OF CALIFORNIA
3/16/2023

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SHEET SIZE ARCH "D"

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PROJECT:
Majestic Freeway Business Center 11

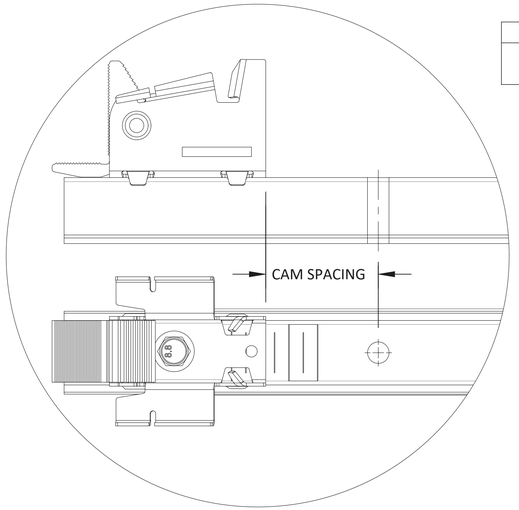
LOCATION:
18740 Harvill Avenue, Perris, CA, USA

SHEET TITLE:
TYPICAL ARRAY DIMENSIONS

REVISION: 0

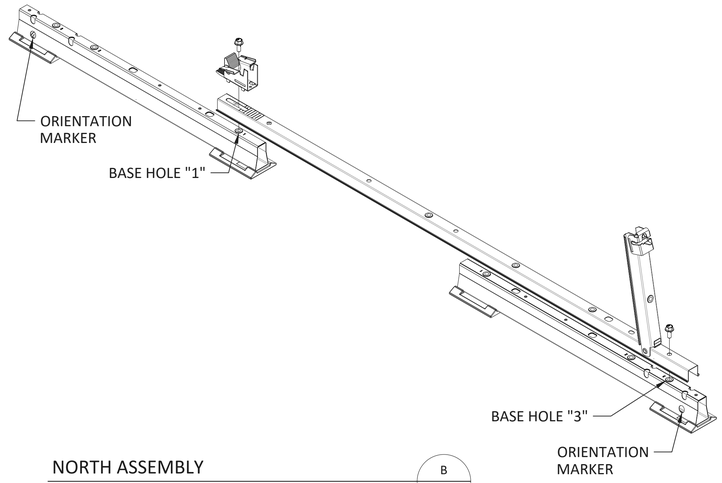
SHEET: PC-4

		CAM SPACING
UNITS	mm	60
	inches	2 3/8



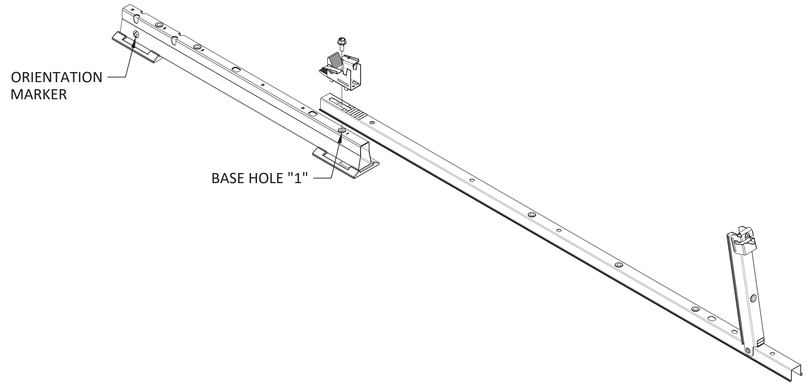
CAM SPACING DETAIL — A — PC-5

SCALE: NTS



NORTH ASSEMBLY — B — PC-5

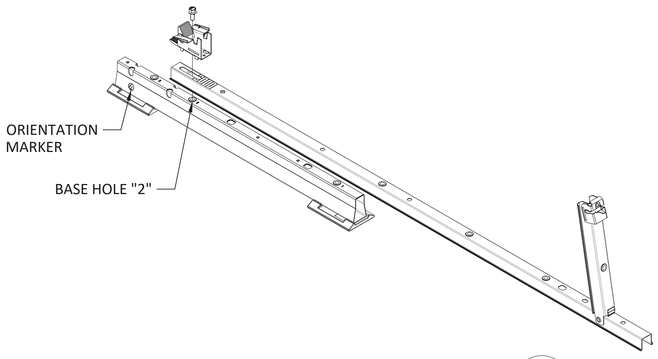
SCALE: NTS



MIDDLE ASSEMBLY — C — PC-5

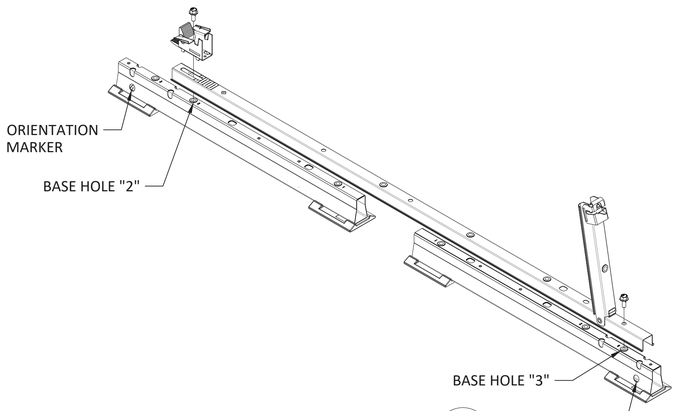
SCALE: NTS

STANDARD ASSEMBLY QUANTITY	
NORTH ASSEMBLY	72
SOUTH ASSEMBLY	72
MIDDLE ASSEMBLY	472
NORTH SOUTH ASSEMBLY	0
NOTE: ASSEMBLIES IN THIS TABLE USE THE STANDARD 2-PAD BASE	



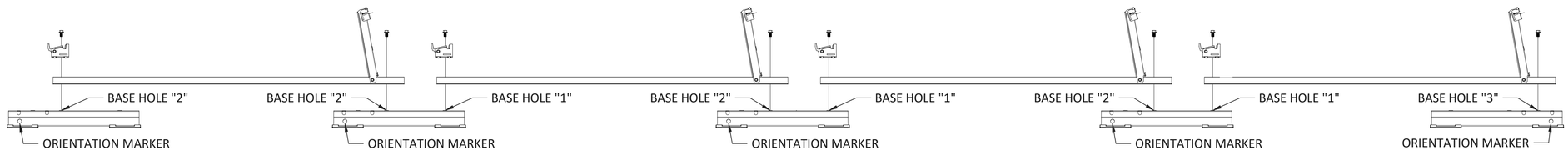
SOUTH ASSEMBLY — D — PC-5

SCALE: NTS



NORTH SOUTH ASSEMBLY — E — PC-5

SCALE: NTS



EXAMPLE ARRAY CONSTRUCTION — F — PC-5

SCALE: NTS

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SCALE: 0" 1/2" 1" 2"
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SHEET SIZE ARCH "D"

PREPARED FOR:
Panelized Structures Inc.

PROJECT:
Majestic Freeway Business Center 11

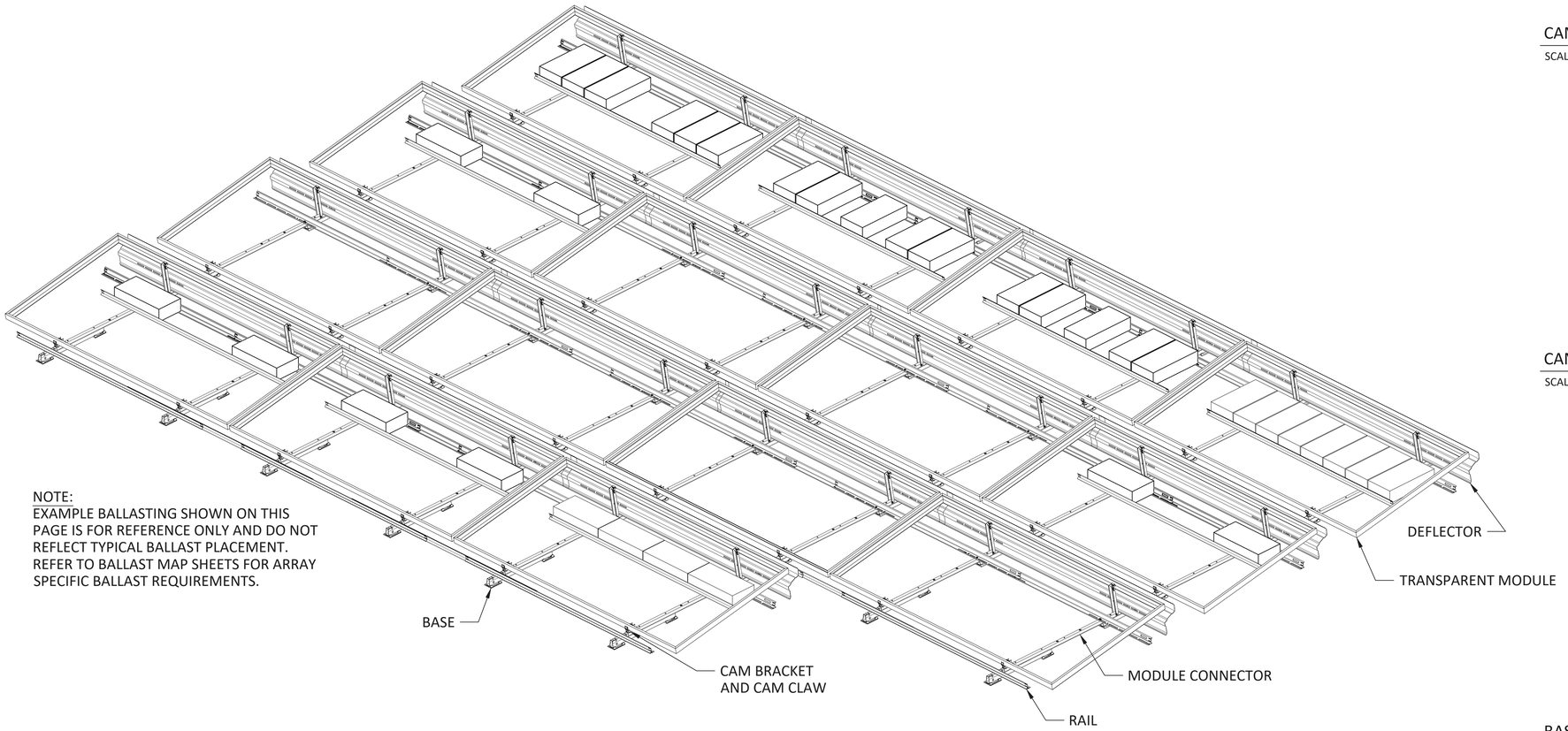
LOCATION:
18740 Harvill Avenue, Perris, CA, USA

SHEET TITLE:
ASSEMBLIES

REVISION: 0

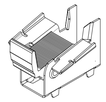
SHEET: PC-5

NOTE:
EXAMPLE BALLASTING SHOWN ON THIS PAGE IS FOR REFERENCE ONLY AND DO NOT REFLECT TYPICAL BALLAST PLACEMENT. REFER TO BALLAST MAP SHEETS FOR ARRAY SPECIFIC BALLAST REQUIREMENTS.



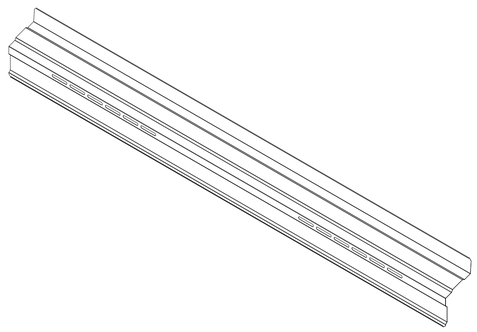
EXAMPLE RAIL AND BLOCK CONFIGURATION — A / PC-6
SCALE: NTS

CAM CLAW — B / PC-6
SCALE: NTS

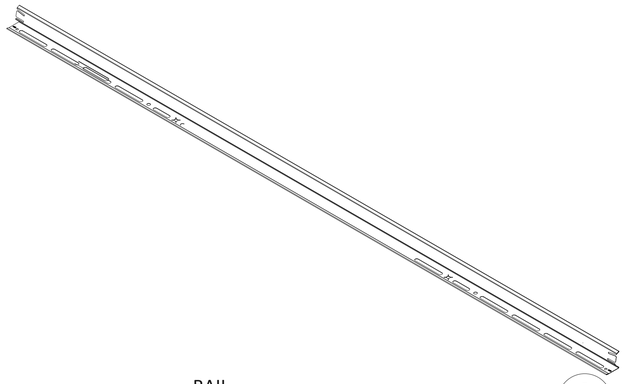


CAM BRACKET — C / PC-6
SCALE: NTS

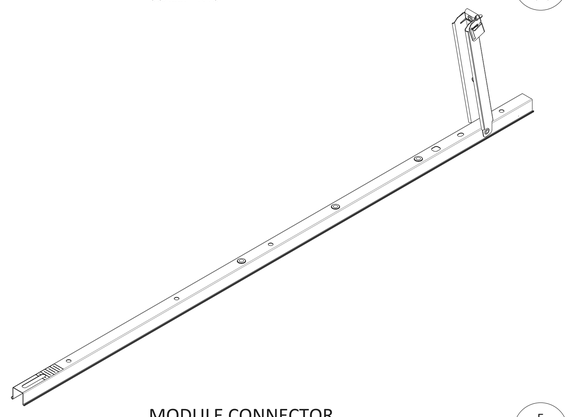
BASE — D / PC-6
SCALE: NTS



DEFLECTOR — G / PC-6
SCALE: NTS



RAIL — F / PC-6
SCALE: NTS



MODULE CONNECTOR — E / PC-6
SCALE: NTS

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S 4993
STRUCTURAL
STATE OF CALIFORNIA
3/16/2023

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SHEET SIZE ARCH "D"

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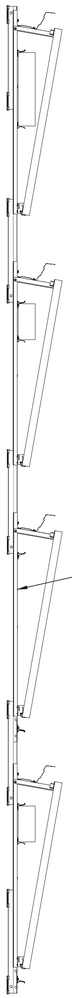
Panelized Structures Inc.

PROJECT:
Majestic Freeway Business Center 11

LOCATION:
18740 Harvill Avenue, Perris, CA, USA

SHEET TITLE:
RACKING COMPONENTS

REVISION: 0
SHEET: PC-6



BALLAST QUANTITY:
"#"=QUANTITY OF BALLAST BLOCK INSTALLED CENTERED UNDER MODULE

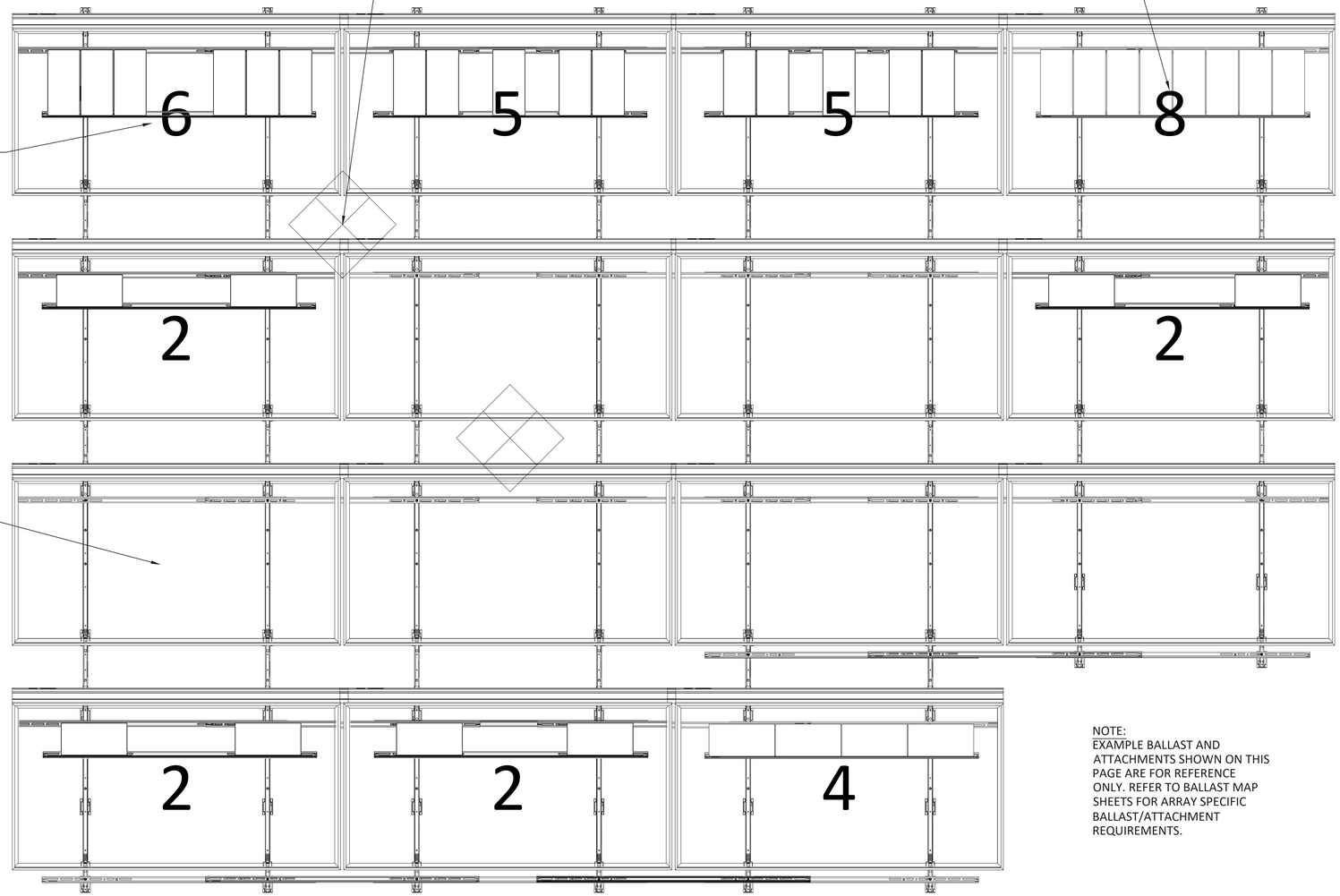
IF NO BALLAST QUANTITY SHOWN, DO NOT PLACE BALLAST

SEE INSTALLATION MANUAL FOR NOTES ON INSTALLING MORE THAN FOUR BALLAST BLOCKS PER MODULE

DO NOT INSTALL ADDITIONAL RAIL TO HOLD BALLAST ON MODULES WITH NO BALLAST SHOWN.

MECHANICAL ATTACHMENT AT INDICATED LOCATION

MODULES LONGER THAN 2100 MM WITH 7 OR 8 BALLAST BLOCKS REQUIRE TWO (2) RAILS.



NOTE:
EXAMPLE BALLAST AND ATTACHMENTS SHOWN ON THIS PAGE ARE FOR REFERENCE ONLY. REFER TO BALLAST MAP SHEETS FOR ARRAY SPECIFIC BALLAST/ATTACHMENT REQUIREMENTS.

ARRAY CROSS SECTION VIEW — A PC-7
SCALE: NTS

ARRAY TOP VIEW — B PC-7
SCALE: NTS

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TROY E. TURLEY
S 4993
STRUCTURAL
STATE OF CALIFORNIA
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PROJECT:
Majestic Freeway Business Center 11

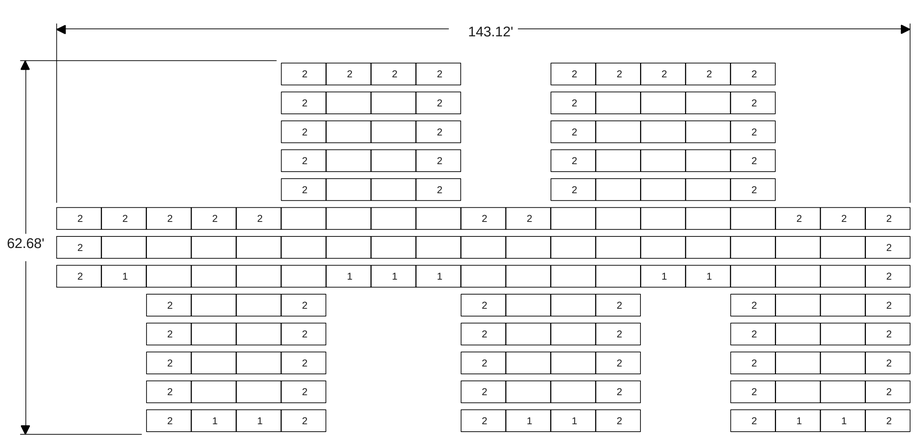
LOCATION:
18740 Harvill Avenue, Perris, CA, USA

SHEET TITLE:
BALLAST LEGEND

REVISION: 0
SHEET: PC-7

ARRAY 1.1	
ROOF INFORMATION	
ROOF HEIGHT (FT)	45.00
PARAPET HEIGHT (FT)	4.0
ROOF TILT (DEG)	2
ROOF TYPE	Asphalt SBS Adhered
SPECIFICATIONS	
NUMBER OF MODULES	162
MODULE POWER (W)	540
ARRAY OUTPUT (Kw)	87.48
ARRAY AZIMUTH	180
PART QUANTITIES	
ITEM	QTY
Base	362
Module Connector	324
Rail	419
Cam	324
Cam Claw	324
Deflector	162
Base Pad	0
Ballast Block	150
LOADING DETAILS	
SINGLE MODULE WT (LB)	70.1
SINGLE CMU WT (LB)	32.6
TOTAL ARRAY WT (LB)	18775
ARRAY AREA (SQ. FT)	5870
ARRAY LOAD (PSF)	3.20
REQUIRED CLEARANCES PER ASCE 7-16	
CONDITION 1 (in.)	6
CONDITION 2 (in.)	11
CONDITION 3 (in.)	11
CONDITION 4 (in.)	48

ASSEMBLY QUANTITIES	
ASSEMBLY	QTY
NORTH ASSEMBLY	38
SOUTH ASSEMBLY	38
MIDDLE ASSEMBLY	248
NORTH SOUTH ASSEMBLY	0



BALLAST LAYOUT - 1.1

SCALE: 1/12" = 1'-0"

A
PC-8

N

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STAMP:

REGISTERED PROFESSIONAL ENGINEER
TROY E. TURLEY
S 4993
STRUCTURAL
STATE OF CALIFORNIA

3/16/2023

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0" 1/2" 1" 2"
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PREPARED FOR:
Panelized Structures Inc.

PROJECT:
Majestic Freeway Business Center 11

LOCATION:
18740 Harvill Avenue, Perris, CA, USA

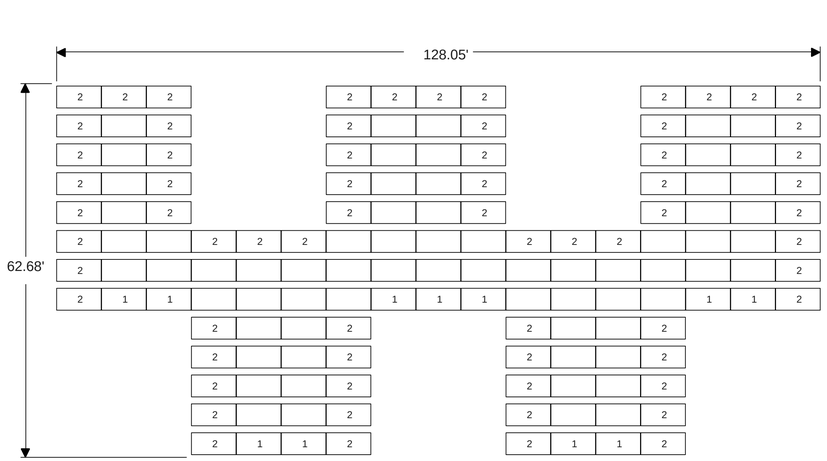
SHEET TITLE:
BALLAST LAYOUT - 1.1

REVISION: 0

SHEET: PC-8

ARRAY 1.2	
ROOF INFORMATION	
ROOF HEIGHT (FT)	45.00
PARAPET HEIGHT (FT)	4.0
ROOF TILT (DEG)	2
ROOF TYPE	Asphalt SBS Adhered
SPECIFICATIONS	
NUMBER OF MODULES	146
MODULE POWER (W)	540
ARRAY OUTPUT (Kw)	78.84
ARRAY AZIMUTH	180
PART QUANTITIES	
ITEM	QTY
Base	326
Module Connector	292
Rail	379
Cam	292
Cam Claw	292
Deflector	146
Base Pad	0
Ballast Block	145
LOADING DETAILS	
SINGLE MODULE WT (LB)	70.1
SINGLE CMU WT (LB)	32.6
TOTAL ARRAY WT (LB)	17243
ARRAY AREA (SQ. FT)	5291
ARRAY LOAD (PSF)	3.26
REQUIRED CLEARANCES PER ASCE 7-16	
CONDITION 1 (in.)	6
CONDITION 2 (in.)	11
CONDITION 3 (in.)	11
CONDITION 4 (in.)	48

ASSEMBLY QUANTITIES	
ASSEMBLY	QTY
NORTH ASSEMBLY	34
SOUTH ASSEMBLY	34
MIDDLE ASSEMBLY	224
NORTH SOUTH ASSEMBLY	0



BALLAST LAYOUT - 1.2

SCALE: 1/12" = 1'-0"

A / PC-9

N

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S 4993
STRUCTURAL
STATE OF CALIFORNIA

3/16/2023

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REV	DESCRIPTION	DATE	CHECK	PREP
0	Initial Ballast Map Layout	2023-03-08		RH

SCALE:
0" 1/2" 1" 2"
ORIGINAL SIZE 36"X24"
SHEET SIZE ARCH "D"

PREPARED FOR:
Panelized Structures Inc.

PROJECT:
Majestic Freeway Business Center 11

LOCATION:
18740 Harvill Avenue, Perris, CA, USA

SHEET TITLE:
BALLAST LAYOUT - 1.2

REVISION: 0

SHEET: PC-9

NOTICE OF PUBLIC HEARING

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

www.rcaluc.org

A PUBLIC HEARING has been scheduled before the Riverside County Airport Land Use Commission (ALUC) to consider the applications described below.

Any person may submit written comments to the ALUC before the hearing or may appear and be heard in support of or opposition to the project at the time of hearing. **Information on how to participate in the hearing will be available on the ALUC website at www.rcaluc.org.** The ALUC holds hearings for local discretionary permits within the Airport Influence Area, reviewing for aeronautical safety, noise and obstructions. ALUC reviews a proposed plan or project solely to determine whether it is consistent with the applicable Airport Land Use Compatibility Plan. For more information please contact **ALUC Planner Jackie Vega at (951) 955-0982**.

The County of Riverside Planning Department should be contacted on non-ALUC issues. For more information, please contact County of Riverside Planner Viviana Licea at 951-955-6700.

The proposed project application may be viewed by a prescheduled appointment and on the ALUC website www.rcaluc.org. Written comments may be submitted at the Riverside County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, California 92501, Monday through Friday from 8:00 a.m. to 3:30 p.m., or by e-mail to javega@rivco.org. Individuals with disabilities requiring reasonable modifications or accommodations, please contact Barbara Santos at (951) 955-5132.

PLACE OF HEARING: **Riverside County Administration Center**
4080 Lemon Street, 1st Floor Board Chambers
Riverside California

DATE OF HEARING: **July 13, 2023**

TIME OF HEARING: **9:30 A.M.**

CASE DESCRIPTION:

ZAP1574MA23 – Majestic Freeway Business Center, LLC (Representative: T&B Planning) – County of Riverside Case No. BEL23-02256 (Building Permit). A proposal to construct an 12,000 square foot rooftop solar panel system on a previously approved industrial building (ZAP1345MA18) on 21.26 acres, located southerly of Commerce Center Drive, easterly of Harvill Avenue, westerly of Messenia Lane, and northerly of Perry Street. (Airport Compatibility Zone C2 of the March Air Reserve Base/Inland Port Airport Influence Area).

RIVERSIDE COUNTY
AIRPORT LAND USE COMMISSION

APPLICATION FOR MAJOR LAND USE ACTION REVIEW

ALUC STAFF ONLY

ALUC Case Number: ZAP1574MA23 Date Submitted: 5/18/23

AIA: Airport Zone: Zone Public Hearing ☑ Staff Review ☐

Applicant

Applicant Full Name: Matthew Vawter

Applicant Address: 13191 Crossroads Pkwy North, 6th Floor City of Industry, CA, 91746

Phone: 562-948-4395 **Email:** mvawter@commercelp.com

Representative/ Property Owner Contact Information

Representative: T&B Planning, Inc. **Email:** tprater@tbplanning.com

Tina Prater Phone: 714-757-4862

Address: 3200 El Camino Real, Suite 100, Irvine, CA 92602

Property Owner: Majestic Freeway Business Center, LLC **Email:** mvawter@commercelp.com

Edward P. Roski, Jr. Phone: 562-948-4395

Address: 13191 Crossroads Pkwy North, 6th Floor City of Industry, CA, 91746

Local Jurisdiction Agency

Agency Name: Riverside County - Transportation and Land Use Management Phone: 951-955-6700

Staff Contact: Viviana Licea **Email:** vlicea@rivco.org

Address: 4080 Lemon Street, 9th Floor, Riverside, CA 92502

Local Agency Case No.: BEL2302256

Project Location

Street Address: 18740 HARVILL AVE, PERRIS, CA, 92570 Gross Parcel Size.: 18.35 Acres

Assessor's Parcel No.: 314-290-017

Solar

Is the project proposing solar Panels? Yes ☑ No ☐ If yes, please provide solar glare study. (only if in Zone C or higher)

Data

Site Elevation:(above mean sea level) 1522 feet

Height of Building or structures: 45 feet

What type of drainage basins are being proposed and the square footage: Bioretention Basin; Basin B1 is 6,954 sq.ft. and Basin B2 is 33,587 sq.ft.

Notice

A. NOTICE: Failure of an applicant to submit complete or adequate information pursuant to Sections 65940 to 65948 inclusive of the California Government Code, MAY constitute grounds for disapproval of actions, regulations, or permits.

B. REVIEW TIME: Estimated time for "staff level review" is approximately 30 days from date of submittal. Estimated time for "commission level review" is approximately 45 days from date of a complete application submittal to the next available commission hearing meeting.

C. SUBMISSION PACKAGE:

Please submit all application items DIGITALLY via USB or CD:

- Completed ALUC Application Form
- Plans Package: site plans, floor plans, building elevations, grading plans, subdivision maps
- Exhibits of change of zone, general plan amendment, specific plan amendment
- Project description of existing and proposed use

Additionally, please provide:

- ALUC fee payment (Checks made out to Riverside County ALUC)
- Gummed address labels of all surrounding property owners within a 300-foot radius of project site. (Only required if the project is scheduled for a public hearing).

Riverside County Airport Land Use Commission, County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, CA 92501, Phone: 951-955-5132 Fax: 951-955-5177 Website: www.rcaluc.org

RIVERSIDE COUNTY
AIRPORT LAND USE COMMISSION

STAFF REPORT

AGENDA ITEM:	3.6
HEARING DATE:	July 13, 2023
CASE NUMBER:	ZAP1571MA23 – Meridian Park, LLC (Representative: Jeff Gordon)
APPROVING JURISDICTION:	March Joint Powers Authority
JURISDICTION CASE NO:	COM-Solar 23-003 (Building Permit)
LAND USE PLAN:	2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan
Airport Influence Area:	March Air Reserve Base
Land Use Policy:	Zone C2
Noise Levels:	Below 60 CNEL contour

RECOMMENDATION: Staff recommends that the Commission find the proposed Building Permit CONSISTENT with the 2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, subject to the conditions included herein.

PROJECT DESCRIPTION: A proposal to construct a 57,271 square foot rooftop solar panel system on an industrial building on 45.84 acres.

PROJECT LOCATION: The site is located northerly of Krameria Avenue, westerly of Village West Drive, and southerly of Van Buren Boulevard, approximately 7,394 feet westerly of the northerly end of Runway 14-32 at March Air Reserve Base.

BACKGROUND:

Non-Residential Land Use Intensity: Pursuant to the Airport Land Use Compatibility Plan for the March Air Reserve Base/Inland Port Airport, the site is located within Compatibility Zone C2, which limits average intensity to 200 people per acre and 500 people per single acre. The proposed rooftop solar panels will not generate any occupancy.

March Air Reserve Base/United States Air Force Input: Given that the project site is located in Zone C2 westerly of the northerly runway at March Air Reserve Base, the March Air Reserve Base staff was notified of the proposal to add rooftop solar panels and sent a solar glare hazard analysis study for their review. On May 18, 2023, the Air Force provided comments concurring with the analysis and conclusions of the glare study.

Prohibited and Discouraged Uses: The applicant does not propose any uses prohibited or discouraged in Compatibility Zone C2.

Flight Hazard Issues: Structure height, electrical interference, and reflectivity/glare are among the issues that solar panels in the airport influence area must address. The project's 57,271 square foot photovoltaic (PV) panel structures would be located on the rooftop of the industrial building within Compatibility Zone C2.

Glint and Glare/Reflectivity

Based on the Federal Aviation Administration's Interim Policy for Review of Solar Energy System Projects on Federally Obligated Airports, no glare potential or low potential for temporary after-image ("green" level) are acceptable levels of glare on final approach (within 2 miles from end of runway) for solar facilities located on airport property. However, potential for temporary after-image" ("yellow" level) and potential for permanent eye damage ("red" level) are not acceptable levels of glare on final approach. No glare is permitted at air traffic control towers.

The project proposes 57,271 square feet of solar panels on the existing building rooftop with a fixed tilt of 10 degrees with no rotation, and an orientation of 180 degrees. The applicant has submitted a glare analysis utilizing the web-based Forge Solar, a copy of which is attached hereto. The analysis was based on a 2 mile straight in approach (as per FAA Interim Policy standards) to runways 14 and 32, and also based on the traffic patterns as identified by March Air Reserve Base staff (Runway 12/30 General Aviation, Runway 14/32 General Aviation, Runway 14/32 C-17/KC-135, Runway 14/32 Overhead). The analysis utilized a glide slope approach of 3.0 degrees. No glare would affect the Air Traffic Control Tower.

The analysis concluded that some glare would occur on the 2 mile approach to the runways, and some potential for glare was identified within the Air Force traffic pattern. Evaluation of the Air Force traffic patterns indicates that the panels would result in a low potential for temporary after-image ("green" level glare) or no glare. All times are in standard time.

Runway 12/30 General Aviation traffic pattern (totaling 6,009 minutes of 'green' level glare):

- Runway 12 General, totaling 3,007 minutes of "green" level glare, lasting up to 35 minutes a day, from March to May and August to October from 5:00 p.m. to 6:00 p.m.
- Runway 30 General, totaling 3,002 minutes of "green" level glare, lasting up to 35 minutes a day, from March to May and August to October, from 5:00 p.m. to 6:00 p.m.

Runway 14/32 General Aviation traffic pattern (total 15,767 minutes of 'green' level glare):

- Runway 14 General, totaling 7,878 minutes of "green" level glare, lasting up to 85 minutes a day, from April to August from 3:00 p.m. to 6:30 p.m.
- Runway 32 General, totaling 7,889 minutes of "green" level glare, lasting up to 85 minutes a day, from April to August from 3:00 p.m. to 6:00 p.m.

Runway 14/32 C-17/KC-135 traffic pattern (totaling 20,927 minutes of 'green' level glare):

- Runway 14 C17 KC135, totaling 10,463 minutes of "green" level glare, lasting up to 45 minutes a day, from September to April and May to July from 8:00 a.m. to 9:00 a.m. and 6:00 p.m. to 6:30 p.m.
- Runway 32 C17 KC135, totaling 10,464 minutes of "green" level glare, lasting up to 45

minutes a day, from September to April and May to July from 8:00 a.m. to 9:00 a.m. and 5:00 p.m. to 6:30 p.m.

Runway 14/32 Overhead Aviation traffic pattern (totaling 25,168 minutes of 'green' level glare):

- Runway 14 Overhead, totaling 14,644 minutes of "green" level glare, lasting up to 55 minutes a day, from January to December from 8:00 a.m. to 9:00 a.m. and 4:00 p.m. to 5:30 p.m.
- Runway 32 Overhead, totaling 10,524 minutes of "green" level glare, lasting up to 85 minutes a day, from April to September from 4:00 p.m. to 6:00 p.m.

The total of 67,871 minutes of "green" level glare represents less than 26 percent of total day light time.

Electrical and Communication Interference

The applicant has indicated that they do not plan to utilize equipment that would interfere with aircraft communications. The PV panels themselves present little risk of interfering with radar transmission due to their low profiles. In addition, solar panels do not emit electromagnetic waves over distances that could interfere with radar signal transmissions, and any electrical facilities that do carry concentrated current will be buried beneath the ground and away from any signal transmission. There are no radar transmission or receiving facilities within the site.

Noise: The March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan depicts the site below 60 CNEL range from aircraft noise. The proposed solar panels are a non-noise sensitive use; therefore, no mitigation measures are necessary.

Part 77: The elevation of Runway 14-32 at its northerly terminus is 1,535 feet above mean sea level (AMSL). At a distance of approximately 7,394 feet from the project to the nearest point on the runway, Federal Aviation Administration (FAA) review would be required for any structures with top of roof exceeding 1,609 feet AMSL. The site's finished floor elevation is 1,685 feet AMSL and building height is 40 feet, resulting in a top point elevation of 1,725 feet AMSL. Therefore, review by the FAA Obstruction Evaluation Service was required. However, the height of the solar panels will not significantly increase the overall height of the building.

Open Area: None of the Compatibility Zones for the March Air Reserve Base/Inland Port ALUCP require open area specifically.

CONDITIONS:

1. Any outdoor lighting installed shall be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.

2. The following uses/activities are not included in the proposed project and shall be prohibited at this site.

    (a) Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight or circling climb following takeoff or toward an aircraft engaged in a

straight or circling final approach toward a landing at an airport, other than a DoD or FAA-approved navigational signal light or visual approach slope indicator.

(b) Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport to the extent as to result in a potential for temporary after-image greater than the low ("green") level.

(c) Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses include landscaping utilizing water features, aquaculture, production of cereal grains, sunflower, and row crops, composting operations, wastewater management facilities, artificial marshes, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, and incinerators.)

(d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.

(e) Highly noise-sensitive outdoor nonresidential uses. Examples of noise-sensitive outdoor nonresidential uses that are prohibited include, but are not limited to, major spectator-oriented sports stadiums, amphitheaters, concert halls and drive-in theaters.

(f) Hazards to Flight.

3. The attached notice shall be provided to all prospective purchasers of the property and tenants of the building, and shall be recorded as a deed notice.

4. March Air Reserve Base must be notified of any land use having an electromagnetic radiation component to assess whether a potential conflict with Air Base radio communications could result. Sources of electromagnetic radiation include radio wave transmission in conjunction with remote equipment inclusive of irrigation controllers, access gates, etc.

5. All solar arrays installed on the project site shall consist of smooth glass photovoltaic solar panels without anti-reflective coating, a fixed tilt of 10 degrees and orientation of 180 degrees. Solar panels shall be limited to a total of 57,271 square feet, and the locations and coordinates shall be as specified in the glare study. Any deviation from these specifications (other than reduction in square footage of panels), including change in orientation, shall require a new solar glare analysis to ensure that the amended project does not result in any glare impacting the air traffic control tower or creation of any "yellow" or "red" level glare in the flight paths, and shall require a new hearing by the Airport Land Use Commission.

6. In the event that any glint, glare, or flash affecting the safety of air navigation occurs as a result of project operation, upon notification to the airport operator of an event, the airport operator shall notify the project operator in writing. Within 30 days of written notice, the project operator shall be required to promptly take all measures necessary to eliminate such glint, glare, or flash. An "event" includes any situation that results in an accident, incident,

"near-miss," or specific safety complaint regarding an in-flight experience to the airport operator or to federal, state, or county authorities responsible for the safety of air navigation. The project operator shall work with the airport operator to prevent recurrence of the incidence. Suggested measures may include, but are not limited to, changing the orientation and/or tilt of the source, covering the source at the time of day when events of glare occur, or wholly removing the source to diminish or eliminate the source of the glint, glare, or flash. For each such event made known to the project operator, the necessary remediation shall only be considered to have been fulfilled when the airport operator states in writing that the situation has been remediated to the airport operator's satisfaction.

7. In the event that any electrical interference affecting the safety of air navigation occurs as a result of project operation, upon notification to the airport operator of an event, the airport operator shall notify the project operator in writing. Within 30 days of written notice, the project operator shall be required to promptly take all measures necessary to eliminate such interference. An "event" includes any situation that results in an accident, incident, "near-miss," report by airport personnel, or specific safety complaint to the airport operator or to federal, state, or county authorities responsible for the safety of air navigation. The project operator shall work with the airport operator to prevent recurrence of the event. For each such event made known to the project operator, the necessary remediation shall only be considered to have been fulfilled when the airport operator states in writing that the situation has been remediated to the airport operator's satisfaction.

X:\AIRPORT CASE FILES\March\ZAP1571MA23\ZAP1571MA23sr.doc

NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances [can vary from person to person. You may wish to consider what airport annoyances], if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. Business & Professions Code Section 11010 (b)(13)(A)

NOTICE

THERE IS AN AIRPORT NEARBY.

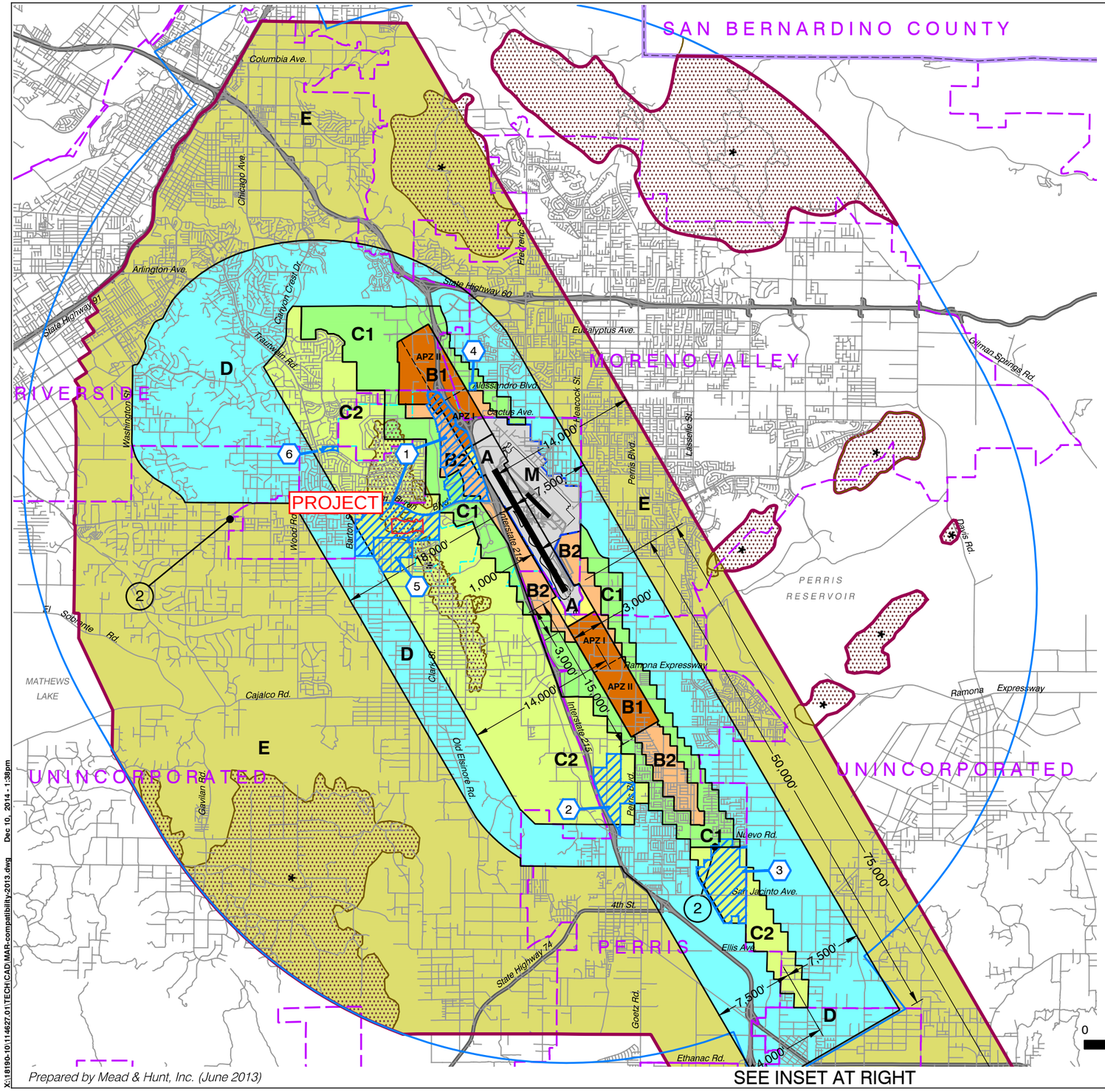
THIS STORM WATER BASIN IS DESIGNED TO HOLD STORM WATER FOR ONLY 48 HOURS AND NOT TO ATTRACT BIRDS

PROPER MAINTENANCE IS NECESSARY TO AVOID BIRD STRIKES

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION ALUC

IF THIS BASIN IS OVERGROWN, PLEASE CONTACT:

Name: _____ Phone: _____



LEGEND

Compatibility Zones

- Airport Influence Area Boundary
- Zone A
- Zone B1
- Zone B2
- Zone C1
- Zone C2
- Zone D
- Zone E
- Zone M
- High Terrain Zone
- FAR Part 77 Military Outer Horizontal Surface Limits
- FAR Part 77 Notification Area

Boundary Lines

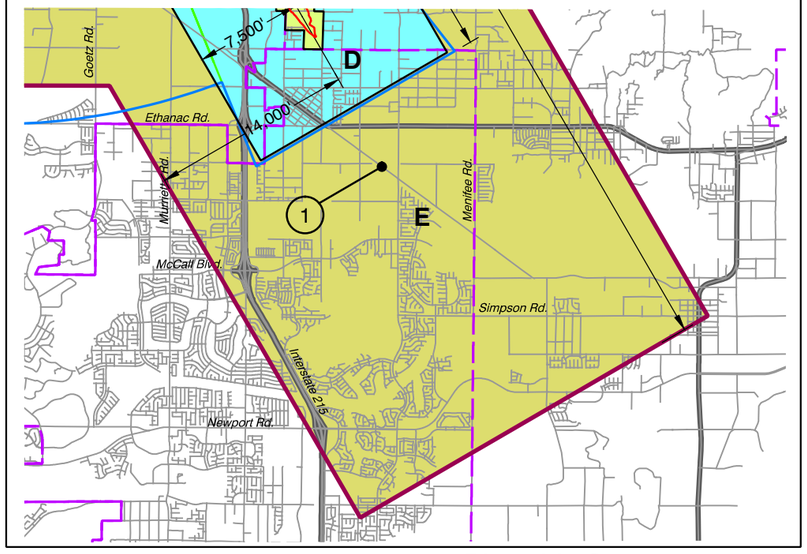
- March Air Reserve Base / Air Force Property
- March Joint Powers Authority Property Line
- County Boundary
- City Limits
- Site-Specific Exceptions (existing local agency commitments to development projects)

1. March JPA: March Business Center/Meridian
2. Perris: Harvest Landing
3. Perris: Park West
4. Moreno Valley: Affordable Housing
5. March JPA: Ben Clark Training Center
6. Riverside: Ridge Crest Subdivision

(1) Point at which aircraft on Runway 32 ILS approach descend below 3,000 feet above runway end. Airport Elevation is 1,535 feet MSL.

(2) Point at which departing aircraft typically reach 3,000 feet above runway end.

INSET



SEE INSET AT RIGHT

Note:
All dimensions are measured from runway ends and centerlines.

N

0 2 4 MILES

Base map source: County of Riverside 2013

Prepared by Mead & Hunt, Inc. (June 2013)

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Riverside County
Airport Land Use Commission

March Air Reserve Base / Inland Port Airport
Land Use Compatibility Plan

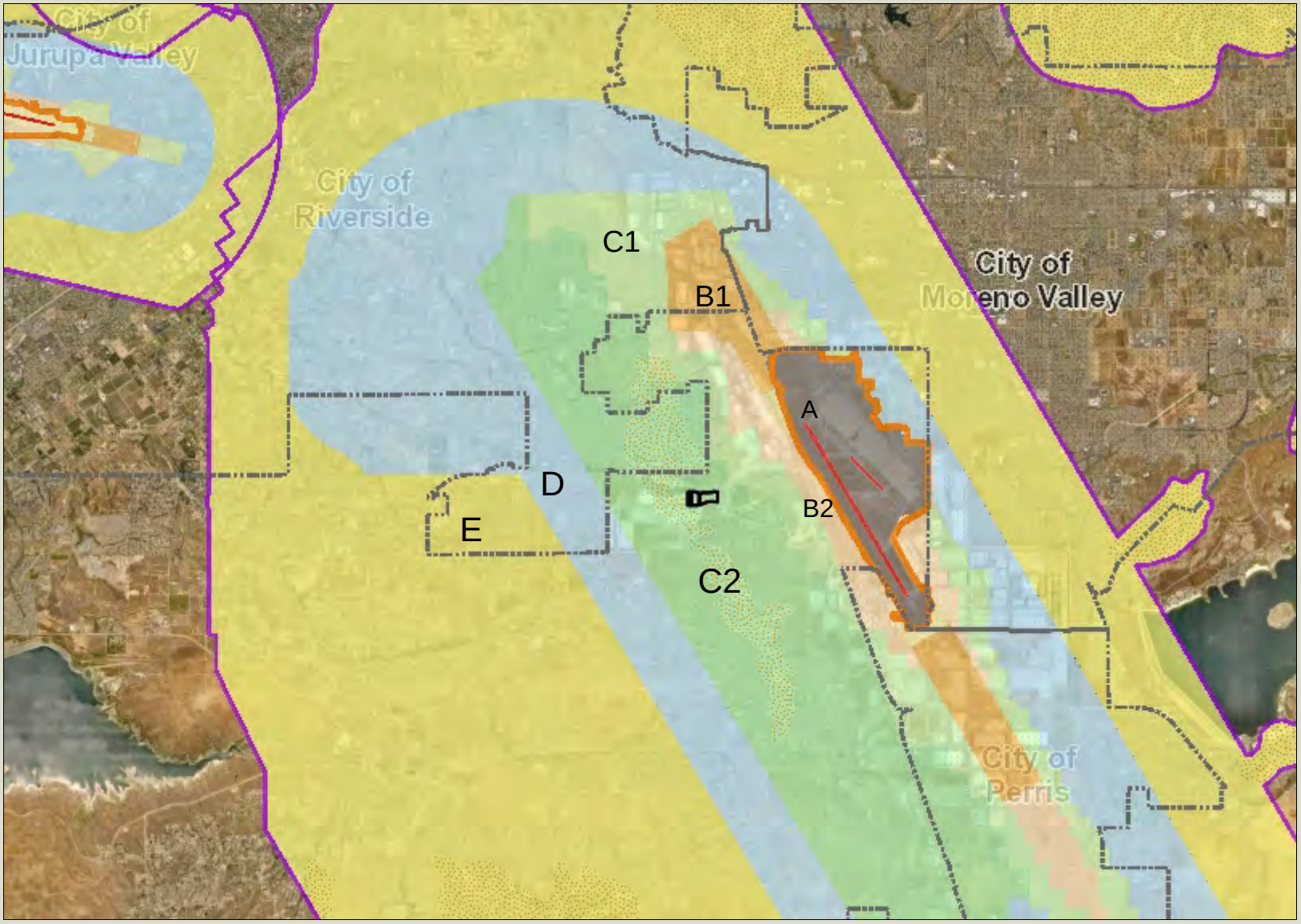
(Adopted November 13, 2014)

Map MA-1

Compatibility Map

March Air Reserve Base / Inland Port Airport

Map My County Map



Legend

- Runways
- Airports
- Airport Influence Areas
- Airport Compatibility Zones
  - OTHER COMPATIBILITY ZONE
  - A
  - A-EXC1
  - B1
  - B1-APZ I
  - B1-APZ I-EXC1
  - B1-APZ II
  - B1-APZ II-EXC1
  - B1-EXC1
  - B2
  - B2-EXC1
  - C
  - C1
  - C1-EXC1
  - C1-EXC3
  - C1-EXC4
  - C1-HIGHT
  - C2
  - C2-EXC1
  - C2-EXC2
  - C2-EXC3
  - C2-EXC5
  - C2-EXC6

RCIT

0 12,314 24,629 Feet

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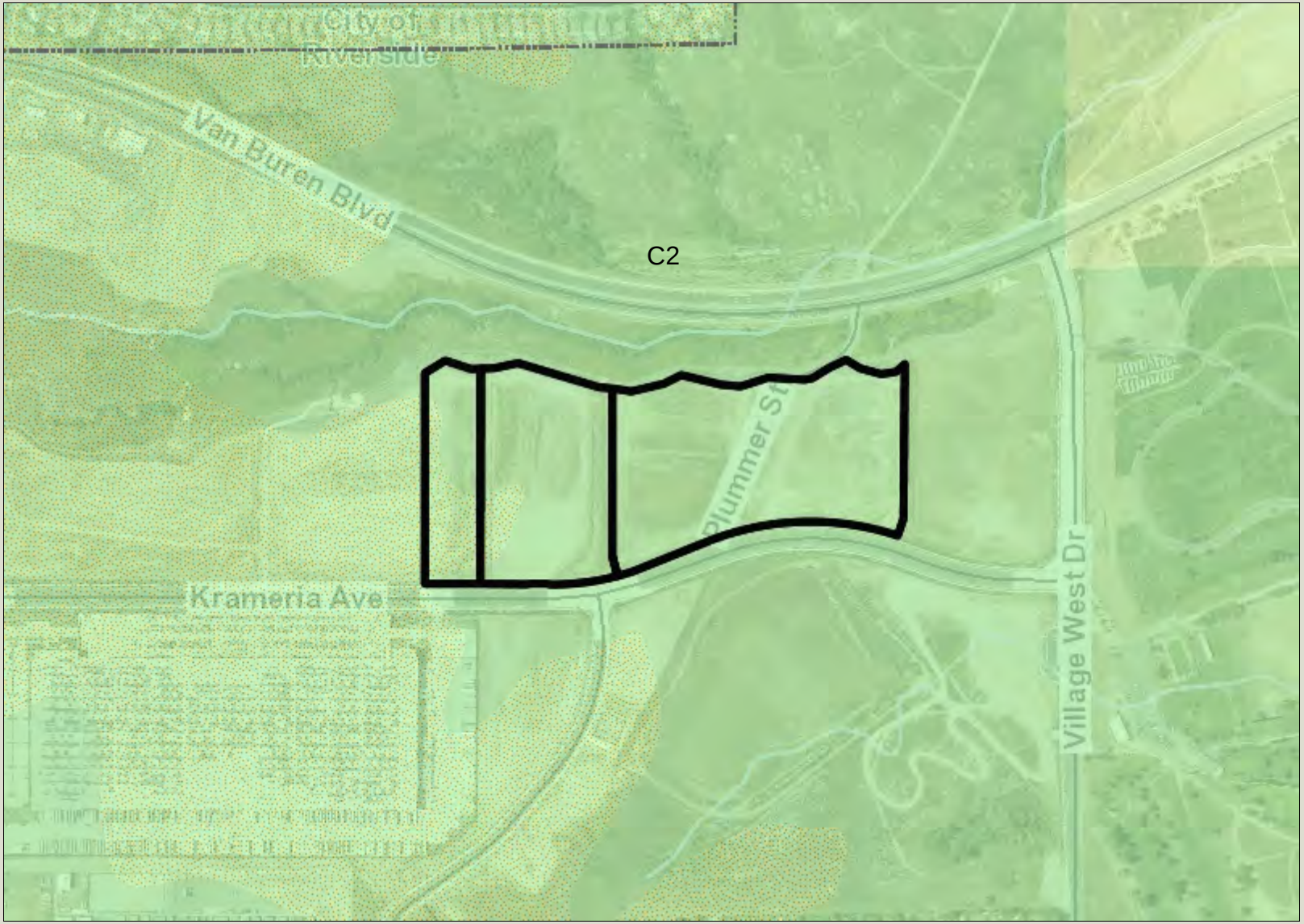
Notes

Map My County Map



Legend

- Runways
- Airports
- Airport Influence Areas
- Airport Compatibility Zones
  - OTHER COMPATIBILITY ZONE
  - A
  - A-EXC1
  - B1
  - B1-APZ I
  - B1-APZ I-EXC1
  - B1-APZ II
  - B1-APZ II-EXC1
  - B1-EXC1
  - B2
  - B2-EXC1
  - C
  - C1
  - C1-EXC1
  - C1-EXC3
  - C1-EXC4
  - C1-HIGHT
  - C2
  - C2-EXC1
  - C2-EXC2
  - C2-EXC3
  - C2-EXC5
  - C2-EXC6

RCIT

0 770 1,539 Feet

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Notes

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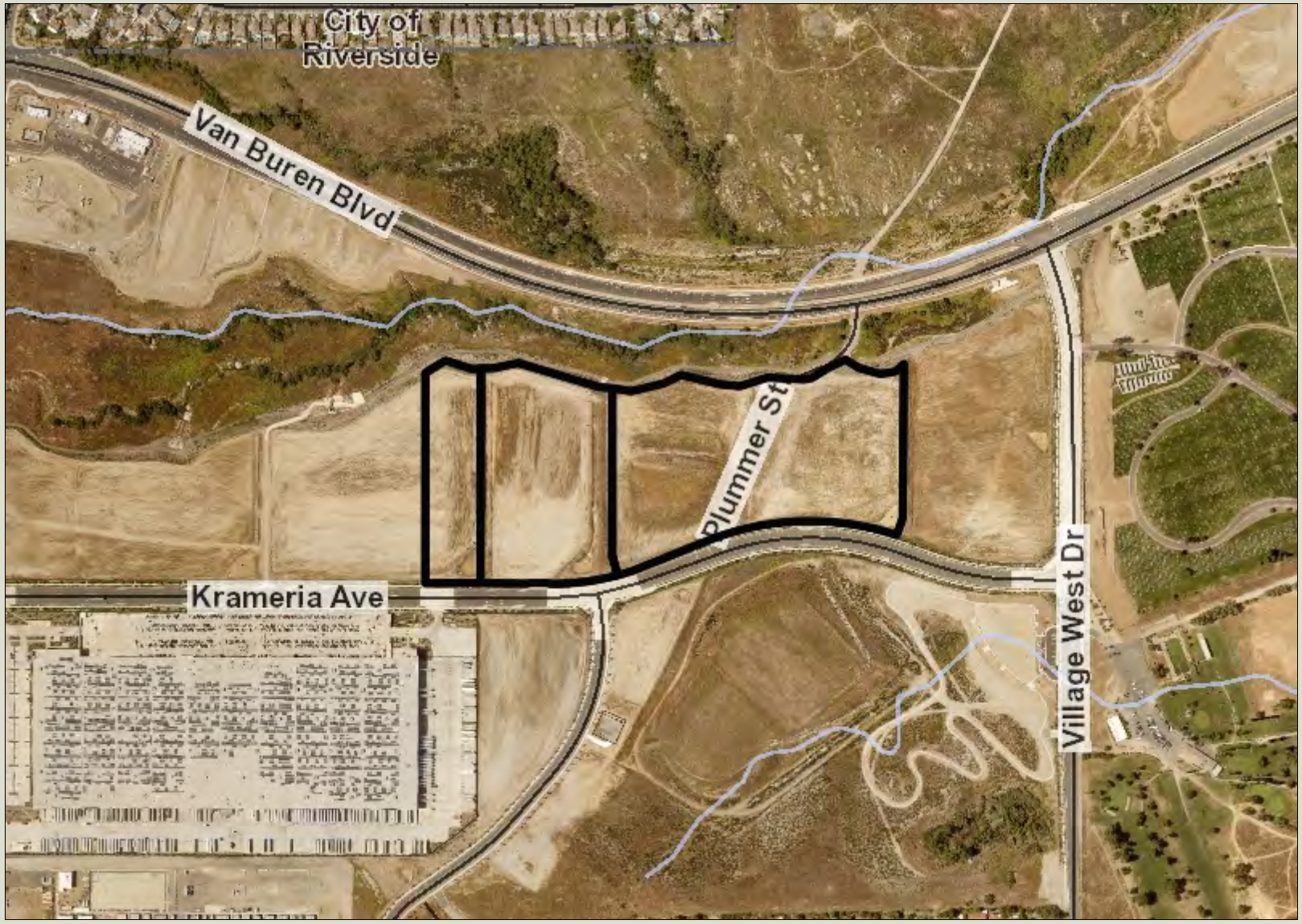

Legend

- County Centerline Names
- County Centerlines
- Blueline Streams
- City Areas
- World Street Map

0 770 1,539 Feet

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Notes

Map My County Map

Legend

- Blueline Streams
- City Areas
- World Street Map

0 3,079 6,157 Feet

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Notes

Map My County Map

Legend

- County Centerline Names
- County Centerlines
- Blueline Streams
- City Areas
- World Street Map

0 770 1,539 Feet

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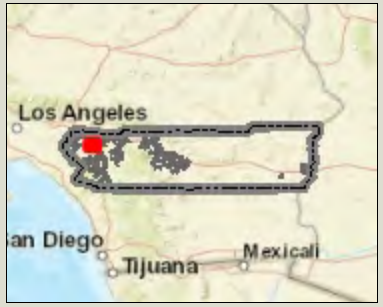
Notes

Map My County Map



Legend

- Blueline Streams
- City Areas
- World Street Map

0 6, 12,314 Feet
157

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Notes

Site Design Criteria - Flat Roof PV System Basis of Design	
Roof Live Load (psf)	20(see footnote 1)
Ground Snow Pg (psf)	0
Flat Roof Snow Pf (psf)	0
Snow Importance Factor (Is)	1.0
Wind Design Data	
Basic Wind Speed (mph)	100
Risk Category	II
Wind Exposure	C
Earthquake Design Data	
Risk Category	II
Importance Factor (Ie)	1.00
Component Importance Factor (Ip)	1.0
Mapped Acceleration Parameter (Ss)	1.500
Mapped Acceleration Parameter(S1)	0.576
Seismic Site Class	D
Design Spectral Acceleration Parameter (Sds)	1.200
Design Spectral Acceleration Parameter (Sd1)	0.662
Seismic Design Category (SDC)	D
Basic seismic-force-resisting system(s)	roof anchors
Base Design Shear = Fp x W	0.58 W
Response Modification Factor (R)	2.5
Analysis Procedure	ASCE 7 sec. 13.3/4
Design Code (with local amendments)	2022 CBC
-	ASCE 7 - 16
ALTERNATE DESIGN METHOD	
-	SEAOC PV2

1. Roof Live Load only applicable to areas not covered by PV modules. Reference SEAOC Design Guidelines

GENERAL NOTES:

1. ALL SITE, PROJECT, AND BUILDING DETAILS ARE PROVIDED BY CUSTOMER OR GENERATED VIA SATELLITE IMAGERY FROM INFORMATION PROVIDED BY CUSTOMER. PANELCLAW IS NOT RESPONSIBLE FOR SITE INACCURACIES THAT COULD LEAD TO CHANGES TO THESE DRAWING DETAILS AND ARRAY LAYOUT CONFIGURATIONS. ALL INFORMATION CONTAINED WITHIN THESE DOCUMENTS ARE TO BE FIELD VERIFIED BY CUSTOMER AND INSTALLER. ANY CHANGES OR MODIFICATIONS TO THESE DOCUMENTS, CONTAINED INFORMATION, OR FINAL ARRAY AND MOUNTING SYSTEM INSTALLATIONS MUST BE SUBMITTED TO PANELCLAW AND OTHER PROJECT AUTHORITIES FOR APPROVAL.
2. REFER TO AND FOLLOW THE APPROPRIATE PANELCLAW INSTALLATION MANUALS AND PROCEDURES DURING THE INSTALLATION PROCESS. NOT FOLLOWING SUCH PROCEDURES AND METHODS COULD RESULT IN DAMAGE TO THE COMPONENTS OR MAY VOID THE PRODUCT WARRANTY.
3. ARRAY SETBACKS: ALL ARRAYS ARE REQUIRED TO BE SETBACK 4-FEET FROM ALL ROOF EDGES UNLESS OTHERWISE SPECIFIED AND CALLED OUT ON THE ARRAY DIAGRAMS ON THIS PAGE OR ON ADDITIONAL ARRAY BALLAST PAGES
4. REFER TO THE SPECIFIC ARRAY BALLAST SHEETS FOR BALLASTING REQUIREMENTS BASED ON THE PROVIDED SITE INFORMATION
5. SYSTEM PSF INCLUDES ALL PANELCLAW RACKING COMPONENTS, MECHANICAL ATTACHMENTS (IF APPLICABLE), PV MODULE AND BALLAST BLOCKS. FOR MAXIMUM SYSTEM POINT LOAD SUMMARY (PLS), REFER TO CALCULATIONS.
6. PANELCLAW AND/OR PANELCLAW CONSULTING ENGINEERS ARE NOT RESPONSIBLE FOR DETERMINING THE ADEQUACY OF THE STRUCTURE TO SUPPORT LOADS IMPOSED BY THE ARRAY AND MOUNTING SYSTEM. SUPPORT STRUCTURE TO BE CHECKED BY OTHERS
7. ALWAYS ALLOW 6" CLEARANCE BETWEEN NEIGHBORING SUBARRAYS, 6" BETWEEN SUBARRAYS AND ALL FIXED ROOF OBJECTS AND 4' BETWEEN SUBARRAYS AND ROOF EDGES. REFER TO LOCAL FIRE CODES AND ELECTRICAL CODES FOR ADDITIONAL REQUIREMENTS WHICH MAY GOVERN DESIGN. SUBARRAYS THAT USE A SEISMIC ANALYSIS METHOD OF DELTA MPV PER SEAOC OR ASCE 7-16 HAVE THEIR OWN CLEARANCE REQUIREMENTS. REFER TO THE BALLAST LAYOUT SHEETS WITHIN THIS DOCUMENT FOR DETAILS.
8. BALLAST BLOCK DIMENSIONS MUST CONFORM TO THE FOLLOWING SPECIFICATIONS: 3-3/4" THICK MAX., 7-5/8" ± 1/8" WIDTH, 15-5/8" ± 1/8" LENGTH.
9. IF AN ARRAY CLEARANCES TABLE APPEARS BELOW ON THIS PAGE, THE DESIGN UTILIZES THIRD PARTY SEISMIC NON-LINEAR RESPONSE ANALYSIS TO ESTIMATE MAXIMUM ARRAY SEISMIC DISPLACEMENT. THE PREDICTED MOVEMENT IS ONLY AN ESTIMATE. PANELCLAW IS NOT RESPONSIBLE OR LIABLE FOR ANY DAMAGES OR COSTS ASSOCIATED WITH PV ARRAY MOVEMENT INCLUDING MOVEMENT IN EXCESS OF THE CLEARANCES NOTED IN THIS DOCUMENT OR ANY REQUIREMENT TO REPOSITION THE ARRAYS IF MOVEMENT OCCURS.
10. DEFLECTORS MUST BE INSTALLED WHEN WINDS ARE EXPECTED TO EXCEED APPROX. 25% OF WIND SPEED DOCUMENTED IN SITE DESIGN CRITERIA TABLE. DEFLECTORS ARE REQUIRED ON ALL MODULES UNLESS OTHERWISE NOTED ON BALLAST LAYOUT PAGES.

SHEET INDEX

NO.	DESCRIPTION
PC-1	COVER SHEET
PC-2	PROJECT SUMMARY
PC-3	ARRAY SITE MAP
PC-4	TYPICAL ARRAY DIMENSIONS
PC-5	ASSEMBLIES
PC-6	RACKING COMPONENTS
PC-7	BALLAST LEGEND
PC-8 TO PC-21	BALLAST LAYOUT - 1 TO 14
PC-22	MECHANICAL ATTACHMENT DETAIL

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RACKING CONSTRUCTION SET

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REV	DESCRIPTION	DATE	CHECK	PREP
0	Initial Ballast Map Layout	2023-04-20		MM
1	Revised Ballast	2023-04-20		RH

SCALE:
0" 1/2" 1" 2"
ORIGINAL SIZE 36"X24"
SHEET SIZE ARCH "D"

PREPARED FOR:
Telyon

PROJECT:
Amazon DJT6

LOCATION:
20920 Krameria Avenue, March Air Reserve Base, CA, USA

SHEET TITLE:
COVER SHEET

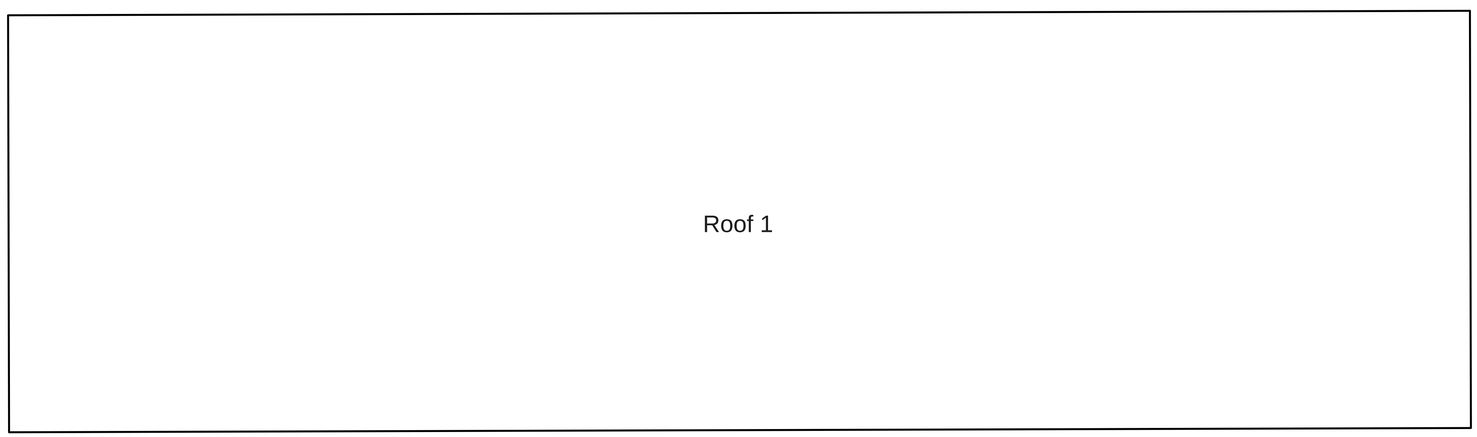
REVISION: 1

SHEET: PC-1

PROJECT SUMMARY	
MODULE TYPE	TRINA SOLAR TSM-500DEG18MC.20(II)
MODULE DIMENSIONS (IN.)	86.10 X 43.39 X 1.38
NUMBER OF MODULES	1600
MODULE WATTAGE (W STC)	500
SYSTEM SIZE (kW STC)	800
SYSTEM WEIGHT (LB)	149105
SYSTEM AREA (SQ FT.)	57271
AGGREGATE SYSTEM LOAD (PSF)	2.60
NUMBER OF ARRAYS	14
ARRAY TILT (DEG)	9.25

clawFR 10 Degree - 44 cm		
PROJECT PART QUANTITY		
ITEM	PART NUMBER	QTY
Base	500050203	3566
BASE, 03, CFR		
Module Connector	500050703	3200
MODULE CONNECTOR, 1110, 10D, CFR		
Rail	2000895	3836
RAIL, 2500, CFR		
Cam	5000500	3200
CAM, 10D, CFR		
Cam Claw	2000673	3200
CAM CLAW, CFR		
Deflector	200088704	1600
DEFLECTOR, 10D, 2200, CFR		
Bolt	2000697	14688
BLT, HEX FLG, TRI, M6X16, GR8.8, PATCH		
Base Pad	2000678	0
PAD, BASE, CFR		
CONCRETE MASONRY UNIT	N/A	528
BLOCK, CONCRETE, 32.6 LB. - Xin x 8in x 16in NOMINAL, PARTNER SUPPLIED, SEE INSTALLATION MANUAL		

MECHANICAL ATTACHMENT PART QUANTITY		
MA Hardware Kit	5000423	21
HW KIT, MA STRUT, 2500, CFR		
MA Strut	2000930	202
MA STRUT, 2500, CFR		
Mechanical Attachment	TBD	202
To Be Determined (OMG PowerGrip Plus)		
TOTAL MECHANICAL ATTACHMENT COUNT		202



SITE MAP

SCALE: NTS

A
PC-2

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SHEET SIZE ARCH "D"

PREPARED FOR:

Telyon

PROJECT:

Amazon DJT6

LOCATION:

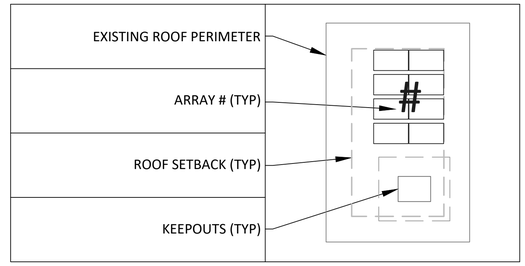
20920 Krameria Avenue, March Air Reserve Base, CA, USA

SHEET TITLE:

PROJECT SUMMARY

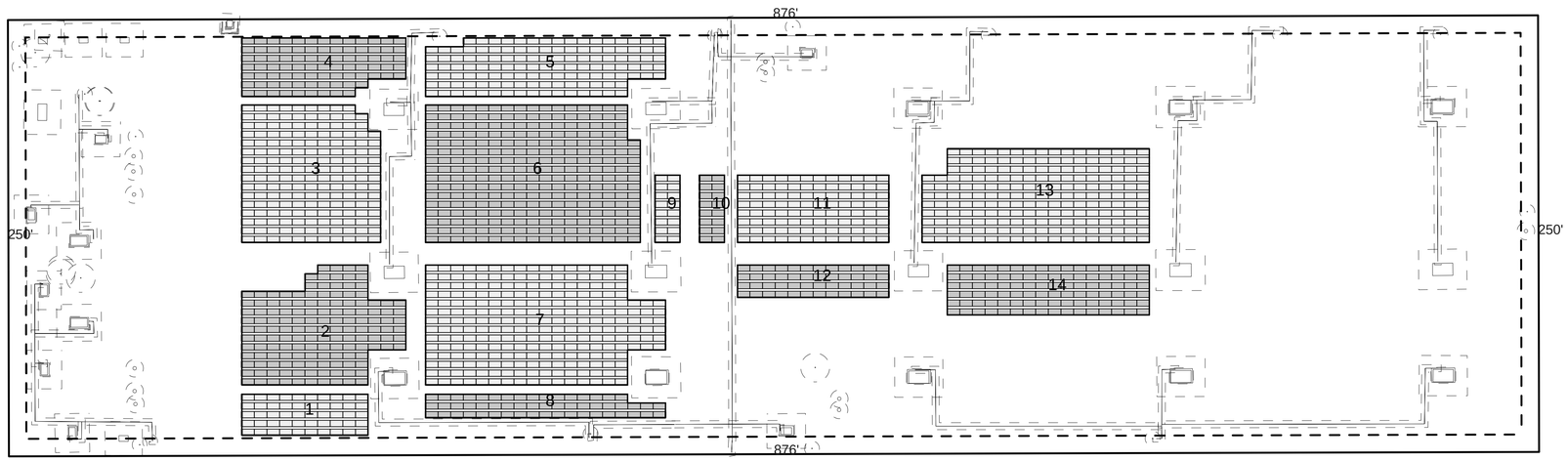
REVISION: 1

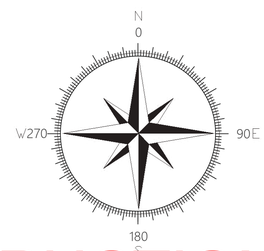
SHEET: PC-2



ROOF NAME	ROOF SETBACK (FT.)	ROOF HEIGHT (FT)	PARAPET HEIGHT (FT)	ROOF TILT (DEG)
Roof 1	10.00	45.00	0.0	2

KEEPOUT NAME	KEEPOUT CLEARANCE (FT.)	KEEPOUT HEIGHT (IN.)
Group 1	4	24
Group 2	8	24
Group 3	0.5	6
Group 4	8	72
Group 5	2	6





ARRAY SITE MAP

SCALE: NTS

A
PC- 3

NOTES:

1. ALL DIMENSIONS SHOWN ARE BASED UPON INFORMATION PROVIDED TO PANELCLAW. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION OF THE SOLAR ARRAY. NOTIFY PANELCLAW OF ANY DISCREPANCIES.

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PREPARED FOR:

Telyon

PROJECT:

Amazon DJT6

LOCATION:

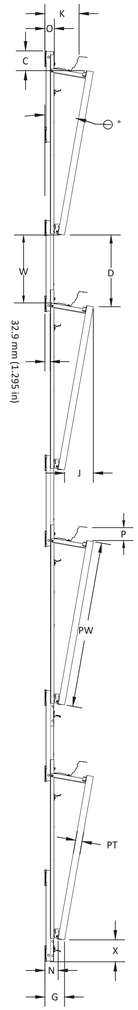
20920 Krameria Avenue, March Air Reserve Base, CA, USA

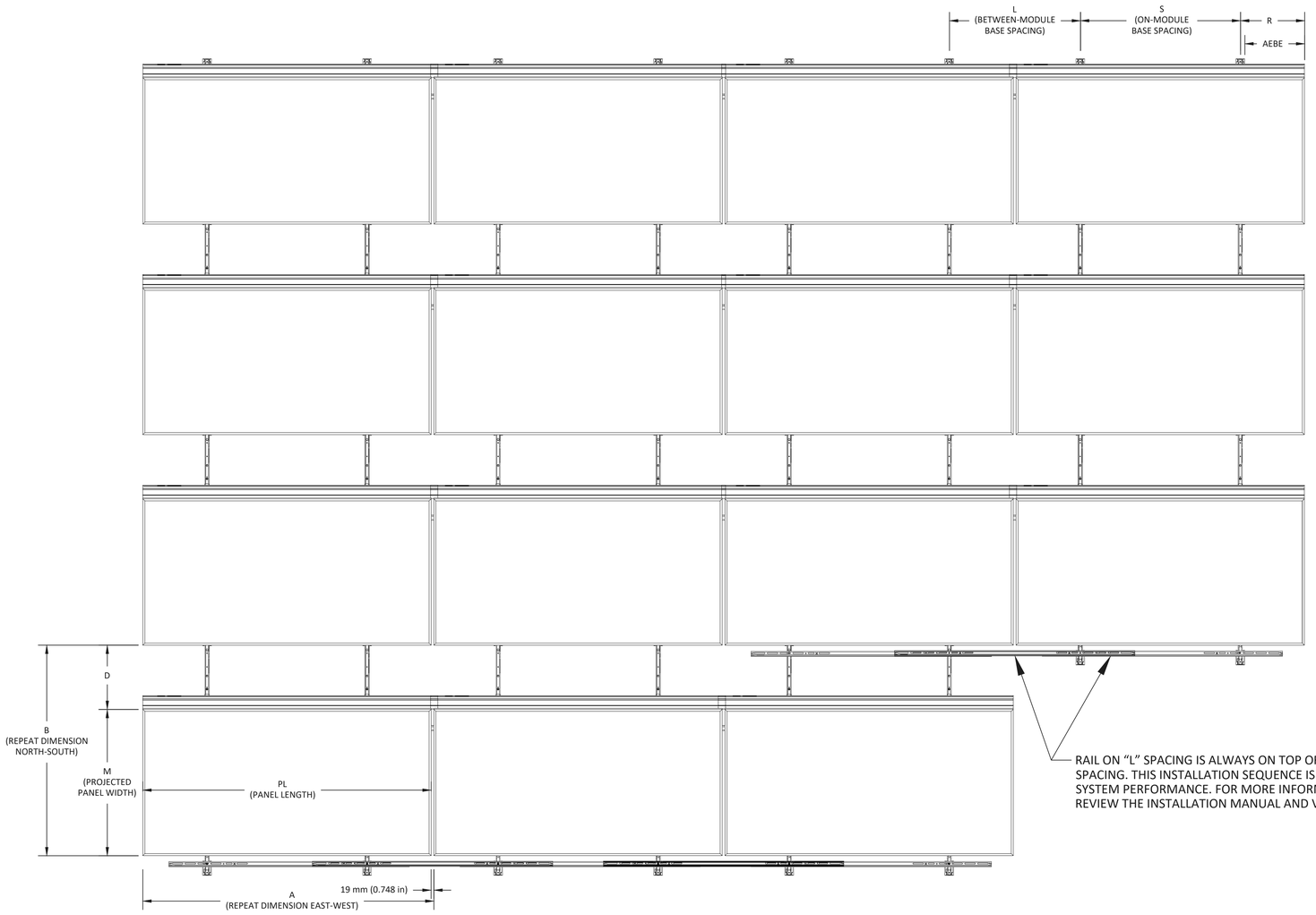
SHEET TITLE:

ARRAY SITE MAP

REVISION: 1

SHEET: PC-3





RAIL ON “L” SPACING IS ALWAYS ON TOP OF RAIL ON “S” SPACING. THIS INSTALLATION SEQUENCE IS CRITICAL TO SYSTEM PERFORMANCE. FOR MORE INFORMATION REVIEW THE INSTALLATION MANUAL AND VIDEOS.

ARRAY CROSS SECTION VIEW

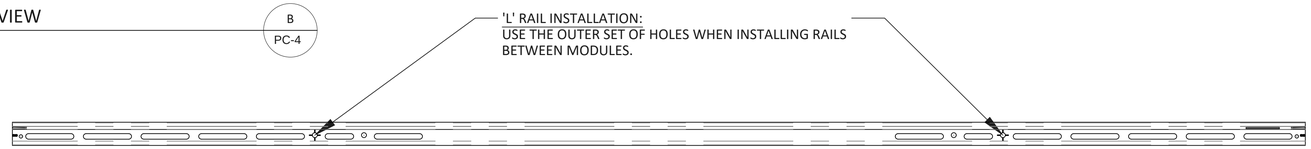
SCALE: NTS

A PC-4

ARRAY TOP VIEW

SCALE: NTS

B PC-4



'L' RAIL INSTALLATION:
USE THE OUTER SET OF HOLES WHEN INSTALLING RAILS BETWEEN MODULES.

RAIL DETAIL

SCALE: NTS

C PC-4

INSTALLATION MEASUREMENTS

		AEBE	S	L	CAM SPACING*
UNITS	mm	486	1156	1050	69
	inches	19 1/8	45 1/2	41 5/16	2 11/16

*CAM SPACING SHOWN ON ASSEMBLIES PAGE.

MODULE DIMENSIONS

		PL	PW	PT
UNITS	mm	2187	1102	35
	inches	86.10	43.39	1.38

INSTALLED ARRAY DIMENSIONS

		A	B	C	D	G	J	K	M	N	O	P	R	W	X	Theta (DEG)	D/J (#:1)	G.C.R.*
UNITS	mm	2206	1528	123	441	116	177	211	1088	82	61	87	516	425	136	9.25	2.49	0.72
	inches	86.85	60.17	4.84	17.34	4.57	6.97	8.30	42.82	3.21	2.39	3.42	20 5/16	16.73	5.35	9.25	2.49	0.72

* G.C.R = (PW) / B

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PROJECT:
Amazon DJT6

LOCATION:
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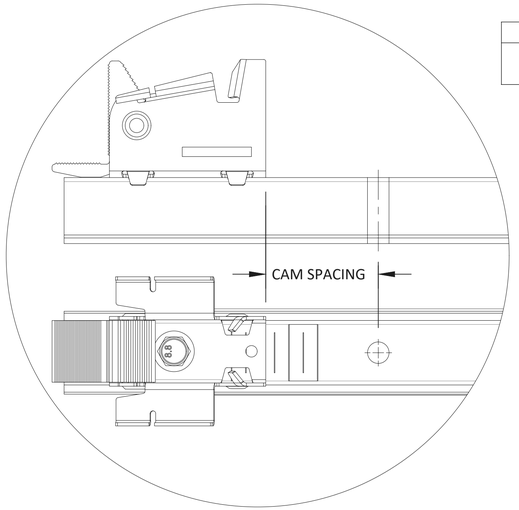
SHEET TITLE:
TYPICAL ARRAY DIMENSIONS

REVISION: 1

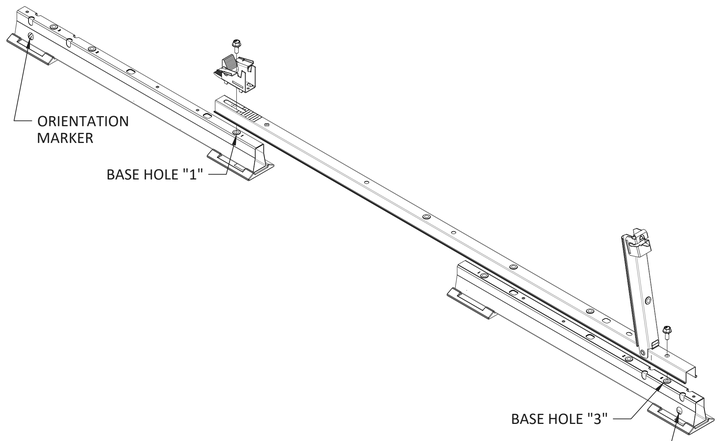
SHEET: PC-4

		CAM SPACING
UNITS	mm	69
	inches	2 11/16



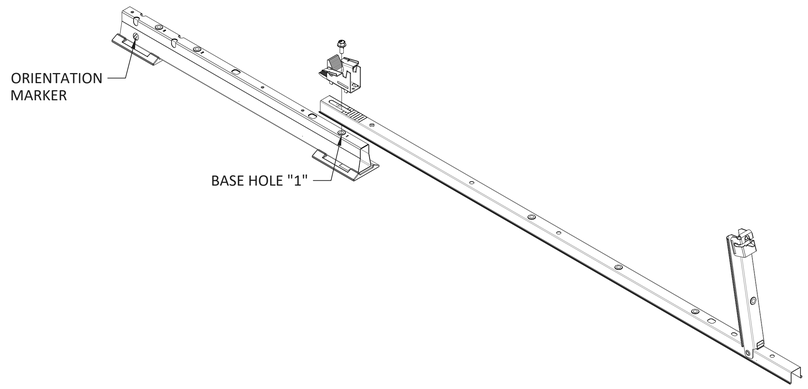
CAM SPACING DETAIL — A — PC-5

SCALE: NTS



NORTH ASSEMBLY — B — PC-5

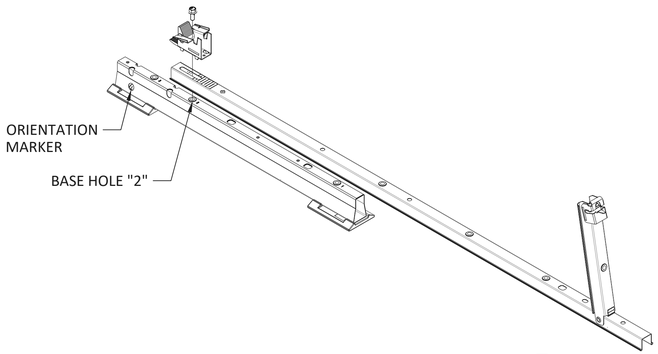
SCALE: NTS



MIDDLE ASSEMBLY — C — PC-5

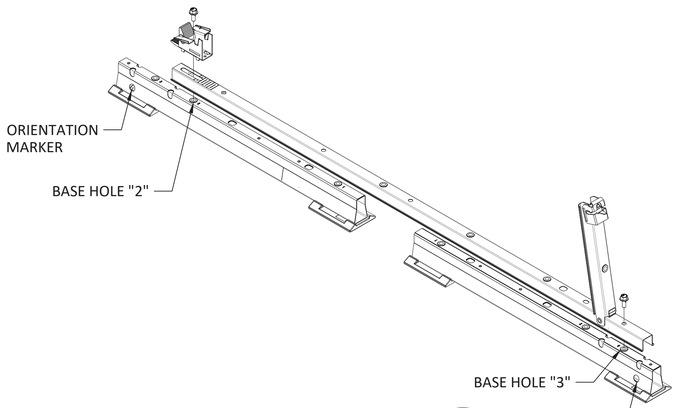
SCALE: NTS

STANDARD ASSEMBLY QUANTITY	
NORTH ASSEMBLY	366
SOUTH ASSEMBLY	366
MIDDLE ASSEMBLY	2468
NORTH SOUTH ASSEMBLY	0
NOTE: ASSEMBLIES IN THIS TABLE USE THE STANDARD 2-PAD BASE	



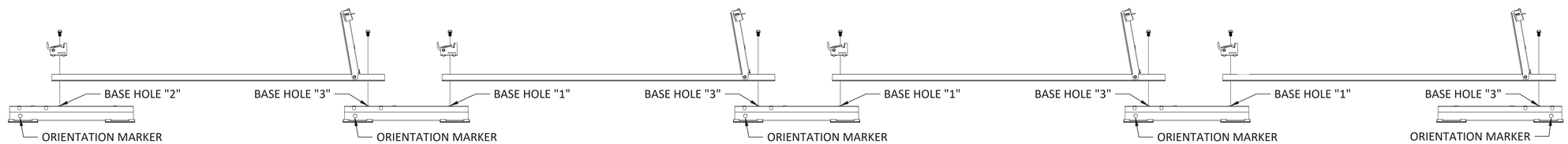
SOUTH ASSEMBLY — D — PC-5

SCALE: NTS



NORTH SOUTH ASSEMBLY — E — PC-5

SCALE: NTS



EXAMPLE ARRAY CONSTRUCTION — F — PC-5

SCALE: NTS

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SHEET SIZE ARCH "D"

PREPARED FOR:

Telyon

PROJECT:

Amazon DJT6

LOCATION:

20920 Krameria Avenue, March Air Reserve Base, CA, USA

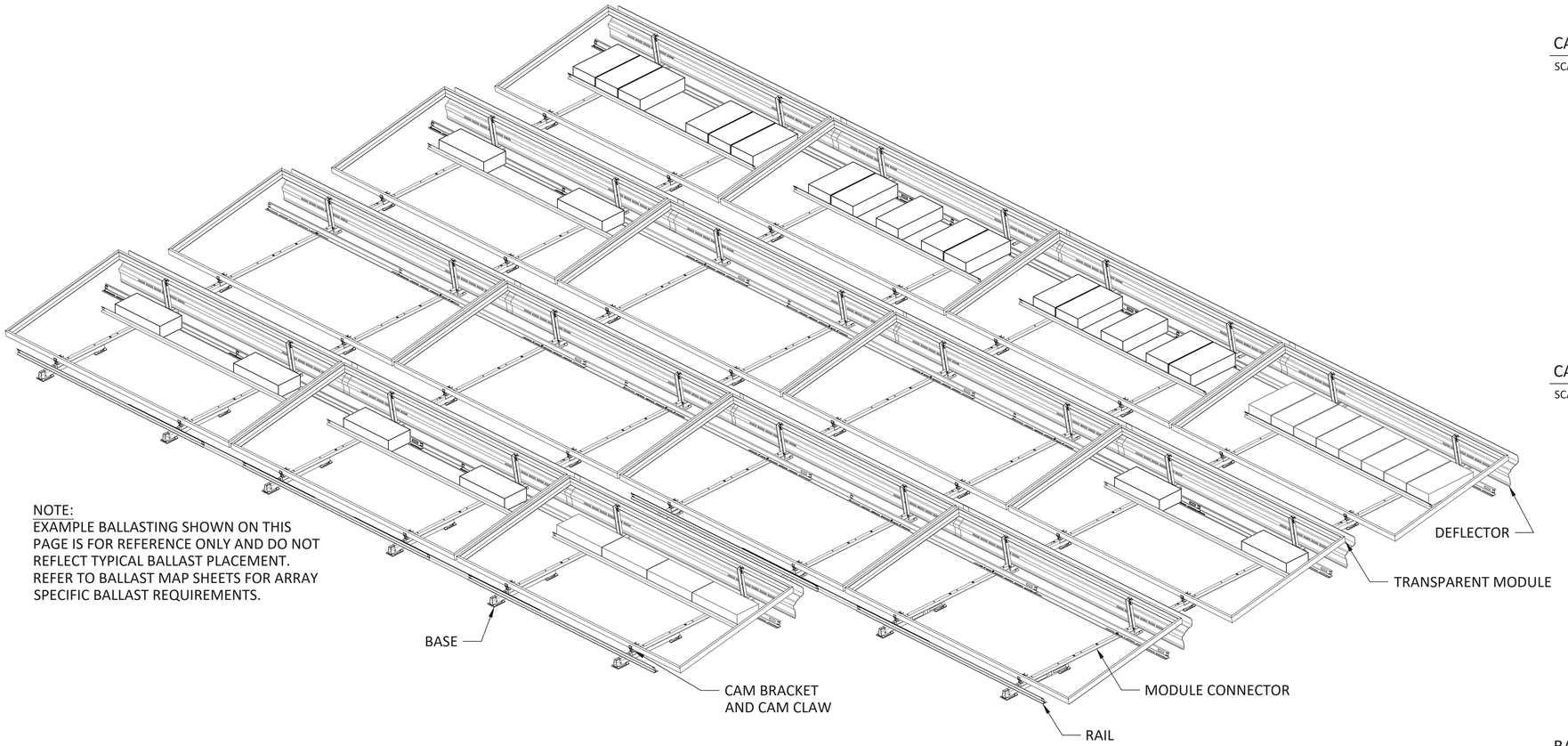
SHEET TITLE:

ASSEMBLIES

REVISION: 1

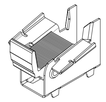
SHEET: PC-5

NOTE:
EXAMPLE BALLASTING SHOWN ON THIS PAGE IS FOR REFERENCE ONLY AND DO NOT REFLECT TYPICAL BALLAST PLACEMENT. REFER TO BALLAST MAP SHEETS FOR ARRAY SPECIFIC BALLAST REQUIREMENTS.

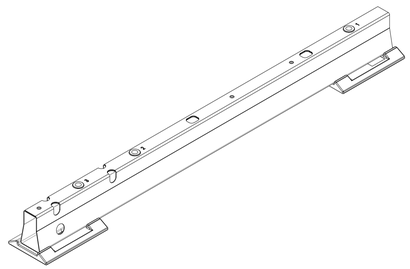


EXAMPLE RAIL AND BLOCK CONFIGURATION (A, PC-6)
SCALE: NTS

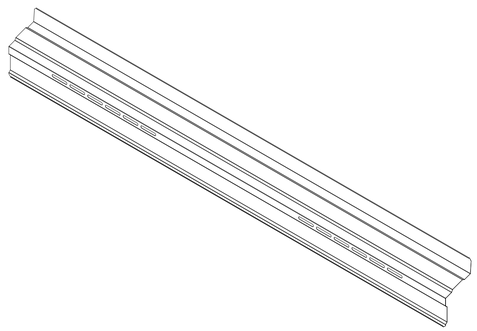
CAM CLAW (B, PC-6)
SCALE: NTS



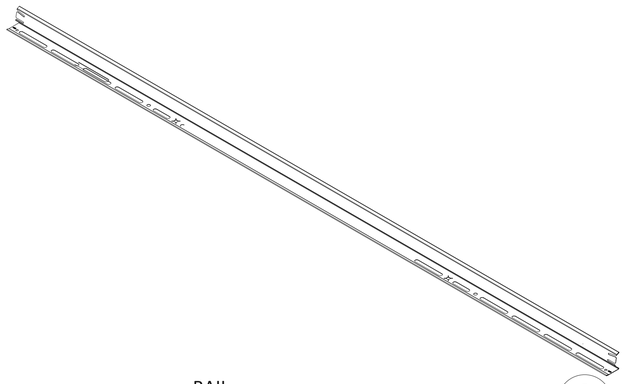
CAM BRACKET (C, PC-6)
SCALE: NTS



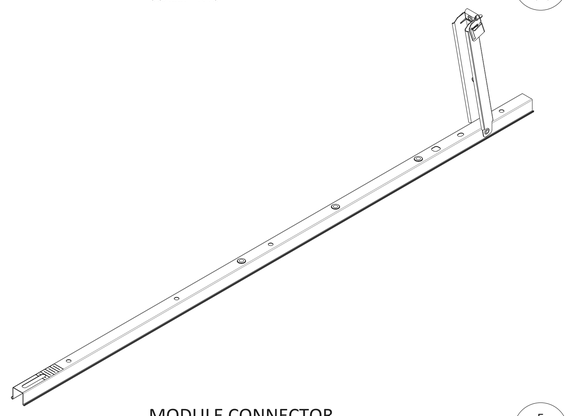
BASE (D, PC-6)
SCALE: NTS



DEFLECTOR (G, PC-6)
SCALE: NTS



RAIL (F, PC-6)
SCALE: NTS



MODULE CONNECTOR (E, PC-6)
SCALE: NTS

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PREPARED FOR:
Telyon

PROJECT:
Amazon DJT6

LOCATION:
20920 Krameria Avenue, March Air Reserve Base, CA, USA

SHEET TITLE:
RACKING COMPONENTS

REVISION: 1
SHEET: PC-6

BALLAST QUANTITY:
"#"=QUANTITY OF BALLAST BLOCK INSTALLED CENTERED UNDER MODULE

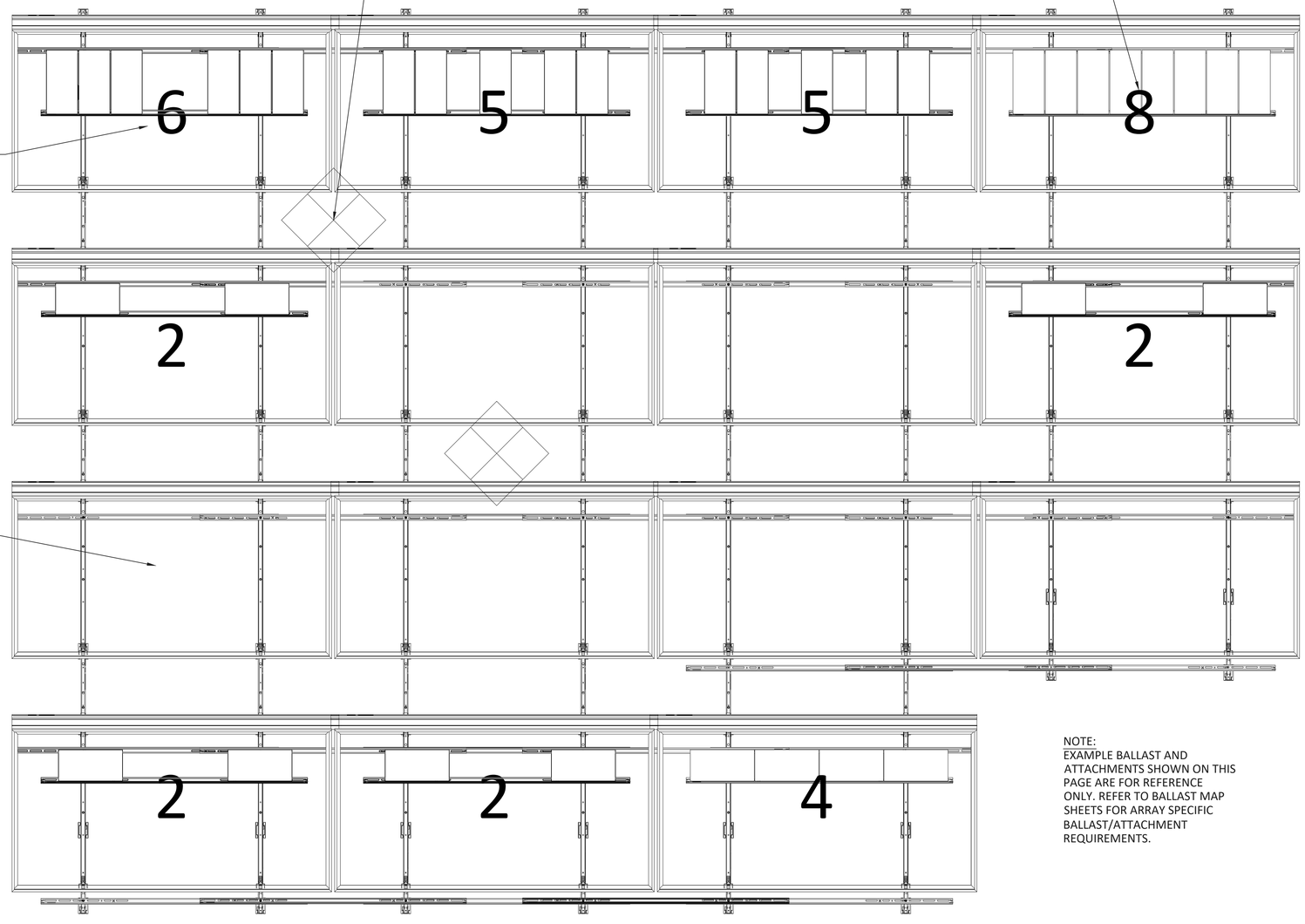
IF NO BALLAST QUANTITY SHOWN, DO NOT PLACE BALLAST

SEE INSTALLATION MANUAL FOR NOTES ON INSTALLING MORE THAN FOUR BALLAST BLOCKS PER MODULE

DO NOT INSTALL ADDITIONAL RAIL TO HOLD BALLAST ON MODULES WITH NO BALLAST SHOWN.

MECHANICAL ATTACHMENT AT INDICATED LOCATION

MODULES LONGER THAN 2100 MM WITH 7 OR 8 BALLAST BLOCKS REQUIRE TWO (2) RAILS.



NOTE:
EXAMPLE BALLAST AND ATTACHMENTS SHOWN ON THIS PAGE ARE FOR REFERENCE ONLY. REFER TO BALLAST MAP SHEETS FOR ARRAY SPECIFIC BALLAST/ATTACHMENT REQUIREMENTS.

ARRAY CROSS SECTION VIEW
SCALE: NTS
A PC-7

ARRAY TOP VIEW
SCALE: NTS
B PC-7

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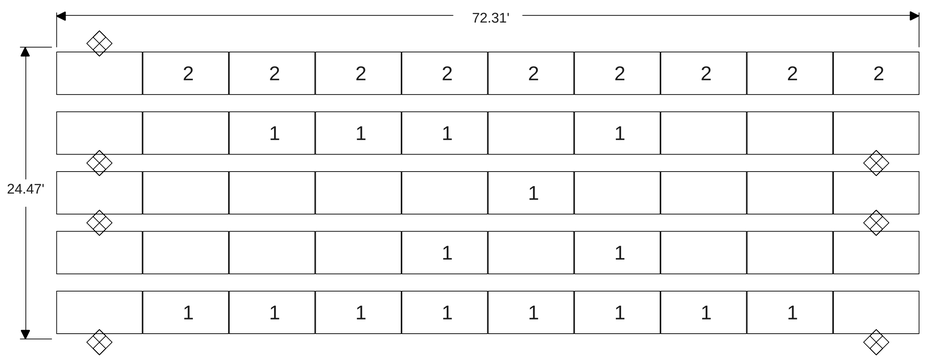
SHEET TITLE:
BALLAST LEGEND

REVISION: 1
SHEET: PC-7

ARRAY 1.1	
ROOF INFORMATION	
ROOF HEIGHT (FT)	45.00
PARAPET HEIGHT (FT)	0.0
ROOF TILT (DEG)	2
ROOF TYPE	TPO
SPECIFICATIONS	
NUMBER OF MODULES	50
MODULE POWER (W)	500
ARRAY OUTPUT (Kw)	25
ARRAY AZIMUTH	180
PART QUANTITIES	
ITEM	QTY
Base	120
Module Connector	100
Rail	138
Cam	100
Cam Claw	100
Deflector	50
Base Pad	0
Ballast Block	33
Mechanical Attachment	7
LOADING DETAILS	
SINGLE MODULE WT (LB)	66.4
SINGLE CMU WT (LB)	32.6
TOTAL ARRAY WT (LB)	5252
ARRAY AREA (SQ. FT)	1771
ARRAY LOAD (PSF)	2.96

ASSEMBLY QUANTITIES	
ASSEMBLY	QTY
NORTH ASSEMBLY	20
SOUTH ASSEMBLY	20
MIDDLE ASSEMBLY	60
NORTH SOUTH ASSEMBLY	0



BALLAST LAYOUT - 1.1

SCALE: 1/6" = 1'-0"

A PC-8

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REV	DESCRIPTION	PREP	CHECK	DATE
0	Initial Ballast Map Layout	MM		2023-04-20
1	Revised Ballast	RH		2023-04-20

SCALE:

0" 1/2" 1" 2"

ORIGINAL SIZE 36"X24"
SHEET SIZE ARCH "D"

PREPARED FOR:

Telyon

PROJECT:

Amazon DJT6

LOCATION:

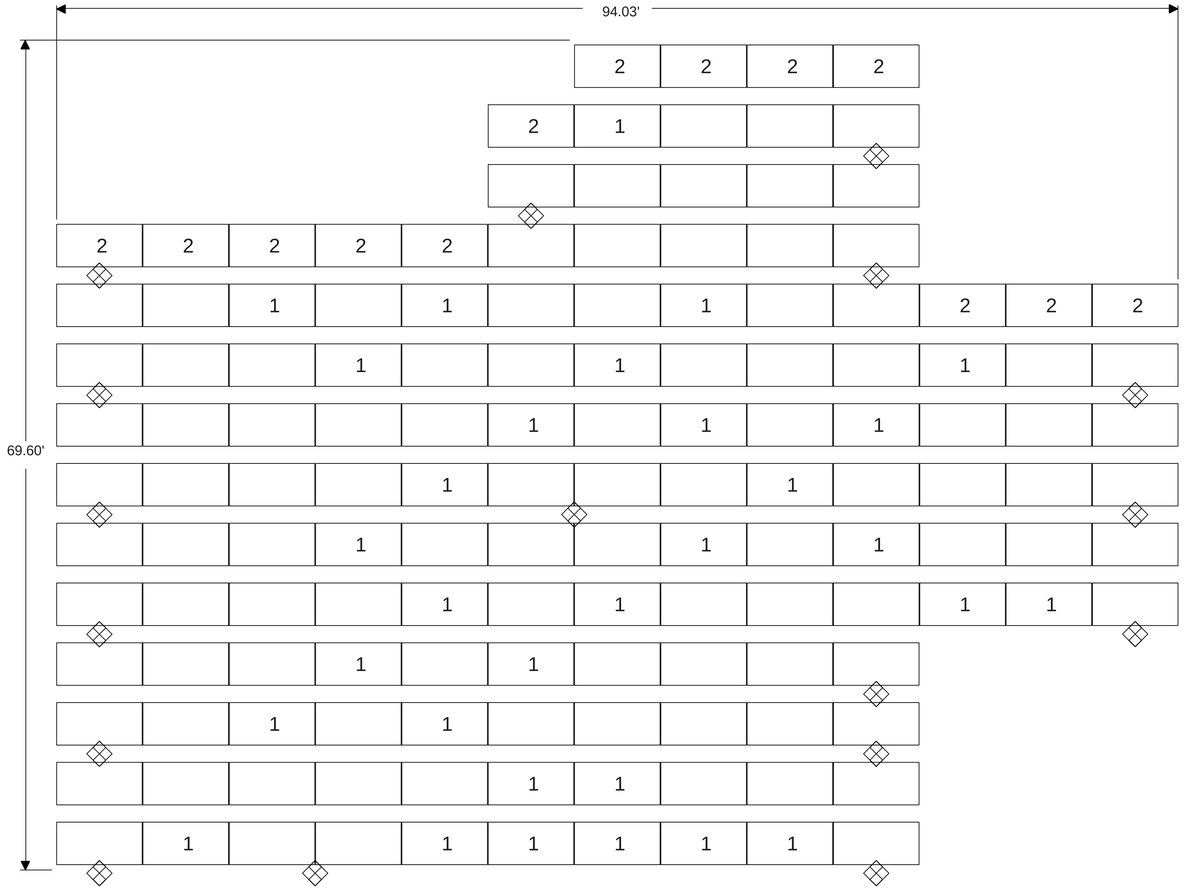
20920 Krameria Avenue, March Air Reserve Base, CA, USA

SHEET TITLE:

BALLAST LAYOUT - 1.1

REVISION: 1

SHEET: PC-8



ARRAY 1.2	
ROOF INFORMATION	
ROOF HEIGHT (FT)	45.00
PARAPET HEIGHT (FT)	0.0
ROOF TILT (DEG)	2
ROOF TYPE	TPO
SPECIFICATIONS	
NUMBER OF MODULES	142
MODULE POWER (W)	500
ARRAY OUTPUT (Kw)	71
ARRAY AZIMUTH	180
PART QUANTITIES	
ITEM	QTY
Base	310
Module Connector	284
Rail	340
Cam	284
Cam Claw	284
Deflector	142
Base Pad	0
Ballast Block	57
Mechanical Attachment	17
LOADING DETAILS	
SINGLE MODULE WT (LB)	66.4
SINGLE CMU WT (LB)	32.6
TOTAL ARRAY WT (LB)	13547
ARRAY AREA (SQ. FT)	5097
ARRAY LOAD (PSF)	2.66

ASSEMBLY QUANTITIES	
ASSEMBLY	**QTY**
NORTH ASSEMBLY	26
SOUTH ASSEMBLY	26
MIDDLE ASSEMBLY	232
NORTH SOUTH ASSEMBLY	0

BALLAST LAYOUT - 1.2

SCALE: 1/6" = 1'-0"

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ORIGINAL SIZE 36"X24"
SHEET SIZE ARCH "D"

PREPARED FOR:

Telyon

PROJECT:

Amazon DJT6

LOCATION:

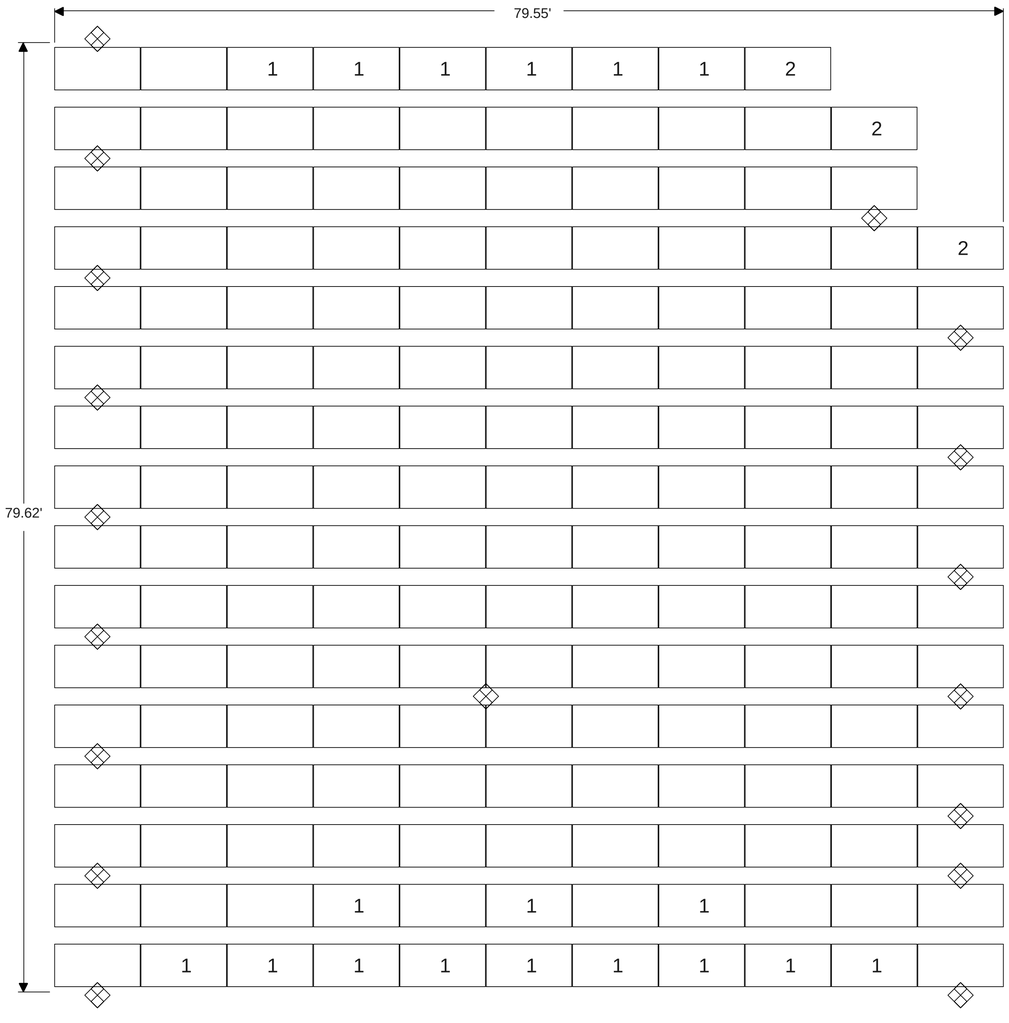
20920 Krameria Avenue, March Air Reserve Base, CA, USA

SHEET TITLE:

BALLAST LAYOUT - 1.2

REVISION: 1

SHEET: PC-9



ARRAY 1.3	
ROOF INFORMATION	
ROOF HEIGHT (FT)	45.00
PARAPET HEIGHT (FT)	0.0
ROOF TILT (DEG)	2
ROOF TYPE	TPO
SPECIFICATIONS	
NUMBER OF MODULES	172
MODULE POWER (W)	500
ARRAY OUTPUT (Kw)	86
ARRAY AZIMUTH	180
PART QUANTITIES	
ITEM	QTY
Base	366
Module Connector	344
Rail	370
Cam	344
Cam Claw	344
Deflector	172
Base Pad	0
Ballast Block	24
Mechanical Attachment	18
LOADING DETAILS	
SINGLE MODULE WT (LB)	66.4
SINGLE CMU WT (LB)	32.6
TOTAL ARRAY WT (LB)	14819
ARRAY AREA (SQ. FT)	6194
ARRAY LOAD (PSF)	2.39

ASSEMBLY QUANTITIES	
ASSEMBLY	**QTY**
NORTH ASSEMBLY	22
SOUTH ASSEMBLY	22
MIDDLE ASSEMBLY	300
NORTH SOUTH ASSEMBLY	0

BALLAST LAYOUT - 1.3

SCALE: 1/6" = 1'-0"

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SCALE:

0" 1/2" 1" 2"

ORIGINAL SIZE 36"X24"
SHEET SIZE ARCH "D"

PREPARED FOR:

Telyon

PROJECT:

Amazon DJT6

LOCATION:

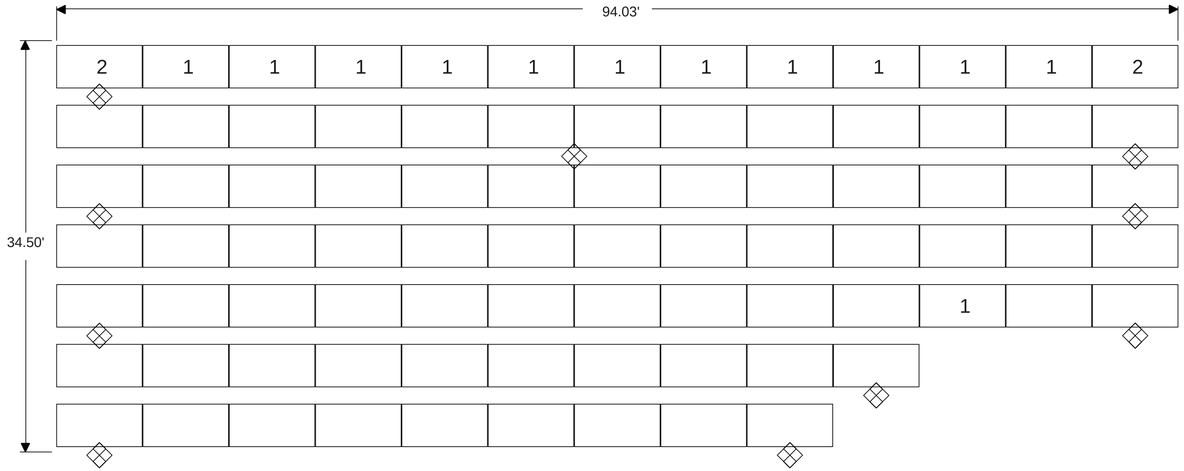
20920 Krameria Avenue, March Air Reserve Base, CA, USA

SHEET TITLE:

BALLAST LAYOUT - 1.3

REVISION: 1

SHEET: PC-10



BALLAST LAYOUT - 1.4

SCALE: 1/6" = 1'-0"

A PC-11

N

ARRAY 1.4	
ROOF INFORMATION	
ROOF HEIGHT (FT)	45.00
PARAPET HEIGHT (FT)	0.0
ROOF TILT (DEG)	2
ROOF TYPE	TPO
SPECIFICATIONS	
NUMBER OF MODULES	84
MODULE POWER (W)	500
ARRAY OUTPUT (Kw)	42
ARRAY AZIMUTH	180
PART QUANTITIES	
ITEM	QTY
Base	194
Module Connector	168
Rail	202
Cam	168
Cam Claw	168
Deflector	84
Base Pad	0
Ballast Block	16
Mechanical Attachment	10
LOADING DETAILS	
SINGLE MODULE WT (LB)	66.4
SINGLE CMU WT (LB)	32.6
TOTAL ARRAY WT (LB)	7450
ARRAY AREA (SQ. FT)	2992
ARRAY LOAD (PSF)	2.49

ASSEMBLY QUANTITIES	
ASSEMBLY	QTY
NORTH ASSEMBLY	26
SOUTH ASSEMBLY	26
MIDDLE ASSEMBLY	116
NORTH SOUTH ASSEMBLY	0

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SCALE:

0" 1/2" 1" 2"

ORIGINAL SIZE 36"X24"
SHEET SIZE ARCH "D"

PREPARED FOR:

Telyon

PROJECT:

Amazon DJT6

LOCATION:

20920 Krameria Avenue, March Air Reserve Base, CA, USA

SHEET TITLE:

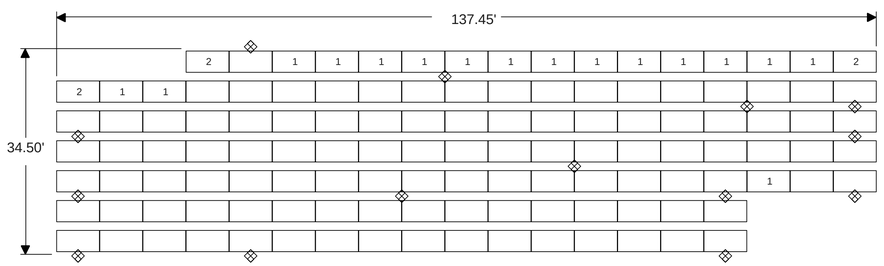
BALLAST LAYOUT - 1.4

REVISION: 1

SHEET: PC-11

ARRAY 1.5	
ROOF INFORMATION	
ROOF HEIGHT (FT)	45.00
PARAPET HEIGHT (FT)	0.0
ROOF TILT (DEG)	2
ROOF TYPE	TPO
SPECIFICATIONS	
NUMBER OF MODULES	124
MODULE POWER (W)	500
ARRAY OUTPUT (Kw)	62
ARRAY AZIMUTH	180
PART QUANTITIES	
ITEM	QTY
Base	286
Module Connector	248
Rail	298
Cam	248
Cam Claw	248
Deflector	124
Base Pad	0
Ballast Block	22
Mechanical Attachment	14
LOADING DETAILS	
SINGLE MODULE WT (LB)	66.4
SINGLE CMU WT (LB)	32.6
TOTAL ARRAY WT (LB)	10937
ARRAY AREA (SQ. FT)	4418
ARRAY LOAD (PSF)	2.48

ASSEMBLY QUANTITIES	
ASSEMBLY	**QTY**
NORTH ASSEMBLY	38
SOUTH ASSEMBLY	38
MIDDLE ASSEMBLY	172
NORTH SOUTH ASSEMBLY	0



BALLAST LAYOUT - 1.5

SCALE: 1/12" = 1'-0"

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SCALE:

0" 1/2" 1" 2"

ORIGINAL SIZE 36"X24"
SHEET SIZE ARCH "D"

PREPARED FOR:

Telyon

PROJECT:

Amazon DJT6

LOCATION:

20920 Krameria Avenue, March Air Reserve Base, CA, USA

SHEET TITLE:

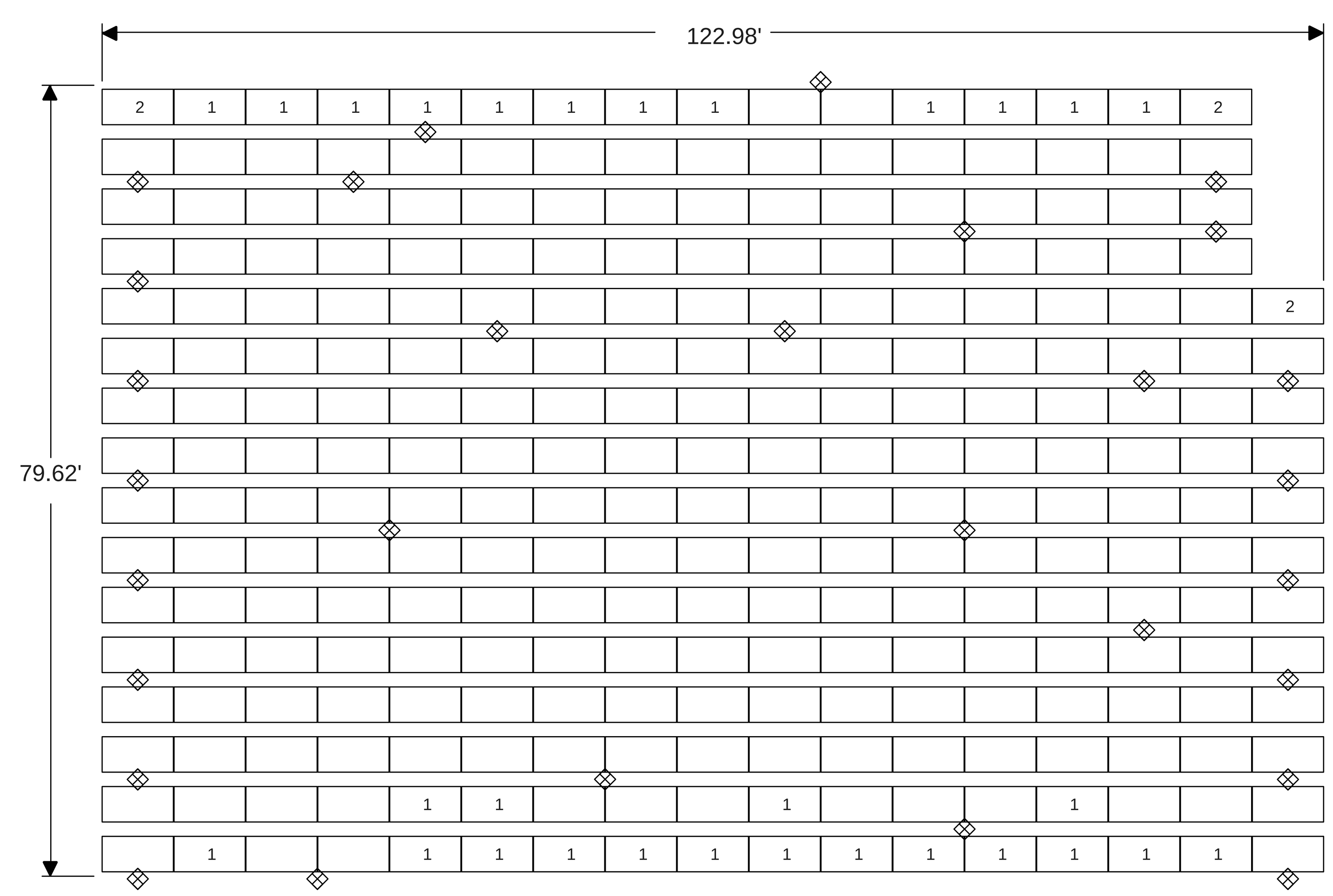
BALLAST LAYOUT - 1.5

REVISION: 1

SHEET: PC-12

ARRAY 1.6	
ROOF INFORMATION	
ROOF HEIGHT (FT)	45.00
PARAPET HEIGHT (FT)	0.0
ROOF TILT (DEG)	2
ROOF TYPE	TPO
SPECIFICATIONS	
NUMBER OF MODULES	268
MODULE POWER (W)	500
ARRAY OUTPUT (Kw)	134
ARRAY AZIMUTH	180
PART QUANTITIES	
ITEM	QTY
Base	570
Module Connector	536
Rail	585
Cam	536
Cam Claw	536
Deflector	268
Base Pad	0
Ballast Block	35
Mechanical Attachment	29
LOADING DETAILS	
SINGLE MODULE WT (LB)	66.4
SINGLE CMU WT (LB)	32.6
TOTAL ARRAY WT (LB)	23038
ARRAY AREA (SQ. FT)	9652
ARRAY LOAD (PSF)	2.39

ASSEMBLY QUANTITIES	
ASSEMBLY	**QTY**
NORTH ASSEMBLY	34
SOUTH ASSEMBLY	34
MIDDLE ASSEMBLY	468
NORTH SOUTH ASSEMBLY	0



BALLAST LAYOUT - 1.6

SCALE: 1/12" = 1'-0"

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0	Initial Ballast Map Layout	MM		2023-04-20

SCALE: 0" 1/2" 1" 2"

ORIGINAL SIZE 36"X24"
SHEET SIZE ARCH "D"

PREPARED FOR: Telyon

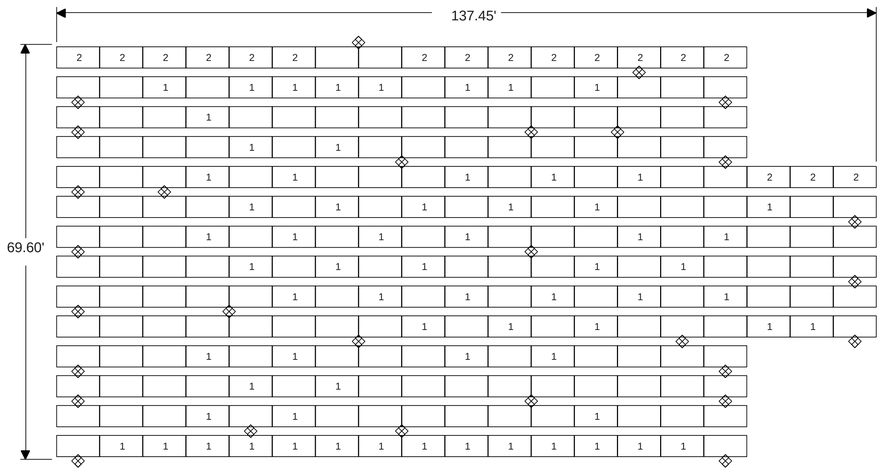
PROJECT: Amazon DJT6

LOCATION: 20920 Krameria Avenue, March Air Reserve Base, CA, USA

SHEET TITLE: BALLAST LAYOUT - 1.6

REVISION: 1

SHEET: PC-13



ARRAY 1.7	
ROOF INFORMATION	
ROOF HEIGHT (FT)	45.00
PARAPET HEIGHT (FT)	0.0
ROOF TILT (DEG)	2
ROOF TYPE	TPO
SPECIFICATIONS	
NUMBER OF MODULES	242
MODULE POWER (W)	500
ARRAY OUTPUT (Kw)	121
ARRAY AZIMUTH	180
PART QUANTITIES	
ITEM	QTY
Base	522
Module Connector	484
Rail	592
Cam	484
Cam Claw	484
Deflector	242
Base Pad	0
Ballast Block	101
Mechanical Attachment	29
LOADING DETAILS	
SINGLE MODULE WT (LB)	66.4
SINGLE CMU WT (LB)	32.6
TOTAL ARRAY WT (LB)	23231
ARRAY AREA (SQ. FT)	8700
ARRAY LOAD (PSF)	2.67

ASSEMBLY QUANTITIES	
ASSEMBLY	QTY
NORTH ASSEMBLY	38
SOUTH ASSEMBLY	38
MIDDLE ASSEMBLY	408
NORTH SOUTH ASSEMBLY	0

BALLAST LAYOUT - 1.7

SCALE: 1/12" = 1'-0"

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ORIGINAL SIZE 36"X24"
SHEET SIZE ARCH "D"

PREPARED FOR:

Telyon

PROJECT:

Amazon DJT6

LOCATION:

20920 Krameria Avenue, March Air Reserve Base, CA, USA

SHEET TITLE:

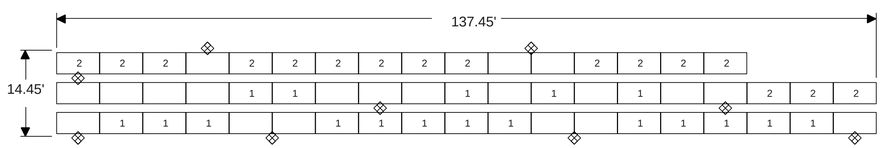
BALLAST LAYOUT - 1.7

REVISION: 1

SHEET: PC-14

ARRAY 1.8	
ROOF INFORMATION	
ROOF HEIGHT (FT)	45.00
PARAPET HEIGHT (FT)	0.0
ROOF TILT (DEG)	2
ROOF TYPE	TPO
SPECIFICATIONS	
NUMBER OF MODULES	54
MODULE POWER (W)	500
ARRAY OUTPUT (Kw)	27
ARRAY AZIMUTH	180
PART QUANTITIES	
ITEM	QTY
Base	146
Module Connector	108
Rail	176
Cam	108
Cam Claw	108
Deflector	54
Base Pad	0
Ballast Block	50
Mechanical Attachment	9
LOADING DETAILS	
SINGLE MODULE WT (LB)	66.4
SINGLE CMU WT (LB)	32.6
TOTAL ARRAY WT (LB)	6228
ARRAY AREA (SQ. FT)	1878
ARRAY LOAD (PSF)	3.32

ASSEMBLY QUANTITIES	
ASSEMBLY	**QTY**
NORTH ASSEMBLY	38
SOUTH ASSEMBLY	38
MIDDLE ASSEMBLY	32
NORTH SOUTH ASSEMBLY	0



BALLAST LAYOUT - 1.8

SCALE: 1/12" = 1'-0"

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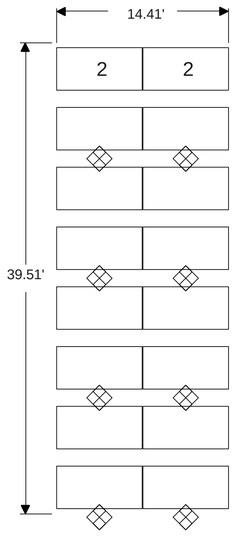
BALLAST LAYOUT - 1.8

REVISION: 1

SHEET: PC-15



ARRAY 1.9	
ROOF INFORMATION	
ROOF HEIGHT (FT)	45.00
PARAPET HEIGHT (FT)	0.0
ROOF TILT (DEG)	2
ROOF TYPE	TPO
SPECIFICATIONS	
NUMBER OF MODULES	16
MODULE POWER (W)	500
ARRAY OUTPUT (Kw)	8
ARRAY AZIMUTH	180
PART QUANTITIES	
ITEM	QTY
Base	36
Module Connector	32
Rail	29
Cam	32
Cam Claw	32
Deflector	16
Base Pad	0
Ballast Block	4
Mechanical Attachment	8
LOADING DETAILS	
SINGLE MODULE WT (LB)	66.4
SINGLE CMU WT (LB)	32.6
TOTAL ARRAY WT (LB)	1483
ARRAY AREA (SQ. FT)	572
ARRAY LOAD (PSF)	2.59

ASSEMBLY QUANTITIES	
ASSEMBLY	**QTY**
NORTH ASSEMBLY	4
SOUTH ASSEMBLY	4
MIDDLE ASSEMBLY	24
NORTH SOUTH ASSEMBLY	0

BALLAST LAYOUT - 1.9

SCALE: 1/6" = 1'-0"

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ORIGINAL SIZE 36"X24"
SHEET SIZE ARCH "D"

PREPARED FOR:

Telyon

PROJECT:

Amazon DJT6

LOCATION:

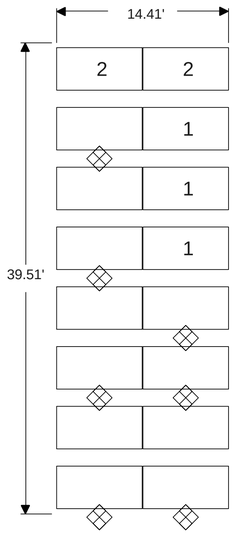
20920 Krameria Avenue, March Air Reserve Base, CA, USA

SHEET TITLE:

BALLAST LAYOUT - 1.9

REVISION: 1

SHEET: PC-16



ARRAY 1.10	
ROOF INFORMATION	
ROOF HEIGHT (FT)	45.00
PARAPET HEIGHT (FT)	0.0
ROOF TILT (DEG)	2
ROOF TYPE	TPO
SPECIFICATIONS	
NUMBER OF MODULES	16
MODULE POWER (W)	500
ARRAY OUTPUT (Kw)	8
ARRAY AZIMUTH	180
PART QUANTITIES	
ITEM	QTY
Base	36
Module Connector	32
Rail	32
Cam	32
Cam Claw	32
Deflector	16
Base Pad	0
Ballast Block	7
Mechanical Attachment	7
LOADING DETAILS	
SINGLE MODULE WT (LB)	66.4
SINGLE CMU WT (LB)	32.6
TOTAL ARRAY WT (LB)	1578
ARRAY AREA (SQ. FT)	572
ARRAY LOAD (PSF)	2.76

ASSEMBLY QUANTITIES	
ASSEMBLY	**QTY**
NORTH ASSEMBLY	4
SOUTH ASSEMBLY	4
MIDDLE ASSEMBLY	24
NORTH SOUTH ASSEMBLY	0

BALLAST LAYOUT - 1.10

SCALE: 1/6" = 1'-0"

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0" 1/2" 1" 2"

ORIGINAL SIZE 36"X24"
SHEET SIZE ARCH "D"

PREPARED FOR:

Telyon

PROJECT:

Amazon DJT6

LOCATION:

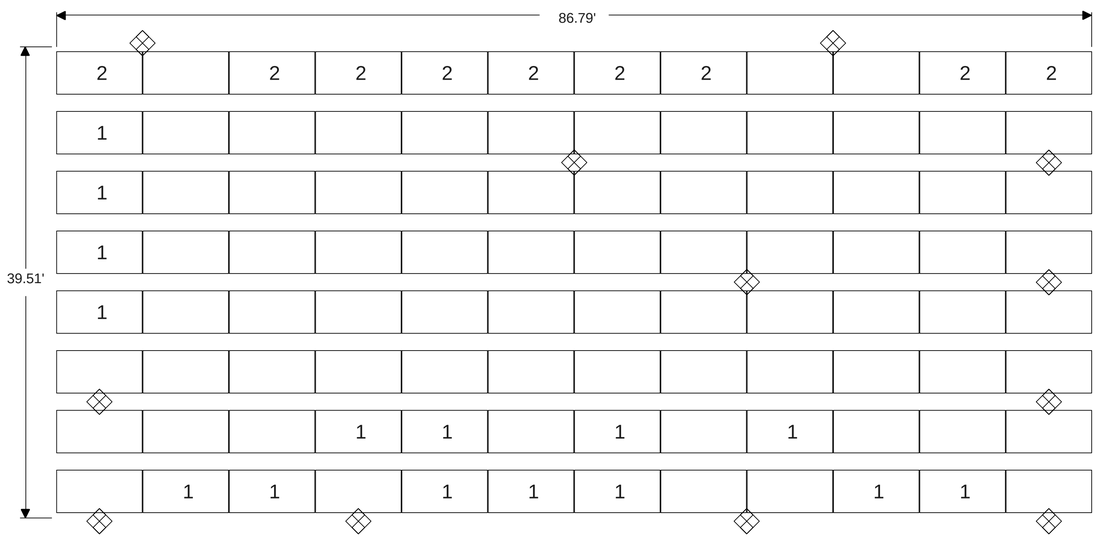
20920 Krameria Avenue, March Air Reserve Base, CA, USA

SHEET TITLE:

BALLAST LAYOUT - 1.10

REVISION: 1

SHEET: PC-17



ARRAY 1.11	
ROOF INFORMATION	
ROOF HEIGHT (FT)	45.00
PARAPET HEIGHT (FT)	0.0
ROOF TILT (DEG)	2
ROOF TYPE	TPO
SPECIFICATIONS	
NUMBER OF MODULES	96
MODULE POWER (W)	500
ARRAY OUTPUT (Kw)	48
ARRAY AZIMUTH	180
PART QUANTITIES	
ITEM	QTY
Base	216
Module Connector	192
Rail	231
Cam	192
Cam Claw	192
Deflector	96
Base Pad	0
Ballast Block	33
Mechanical Attachment	12
LOADING DETAILS	
SINGLE MODULE WT (LB)	66.4
SINGLE CMU WT (LB)	32.6
TOTAL ARRAY WT (LB)	8992
ARRAY AREA (SQ. FT)	3432
ARRAY LOAD (PSF)	2.62

ASSEMBLY QUANTITIES	
ASSEMBLY	**QTY**
NORTH ASSEMBLY	24
SOUTH ASSEMBLY	24
MIDDLE ASSEMBLY	144
NORTH SOUTH ASSEMBLY	0

BALLAST LAYOUT - 1.11

SCALE: 1/6" = 1'-0"

A PC-18

N

NOT APPROVED FOR CONSTRUCTION

STAMP:

PANELCLAW®

RACKING CONSTRUCTION SET

1600 OSGOOD ST. SUITE 2023
NORTH ANDOVER, MA 01845
TEL: 978.688.4900
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REV	DESCRIPTION	PREP	CHECK	DATE
0	Initial Ballast Map Layout	MM		2023-04-20
1	Revised Ballast	RH		2023-04-20

SCALE:

0" 1/2" 1" 2"

ORIGINAL SIZE 36"X24"
SHEET SIZE ARCH "D"

PREPARED FOR:

Telyon

PROJECT:

Amazon DJT6

LOCATION:

20920 Krameria Avenue, March Air Reserve Base, CA, USA

SHEET TITLE:

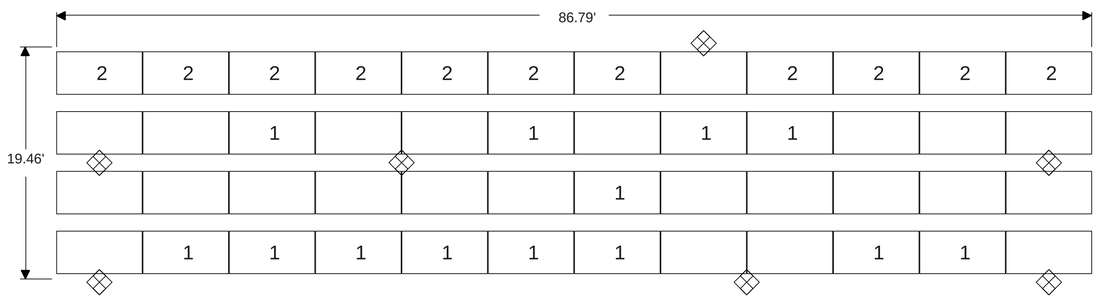
BALLAST LAYOUT - 1.11

REVISION: 1

SHEET: PC-18

ARRAY 1.12	
ROOF INFORMATION	
ROOF HEIGHT (FT)	45.00
PARAPET HEIGHT (FT)	0.0
ROOF TILT (DEG)	2
ROOF TYPE	TPO
SPECIFICATIONS	
NUMBER OF MODULES	48
MODULE POWER (W)	500
ARRAY OUTPUT (Kw)	24
ARRAY AZIMUTH	180
PART QUANTITIES	
ITEM	QTY
Base	120
Module Connector	96
Rail	139
Cam	96
Cam Claw	96
Deflector	48
Base Pad	0
Ballast Block	35
Mechanical Attachment	7
LOADING DETAILS	
SINGLE MODULE WT (LB)	66.4
SINGLE CMU WT (LB)	32.6
TOTAL ARRAY WT (LB)	5172
ARRAY AREA (SQ. FT)	1690
ARRAY LOAD (PSF)	3.06

ASSEMBLY QUANTITIES	
ASSEMBLY	**QTY**
NORTH ASSEMBLY	24
SOUTH ASSEMBLY	24
MIDDLE ASSEMBLY	48
NORTH SOUTH ASSEMBLY	0



BALLAST LAYOUT - 1.12

SCALE: 1/6" = 1'-0"

A / PC-19

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0	Initial Ballast Map Layout	MM		2023-04-20
1	Revised Ballast	RH		2023-04-20

SCALE: 0" 1/2" 1" 2"

ORIGINAL SIZE 36"X24"
SHEET SIZE ARCH "D"

PREPARED FOR:

Telyon

PROJECT:

Amazon DJT6

LOCATION:

20920 Krameria Avenue, March Air Reserve Base, CA, USA

SHEET TITLE:

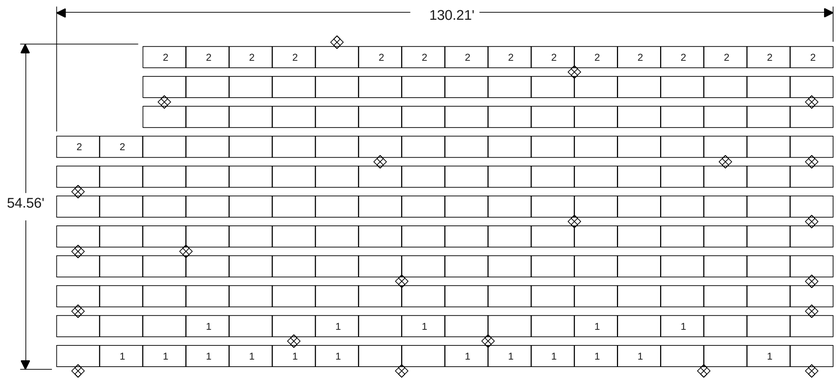
BALLAST LAYOUT - 1.12

REVISION: 1

SHEET: PC-19

ARRAY 1.13	
ROOF INFORMATION	
ROOF HEIGHT (FT)	45.00
PARAPET HEIGHT (FT)	0.0
ROOF TILT (DEG)	2
ROOF TYPE	TPO
SPECIFICATIONS	
NUMBER OF MODULES	192
MODULE POWER (W)	500
ARRAY OUTPUT (Kw)	96
ARRAY AZIMUTH	180
PART QUANTITIES	
ITEM	QTY
Base	420
Module Connector	384
Rail	442
Cam	384
Cam Claw	384
Deflector	192
Base Pad	0
Ballast Block	51
Mechanical Attachment	22
LOADING DETAILS	
SINGLE MODULE WT (LB)	66.4
SINGLE CMU WT (LB)	32.6
TOTAL ARRAY WT (LB)	17422
ARRAY AREA (SQ. FT)	6890
ARRAY LOAD (PSF)	2.53

ASSEMBLY QUANTITIES	
ASSEMBLY	QTY
NORTH ASSEMBLY	36
SOUTH ASSEMBLY	36
MIDDLE ASSEMBLY	312
NORTH SOUTH ASSEMBLY	0



BALLAST LAYOUT - 1.13

SCALE: 1/12" = 1'-0"

A
PC-20

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1	Revised Ballast	RH		2023-04-20

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0" 1/2" 1" 2"

ORIGINAL SIZE 36"X24"
SHEET SIZE ARCH "D"

PREPARED FOR:

Telyon

PROJECT:

Amazon DJT6

LOCATION:

20920 Krameria Avenue, March Air Reserve Base, CA, USA

SHEET TITLE:

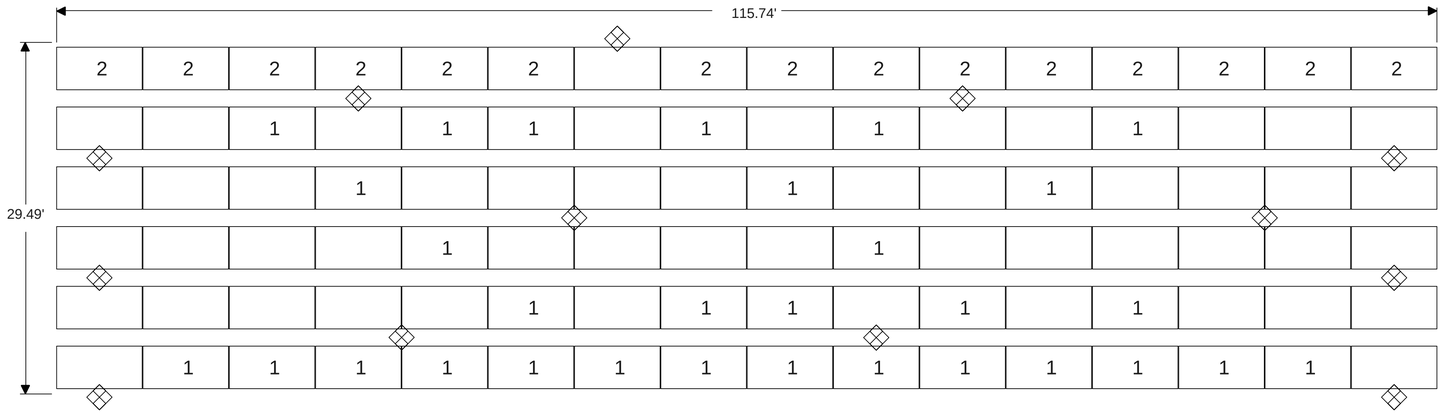
BALLAST LAYOUT - 1.13

REVISION: 1

SHEET: PC-20

ARRAY 1.14	
ROOF INFORMATION	
ROOF HEIGHT (FT)	45.00
PARAPET HEIGHT (FT)	0.0
ROOF TILT (DEG)	2
ROOF TYPE	TPO
SPECIFICATIONS	
NUMBER OF MODULES	96
MODULE POWER (W)	500
ARRAY OUTPUT (Kw)	48
ARRAY AZIMUTH	180
PART QUANTITIES	
ITEM	QTY
Base	224
Module Connector	192
Rail	262
Cam	192
Cam Claw	192
Deflector	96
Base Pad	0
Ballast Block	60
Mechanical Attachment	13
LOADING DETAILS	
SINGLE MODULE WT (LB)	66.4
SINGLE CMU WT (LB)	32.6
TOTAL ARRAY WT (LB)	9956
ARRAY AREA (SQ. FT)	3415
ARRAY LOAD (PSF)	2.92

ASSEMBLY QUANTITIES	
ASSEMBLY	**QTY**
NORTH ASSEMBLY	32
SOUTH ASSEMBLY	32
MIDDLE ASSEMBLY	128
NORTH SOUTH ASSEMBLY	0



BALLAST LAYOUT - 1.14

SCALE: 1/6" = 1'-0"

A PC-21

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0	Initial Ballast Map Layout	MM		2023-04-20
1	Revised Ballast	RH		2023-04-20

SCALE: 0" 1/2" 1" 2"

ORIGINAL SIZE 36"X24"
SHEET SIZE ARCH "D"

PREPARED FOR: Telyon

PROJECT: Amazon DJT6

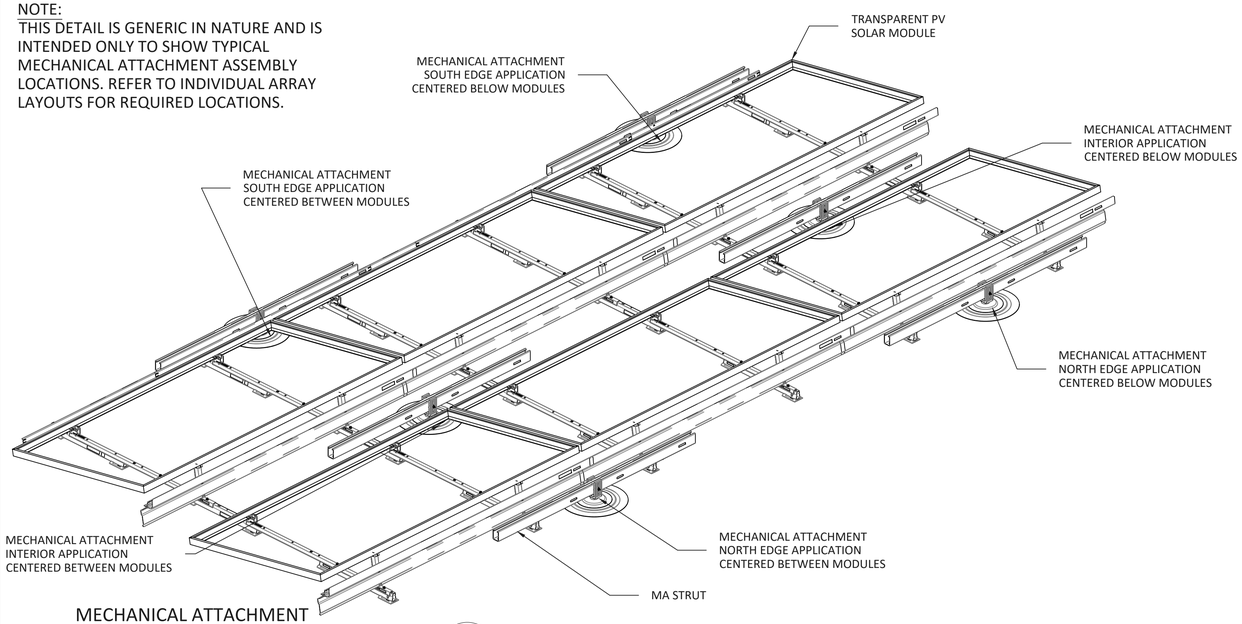
LOCATION: 20920 Krameria Avenue, March Air Reserve Base, CA, USA

SHEET TITLE: BALLAST LAYOUT - 1.14

REVISION: 1

SHEET: PC-21

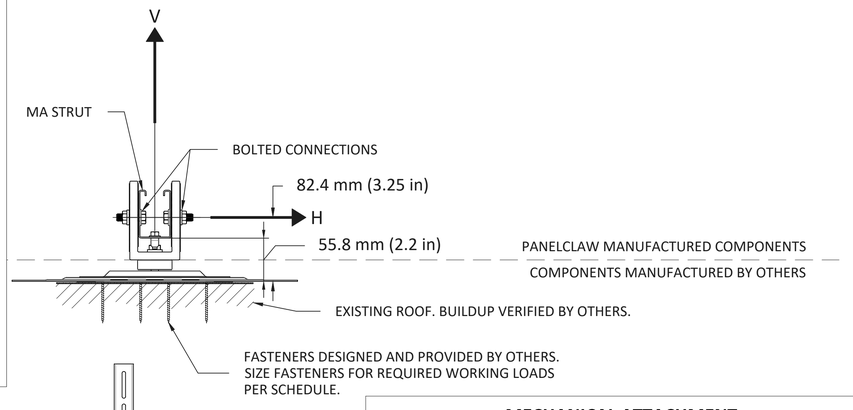
NOTE:
THIS DETAIL IS GENERIC IN NATURE AND IS INTENDED ONLY TO SHOW TYPICAL MECHANICAL ATTACHMENT ASSEMBLY LOCATIONS. REFER TO INDIVIDUAL ARRAY LAYOUTS FOR REQUIRED LOCATIONS.



MECHANICAL ATTACHMENT LOCATION DETAIL (A / PC-22)

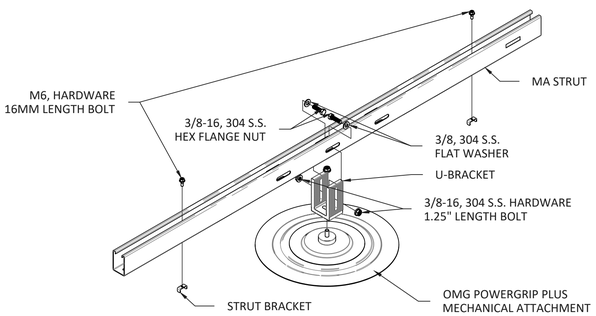
SCALE: N.T.S.

OMG POWERGRIP PLUS MECHANICAL ATTACHMENT: MANUFACTURED BY OTHERS



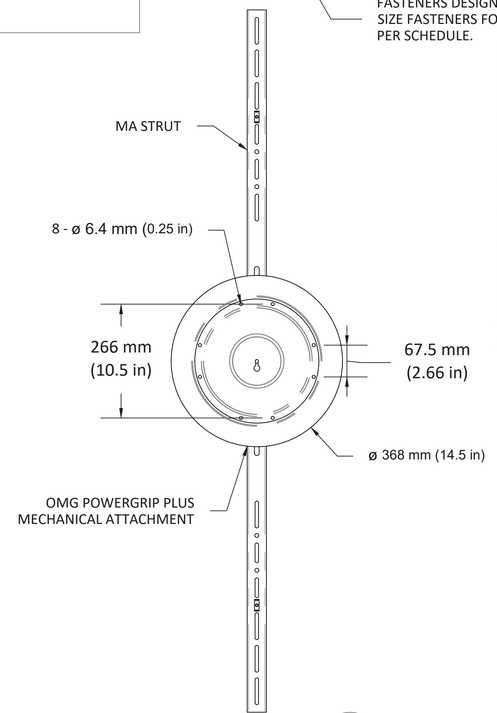
MECHANICAL ATTACHMENT		
WORST-CASE SERVICE LOAD (LB)		
HORIZONTAL (H)		VERTICAL (V)
WIND	SEISMIC	WIND
92	332	256
MAXIMUM ALLOWABLE LOAD (LB)		
HORIZONTAL (H)		VERTICAL (V)
333		500

1. HORIZONTAL LOAD H MAY ACT IN ANY DIRECTION
2. WORKING LOADS = ALLOWABLE LOADS (i.e. NON-FACTORED)



MECHANICAL ATTACHMENT DETAIL (B / PC-22)

SCALE: N.T.S.



MECHANICAL ATTACHMENT DETAIL (C / PC-22)

SCALE: N.T.S.

NOTE: MECHANICAL ATTACHMENT COMPONENT DIMENSIONS ARE PROVIDED FOR REFERENCE ONLY AND SHOULD BE VERIFIED WITH ATTACHMENT MANUFACTURER PRIOR TO FASTENER DESIGN.

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0	Initial Ballast Map Layout	2023-04-20	MM	
1	Revised Ballast	2023-04-20	RH	

SCALE:
0" 1/2" 1" 2"
ORIGINAL SIZE 36"X24"
SHEET SIZE ARCH "D"

PREPARED FOR:
Telyon

PROJECT:
Amazon DJT6

LOCATION:
20920 Krameria Avenue, March Air Reserve Base, CA, USA

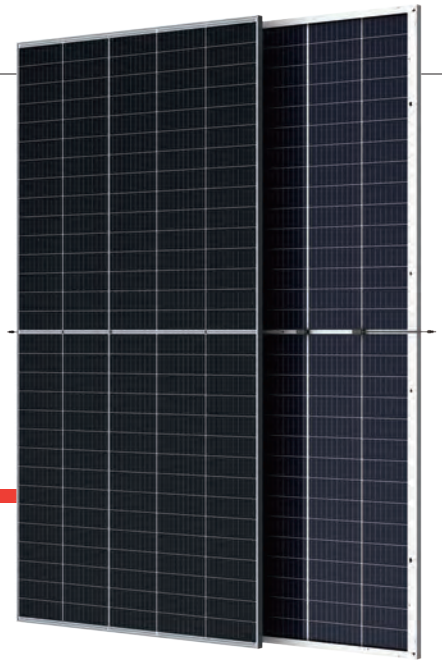
SHEET TITLE:
MECHANICAL ATTACHMENT DETAIL

REVISION: 1

SHEET: PC-22

THE Vertex

BIFACIAL DUAL GLASS MONOCRYSTALLINE MODULE



505W
MAXIMUM POWER OUTPUT

21.0%
MAXIMUM EFFICIENCY

0~+5W
POSITIVE POWER TOLERANCE

PRODUCTS	POWER RANGE
TSM-DEG18MC.20(II)	480-505W

High customer value

- Lower LCOE (Levelized Cost Of Energy), reduced BOS (Balance of System) cost, shorter payback time
- Lowest guaranteed first year and annual degradation; extended 30-year warranty
- Designed for compatibility with existing mainstream system components
- Higher return on Investment

High power up to 505W

- Large area cells based on 210mm silicon wafers and 1/3-cut cell technology
- Up to 21.0% module efficiency with high density interconnect technology
- Multi-busbar technology for better light trapping effect, lower series resistance and improved current collection

High reliability

- Minimized micro-cracks with innovative non-destructive cutting technology
- Ensured PID resistance through cell process and module material control
- Resistant to harsh environments such as salt, ammonia, sand, high temperature and high humidity areas
- Mechanical performance up to 5400 Pa positive load and 2400 Pa negative load

High energy yield

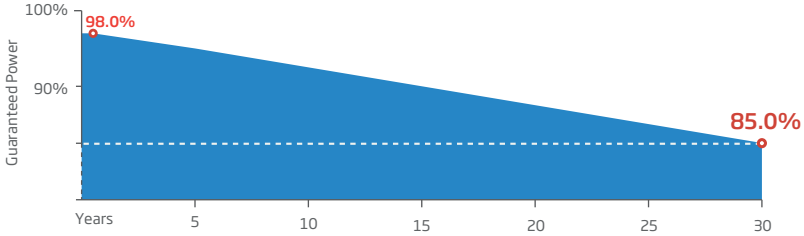
- Excellent IAM (Incident Angle Modifier) and low irradiation performance, validated by 3rd party certifications
- The unique design provides optimized energy production under inter-row shading conditions
- Up to 25% additional power gain from back side depending on albedo

Founded in 1997, Trina Solar is the world's leading total solution provider for solar energy. With local presence around the globe, Trina Solar is able to provide exceptional service to each customer in each market and deliver our innovative, reliable products with the backing of Trina as a strong, bankable brand. Trina Solar now distributes its PV products to over 100 countries all over the world. We are committed to building strategic, mutually beneficial collaborations with installers, developers, distributors and other partners in driving smart energy together.

Comprehensive Products and System Certificates

IEC61215/IEC61730/IEC61701/IEC62716/UL61730
ISO 9001: Quality Management System
ISO 14001: Environmental Management System
ISO14064: Greenhouse Gases Emissions Verification
ISO45001: Occupational Health and Safety Management System

Trina Solar's Vertex Bifacial Dual Glass Performance Warranty

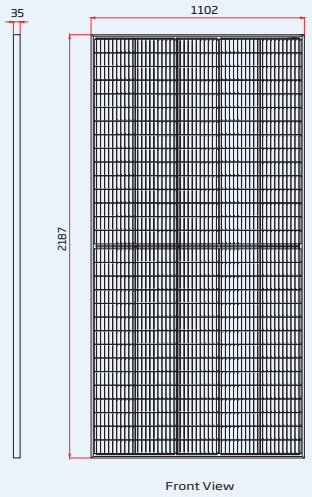


Trinasolar

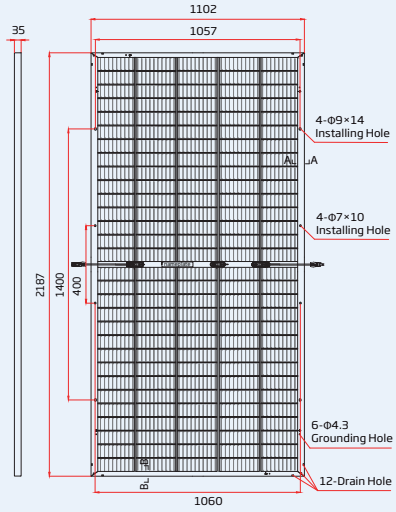
Vertex

BIFACIAL DUAL GLASS MONOCRYSTALLINE MODULE

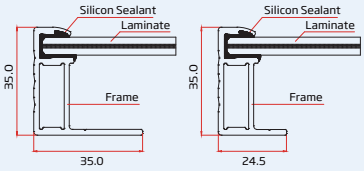
DIMENSIONS OF PV MODULE(mm)



Front View

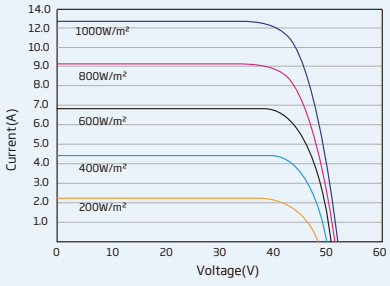


Back View

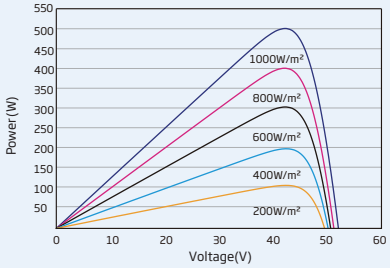


A-A B-B

I-V CURVES OF PV MODULE(500 W)



P-V CURVES OF PV MODULE(500W)



ELECTRICAL DATA (STC)

Peak Power Watts-P_{MAX} (Wp)*	480	485	490	495	500	505
Power Tolerance-P_{MAX} (W)	0 ~ +5					
Maximum Power Voltage-V_{MPP} (V)	42.2	42.5	42.8	43.1	43.4	43.7
Maximum Power Current-I_{MPP} (A)	11.38	11.42	11.45	11.49	11.53	11.56
Open Circuit Voltage-V_{OC} (V)	50.7	50.9	51.1	51.3	51.5	51.7
Short Circuit Current-I_{SC} (A)	11.97	12.01	12.05	12.09	12.13	12.17
Module Efficiency η_m (%)	19.9	20.1	20.3	20.5	20.7	21.0

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.
*Measuring tolerance: ±3%.

Electrical characteristics with different power bin (reference to 10% Irradiance ratio)

Total Equivalent power -P_{MAX} (Wp)	514	519	524	530	535	540
Maximum Power Voltage-V_{MPP} (V)	42.2	42.5	42.8	43.1	43.4	43.6
Maximum Power Current-I_{MPP} (A)	12.18	12.22	12.24	12.29	12.34	12.39
Open Circuit Voltage-V_{OC} (V)	50.7	50.9	51.1	51.3	51.5	51.7
Short Circuit Current-I_{SC} (A)	12.81	12.85	12.89	12.94	12.98	13.02
Irradiance ratio (rear/front)	10%					

Power Bifaciality:70±5%.

ELECTRICAL DATA (NOCT)

Maximum Power-P_{MAX} (Wp)	362	366	369	373	377	381
Maximum Power Voltage-V_{MPP} (V)	38.7	40.0	40.2	40.5	40.7	41.0
Maximum Power Current-I_{MPP} (A)	9.11	9.15	9.18	9.22	9.26	9.29
Open Circuit Voltage-V_{OC} (V)	47.7	47.9	48.0	48.2	48.4	48.5
Short Circuit Current-I_{SC} (A)	9.65	9.68	9.71	9.74	9.78	9.81

NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

MECHANICAL DATA

Solar Cells	Monocrystalline
No. of cells	150 cells
Module Dimensions	2187×1102×35 mm (86.10×43.39×1.38 inches)
Weight	30.1 kg (66.4 lb)
Front Glass	2.0 mm (0.08 inches), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant material	POE/EVA
Back Glass	2.0 mm (0.08 inches), Heat Strengthened Glass (White Grid Glass)
Frame	35mm(1.38 inches) Anodized Aluminium Alloy
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm² (0.006 inches²), Portrait: 280/280 mm(11.02/11.02 inches) Landscape: 1400/1400 mm(55.1²/55.1² inches)
Connector	MC4 EVO2 / TS4*

*Please refer to regional datasheet for specified connector.

TEMPERATURE RATINGS

NOCT(Nominal Operating Cell Temperature)	43°C (±2°C)
Temperature Coefficient of P_{MAX}	- 0.34%/°C
Temperature Coefficient of V_{OC}	- 0.25%/°C
Temperature Coefficient of I_{SC}	0.04%/°C

MAXIMUM RATINGS

Operational Temperature	-40~+85°C
Maximum SystemVoltage	1500V DC (IEC)
	1500V DC (UL)
Max Series Fuse Rating	25A

WARRANTY

12 year Product Workmanship Warranty

30 year Power Warranty

2% first year degradation

0.45% Annual Power Attenuation

(Please refer to product warranty for details)

PACKAGING CONFIGURATION

Modules per box: 31 pieces

Modules per 40' container: 558 pieces

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CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

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Version number: TSM_DEG18MC.20(II)_NA_EN_2022_A

www.trinasolar.com

Photovoltaic Module Solar Glare Study

for the solar project at:

Amazon – DJT6
20920 Krameria Avenue
Riverside, CA 92518

presented to:

Telyon
455 Boston Post Road, Suite 205
Old Sybrook, CT 06475

by:

PURE POWER ENGINEERING

111 River Street, Suite 1110
Hoboken, NJ 07030
www.purepower.com
(201)687-9975

Pure Power Engineering
111 River Street
Suite 1110
Hoboken, NJ 07030
(201) 687-9975
www.purepower.com

Project Information

Pure Power Engineering Project Number: PPE-04946.03

Study commissioned by: Telyon

Revision History

Date	Revision Description	PM	ENG	CHK
03/10/2023	Initial Release	SK	GB	RI
05/12/2023	AHJ Comments	SK	GB	RI

Pure Power Engineering
111 River Street
Suite 1110
Hoboken, NJ 07030
(201) 687-9975
www.purepower.com

Executive Summary

The project **Amazon – DJT6** is a proposed solar PV installation consisting of roof-mounted arrays with azimuths of 180° (due-south) and fixed-tilt of 10-degrees. To evaluate whether the proposed project has the potential to impact March Air Reserve Base, a glare analysis has been completed using the Forge Solar PV Planning & Glare Analysis Program.

The potential for ocular impacts was analyzed over the entire calendar year from when the sun rises above the horizon until the sun sets below the horizon for (1) air traffic control tower (ATCT) at March Air Reserve Base, as well as (6) Rectangular Analysis and (3) Overhead Analysis, modeled as Route Receptors (Routes).

Project arrays were modeled per the latest site plan provided by Pure Power Engineering. Additional model parameters such as solar module surface type are detailed in the Forge Solar output report. Certain input parameters were taken from project-related documentation, such as the module data sheet.

Airport Modeling (based on 2021 U.S. FAA Policy):
The models predict zero glare for the (1) ATCT at March Air Reserve Base. Elaborating results for these determinations can be found on pages 10 of this report.

Rectangular and Overhead Analysis (Routes) Modeling:
The models predict glare with low potential for producing an after-image (green-level glare) at some points along all (9) routes analyzed. Zero instances of glare with potential for producing an after-image (yellow-level glare) and glare with potential for permanent eye damage (retinal burn) (red-level glare) are predicted. Elaborating results for these determinations can be found on pages 10-11 of this report.

Should you have any questions or require any additional information, please do not hesitate to contact us.

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Photovoltaic Module Solar Glare

Renewables are the fastest-growing energy source in the United States, with photovoltaic (PV) module-based solar power being among the major drivers behind this growth. PV solar power projects large and small are collectively producing a considerable source of clean and affordable energy in both sparsely populated rural areas as well as densely populated urban centers. While these installations provide a positive environmental impact on their surrounding communities, PV solar installations share one characteristic that should be considered: the glass construction of PV modules has the potential to create nuisance or hazardous reflections of sunlight for nearby observers, termed glint and glare conditions. Glint is defined as a momentary flash of light, while glare is a continuous source of brightness. Depending on the intensity and duration of these reflections, exposures have the potential to cause flash-blindness, temporary after-image, and in severe cases, retinal burn.

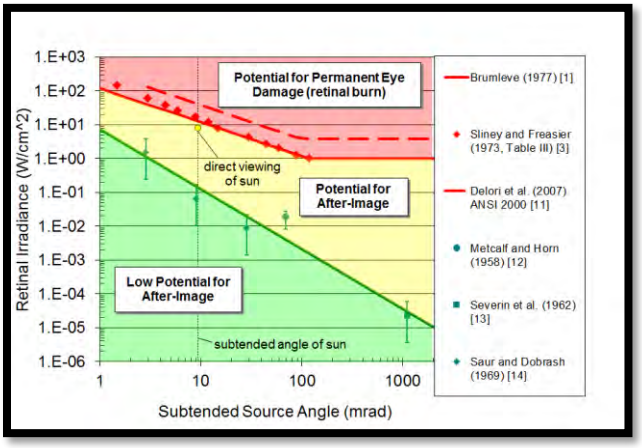

Figure 1 – Types of glare hazards categorized by severity [1]

While, as of 2021, no nationally adopted codes or standards formally preclude PV installations from causing hazardous glare conditions on nearby observers, community boards and authoritative bodies may raise issue to this aspect of PV installations. Acknowledgement of this issue by project developers, government entities, and module manufacturers has led to increased research and development into module-level reflection reduction technologies, such as anti-reflective coating (ARC) formulation and deposition as well as glass texturing methods. Both technologies use destructive interference between incident and reflected light waves to reduce net reflected energy. Most modern commercially available PV modules now include some form of stock ARC and can be ordered with specially textured glass. While moderately effective, these technologies do not fully eliminate potentially hazardous reflection because they do not perform well in certain sunlight conditions.

[1] Sims, C. A. (n.d.). Solar glare and Flux analysis tools. Solar Glare | SNL. https://share-ng.sandia.gov/glare-tools/.

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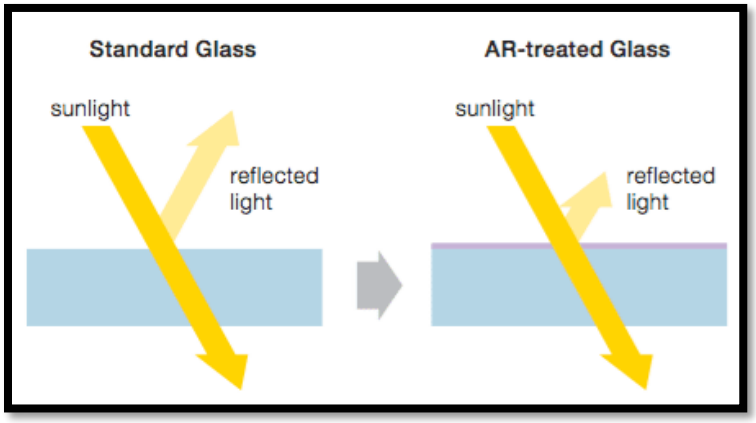

Figure 2 - The effects of anti-reflective coating[2]

It is therefore best practice to consider the potential impact of reflected sunlight during the planning phase of a solar project. A comprehensive glare analysis should be viewed as a significant preliminary engineering milestone as it has the potential to outline additional project requirements and heavily affect the final design. Available computational tools have the capability to accurately predict occurrences and intensity of glare, taking into account parameters such as module tilt, azimuth, surface reflectivity, array area, site topography, and geographically accurate sun patterns throughout the year. Such studies are used to evaluate potential reflection hazards and decide appropriate mitigation measures, allowing solar PV projects to be planned and installed in residential areas and near critical transportation infrastructure, such as alongside roads and near or on airport properties with little to zero negative impact.

In certain cases, glare analysis may conclude that reflections can be mitigated or eliminated entirely by adjusting system design parameters such as module type, azimuth, tilt, and array boundary. If needed, it is advantageous to tune these parameters early in the life of the project when design revisions can be more flexible. In cases where key design parameters cannot be adjusted to mitigate or eliminate occurrences of glare, other options do exist. Screening, the practice of blocking reflected sunlight by means of a physical barrier object, can be accomplished using a variety of solutions such as walls, vegetative landscape buffers, and 'screened' privacy fences, which may already be a part of planned project elements owing to civil or zoning requirements. If line of sight from an observation point to an array can be reduced, then potential for glare can be reduced. Further, if there is no line of sight from an observation point to an array, direct reflection is not possible and the potential for glare is eliminated. When equipped with single or double axis tracking systems, the module resting (AKA stowing) angle can be programmed to lessen early morning and late evening glare. The takeaway: analysis of glare hazards allows for making calculated judgments on how best to control exposure to and reduce or eliminate hazards.

[2] Mitsubishi – anti-reflective Glass. https://www.yourenergysolutions.com/solar/panels/mitsubishi/mitsubishi-anti-reflective-glass/.

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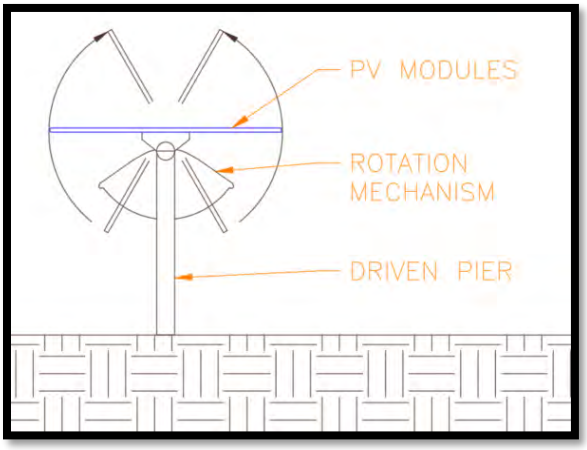


Figure 3 - Single-axis tracking system

Pure Power Engineering employs the web-based Forge Solar PV Planning and Analysis Tool, built with the Solar Glare Hazard Analysis Tool (SGHAT) software licensed from the United States Department of Energy and Sandia National Laboratories to perform glare analysis. Per its developers, the tool provides a quantified assessment of when and where glare will occur throughout the year for a prescribed solar installation, as well as potential effects on the human eye at locations where glare occurs. If glare is found, the tool calculates the retinal irradiance and subtended angle (size/distance) of the glare source to predict potential ocular hazards ranging from temporary after-image to retinal burn. The results are presented in a simple, easy-to-interpret plot that specifies when glare will occur throughout the year, with color codes indicating the potential ocular hazard.

FORGESOLAR GLARE ANALYSIS

Project: **Glare Study - Amazon DJT6**

Analyze Potential for Glare from proposed rooftop solar installation on March Air Reserve Base

Site configuration: **Amazon DJT6 Glare Study Final**

Client: Telyon

Created 11 May, 2023
Updated 11 May, 2023
Time-step 1 minute
Timezone offset UTC-8
Minimum sun altitude 0.0 deg
DNI peaks at 1,000.0 W/m^2
Category 1 MW to 5 MW
Site ID 90410.15917

Ocular transmission coefficient 0.5
Pupil diameter 0.002 m
Eye focal length 0.017 m
Sun subtended angle 9.3 mrad
PV analysis methodology V2

Summary of Results

Glare with low potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
DJT6 Rooftop Array	10.0	180.0	67,871	1,131.2	0	0.0	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Runway 12 GA Rectangular Analysis	3,007	50.1	0	0.0
Runway 14 C17 KC135 Rectangular Analysis	10,463	174.4	0	0.0
Runway 14 GA Rectangular Analysis	7,878	131.3	0	0.0
Runway 14 Overhead	14,644	244.1	0	0.0
Runway 30 GA Rectangular Analysis	3,002	50.0	0	0.0

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Runway 32 C17 KC135 Rectangular Analysis	10,464	174.4	0	0.0
Runway 32 GA Rectangular Analysis	7,889	131.5	0	0.0
Runway 32 Overhead	10,524	175.4	0	0.0
1-ATCT	0	0.0	0	0.0

Component Data

PV Arrays

Name: DJT6 Rooftop Array
Axis tracking: Fixed (no rotation)
Tilt: 10.0°
Orientation: 180.0°
Rated power: -
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.883129	-117.296920	1684.70	45.00	1729.70
2	33.883138	-117.296029	1683.20	45.00	1728.20
3	33.882871	-117.296024	1682.20	45.00	1727.20
4	33.882875	-117.295069	1684.90	45.00	1729.90
5	33.882479	-117.295069	1685.60	45.00	1730.60
6	33.882466	-117.296029	1683.60	45.00	1728.60
7	33.882109	-117.296024	1684.20	45.00	1729.20
8	33.882105	-117.296930	1685.60	45.00	1730.60

Route Receptors

Name: Runway 12 GA Rectangular Analysis
Path type: Two-way
Observer view angle: 50.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.884319	-117.253536	1505.90	1500.00	3005.90
2	33.876069	-117.243611	1489.50	2800.00	4289.50
3	33.876081	-117.235119	1482.90	2800.00	4282.90
4	33.880814	-117.229467	1489.20	2800.00	4289.20
5	33.887897	-117.229483	1505.90	2800.00	4305.90
6	33.910333	-117.256469	1552.50	2800.00	4352.50
7	33.910322	-117.264967	1551.80	2800.00	4351.80
8	33.905592	-117.270622	1545.30	2800.00	4345.30
9	33.898508	-117.270608	1535.40	2800.00	4335.40
10	33.890258	-117.260681	1519.00	1500.00	3019.00

Name: Runway 14 C17 KC135 Rectangular Analysis
Path type: Two-way
Observer view angle: 50.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.864994	-117.248281	1482.90	1500.00	2982.90
2	33.836269	-117.227869	1460.00	3000.00	4460.00
3	33.821961	-117.228367	1450.10	3000.00	4450.10
4	33.813147	-117.244350	1533.90	3000.00	4533.90
5	33.819225	-117.262269	1786.60	3000.00	4786.60
6	33.908131	-117.325528	1577.40	3000.00	4577.40
7	33.922394	-117.325047	1648.00	3000.00	4648.00
8	33.931244	-117.309014	1521.50	3000.00	4521.50
9	33.925156	-117.291061	1526.00	3000.00	4526.00
10	33.896431	-117.270636	1532.20	1500.00	3032.20

Name: Runway 14 GA Rectangular Analysis
Path type: Two-way
Observer view angle: 50.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.864994	-117.248281	1482.90	1500.00	2982.90
2	33.854942	-117.241136	1473.10	3000.00	4473.10
3	33.848078	-117.243236	1479.70	3000.00	4479.70
4	33.844669	-117.250119	1497.50	3000.00	4497.50
5	33.846422	-117.258344	1528.50	3000.00	4528.50
6	33.897972	-117.295011	1665.60	3000.00	4665.60
7	33.904833	-117.292903	1618.90	3000.00	4618.90
8	33.908242	-117.286017	1558.40	3000.00	4558.40
9	33.906486	-117.277783	1551.80	3000.00	4551.80
10	33.896431	-117.270636	1532.20	1500.00	3032.20

Name: Runway 14 Overhead
Path type: Two-way
Observer view angle: 50.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.968036	-117.322128	1306.40	3500.00	4806.40
2	33.880706	-117.259453	1512.50	3500.00	5012.50
3	33.863564	-117.293808	1700.40	3500.00	5200.40
4	33.908131	-117.325528	1577.40	3500.00	5077.40
5	33.925156	-117.291061	1526.00	3500.00	5026.00
6	33.896431	-117.270636	1532.20	1500.00	3032.20

Name: Runway 30 GA Rectangular Analysis
Path type: Two-way
Observer view angle: 50.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.890258	-117.260681	1519.00	1500.00	3019.00
2	33.898508	-117.270608	1535.40	2800.00	4335.40
3	33.905592	-117.270622	1545.30	2800.00	4345.30
4	33.910322	-117.264967	1551.80	2800.00	4351.80
5	33.910333	-117.256469	1552.50	2800.00	4352.50
6	33.887897	-117.229483	1505.90	2800.00	4305.90
7	33.880814	-117.229467	1489.20	2800.00	4289.20
8	33.876081	-117.235119	1482.90	2800.00	4282.90
9	33.876069	-117.243611	1489.50	2800.00	4289.50
10	33.884319	-117.253536	1505.90	1500.00	3005.90

Name: Runway 32 C17 KC135 Rectangular Analysis
Path type: Two-way
Observer view angle: 50.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.896431	-117.270636	1532.20	1500.00	3032.20
2	33.925156	-117.291061	1526.00	3000.00	4526.00
3	33.931244	-117.309014	1521.50	3000.00	4521.50
4	33.922394	-117.325047	1648.00	3000.00	4648.00
5	33.908131	-117.325528	1577.40	3000.00	4577.40
6	33.819225	-117.262269	1786.60	3000.00	4786.60
7	33.813147	-117.244350	1533.90	3000.00	4533.90
8	33.821961	-117.228367	1450.10	3000.00	4450.10
9	33.836269	-117.227869	1460.00	3000.00	4460.00
10	33.864994	-117.248281	1482.90	1500.00	2982.90

Name: Runway 32 GA Rectangular Analysis
Path type: Two-way
Observer view angle: 50.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.896431	-117.270636	1532.20	1500.00	3032.20
2	33.906486	-117.277783	1551.80	3000.00	4551.80
3	33.908242	-117.286017	1558.40	3000.00	4558.40
4	33.904833	-117.292903	1618.90	3000.00	4618.90
5	33.897972	-117.295011	1665.60	3000.00	4665.60
6	33.846422	-117.258344	1528.50	3000.00	4528.50
7	33.844669	-117.250119	1497.50	3000.00	4497.50
8	33.848078	-117.243236	1479.70	3000.00	4479.70
9	33.854942	-117.241136	1473.10	3000.00	4473.10
10	33.864994	-117.248281	1482.90	1500.00	2982.90

Name: Runway 32 Overhead
Path type: Two-way
Observer view angle: 50.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.793375	-117.196878	1420.60	3500.00	4920.60
2	33.880706	-117.259453	1512.50	3500.00	5012.50
3	33.863564	-117.293808	1700.40	3500.00	5200.40
4	33.819225	-117.262269	1786.60	3500.00	5286.60
5	33.836269	-117.227869	1460.00	3500.00	4960.00
6	33.864994	-117.248281	1482.90	1500.00	2982.90

Discrete Observation Point Receptors

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
1-ATCT	1	33.891572	-117.251203	1509.20	118.00

Map image of 1-ATCT

Glare Analysis Results

Summary of Results

Glare with low potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
DJT6 Rooftop Array	10.0	180.0	67,871	1,131.2	0	0.0	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Runway 12 GA Rectangular Analysis	3,007	50.1	0	0.0
Runway 14 C17 KC135 Rectangular Analysis	10,463	174.4	0	0.0
Runway 14 GA Rectangular Analysis	7,878	131.3	0	0.0
Runway 14 Overhead	14,644	244.1	0	0.0
Runway 30 GA Rectangular Analysis	3,002	50.0	0	0.0
Runway 32 C17 KC135 Rectangular Analysis	10,464	174.4	0	0.0
Runway 32 GA Rectangular Analysis	7,889	131.5	0	0.0
Runway 32 Overhead	10,524	175.4	0	0.0
1-ATCT	0	0.0	0	0.0

PV: DJT6 Rooftop Array low potential for temporary after-image

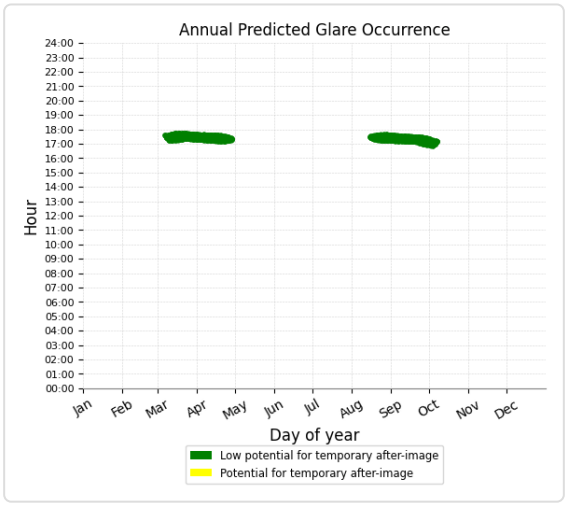
Receptor results ordered by category of glare

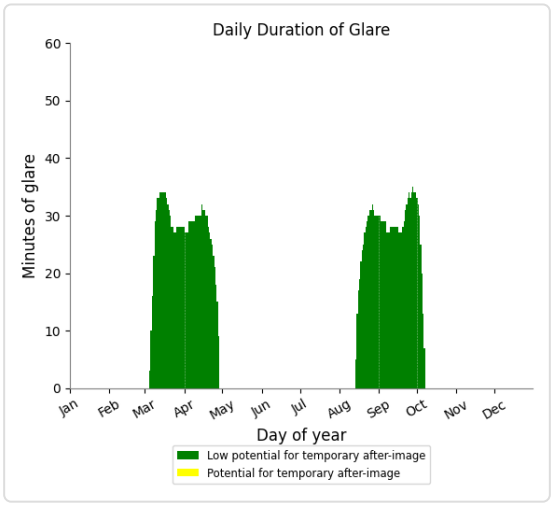
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Runway 12 GA Rectangular Analysis	3,007	50.1	0	0.0
Runway 14 C17 KC135 Rectangular Analysis	10,463	174.4	0	0.0
Runway 14 GA Rectangular Analysis	7,878	131.3	0	0.0
Runway 14 Overhead	14,644	244.1	0	0.0
Runway 30 GA Rectangular Analysis	3,002	50.0	0	0.0
Runway 32 C17 KC135 Rectangular Analysis	10,464	174.4	0	0.0
Runway 32 GA Rectangular Analysis	7,889	131.5	0	0.0
Runway 32 Overhead	10,524	175.4	0	0.0
1-ATCT	0	0.0	0	0.0

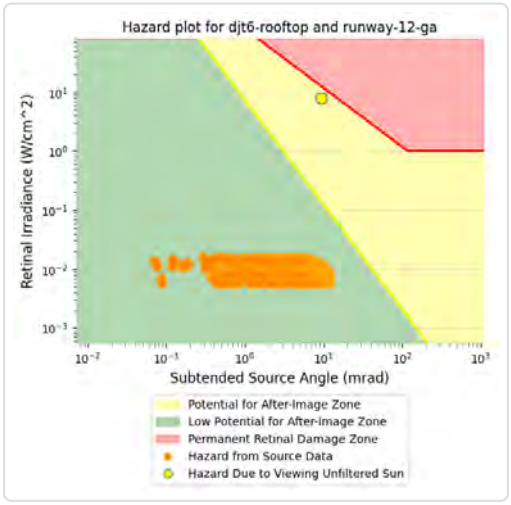
DJT6 Rooftop Array and Route: Runway 12 GA Rectangular Analysis

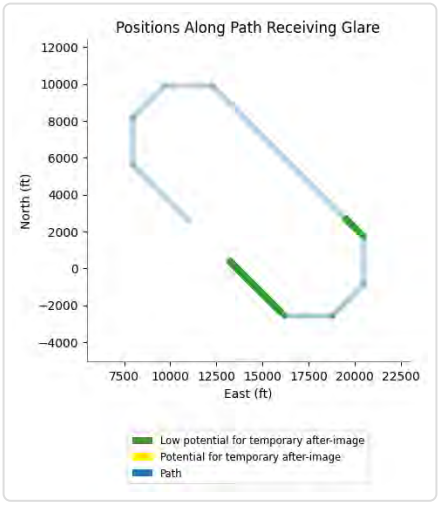
Yellow glare: none

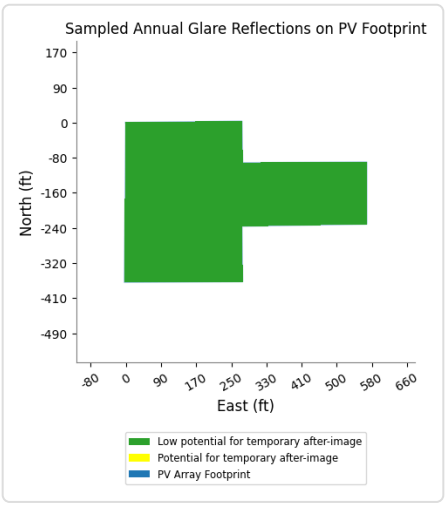
Green glare: 3,007 min.







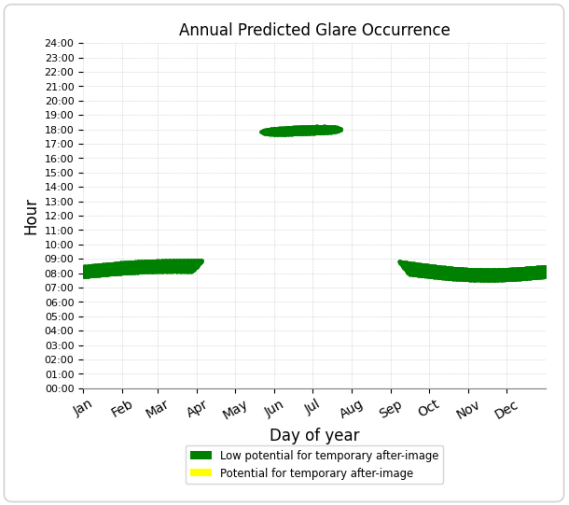


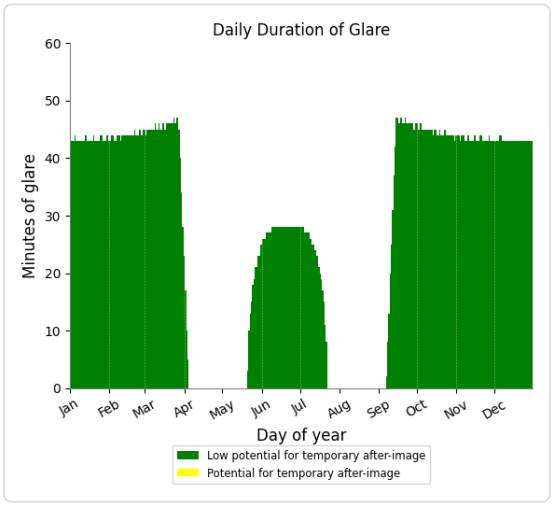


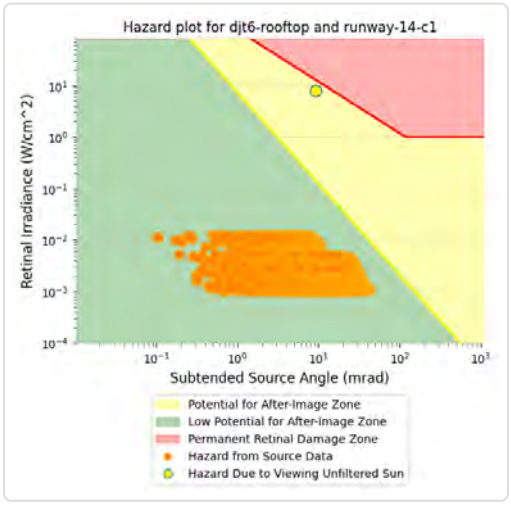
DJT6 Rooftop Array and Route: Runway 14 C17 KC135 Rectangular Analysis

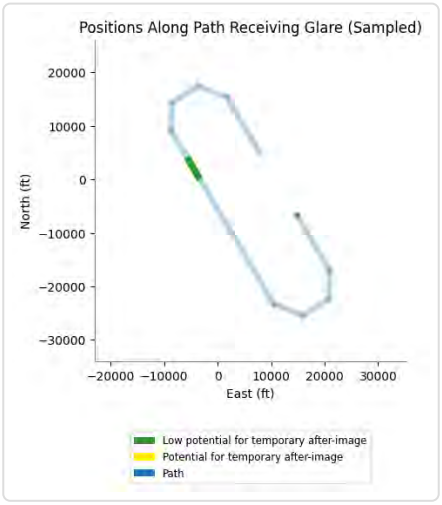
Yellow glare: none

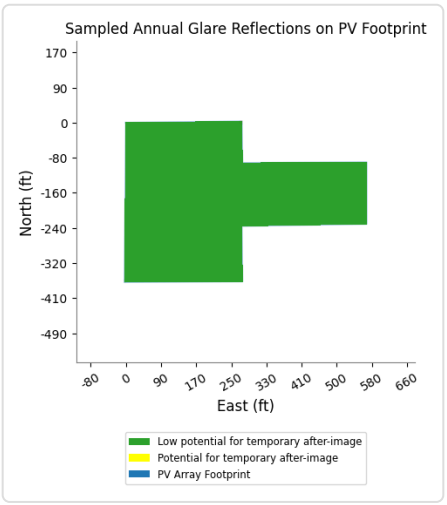
Green glare: 10,463 min.







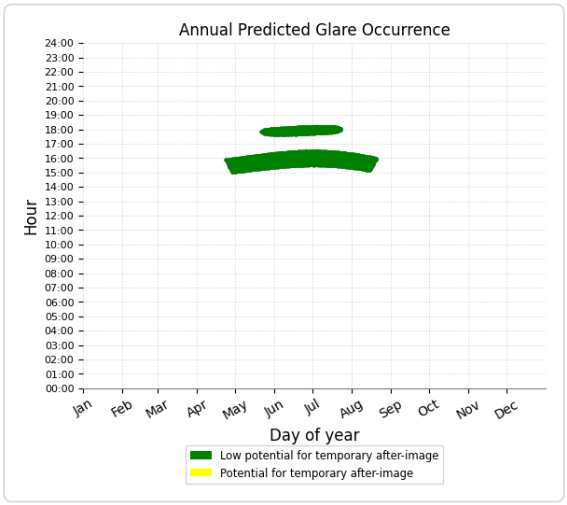


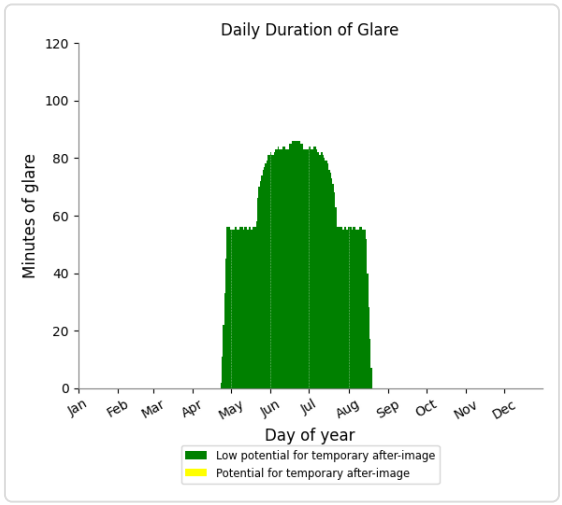


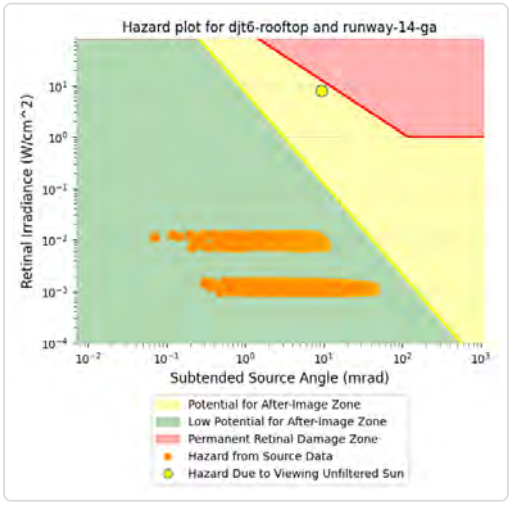
DJT6 Rooftop Array and Route: Runway 14 GA Rectangular Analysis

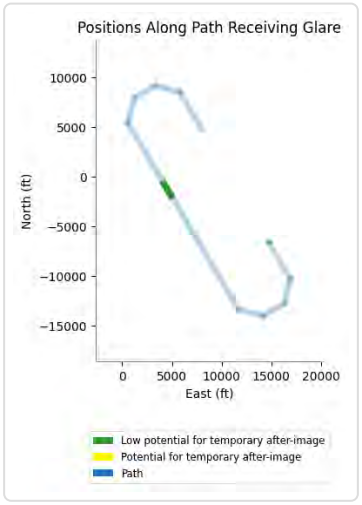
Yellow glare: none

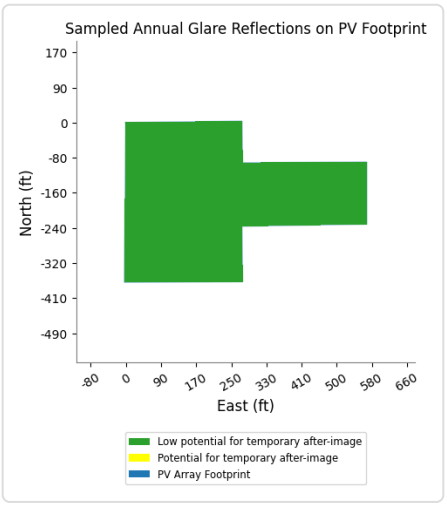
Green glare: 7,878 min.







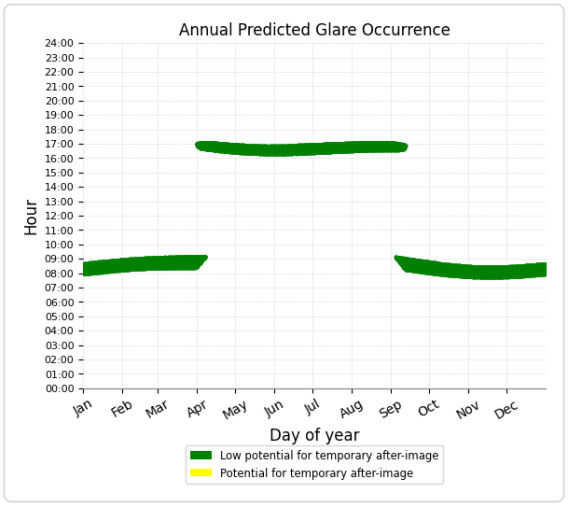


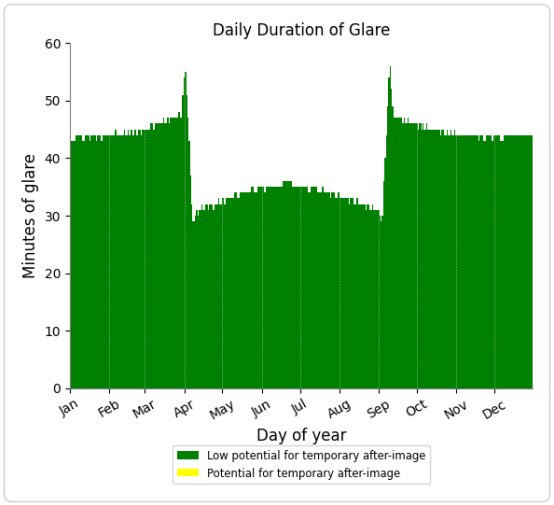


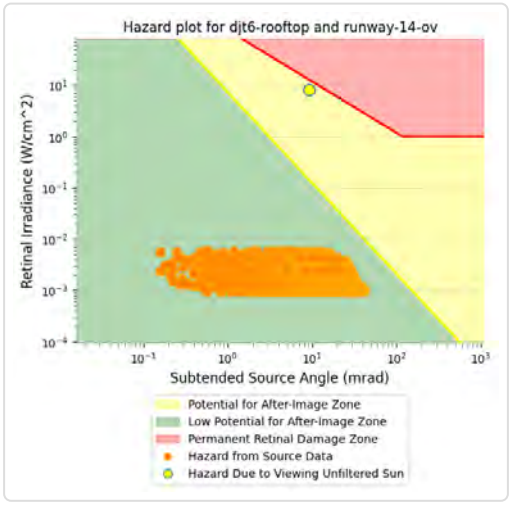
DJT6 Rooftop Array and Route: Runway 14 Overhead

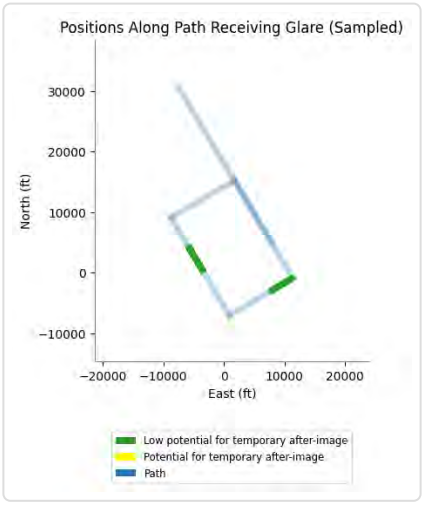
Yellow glare: none

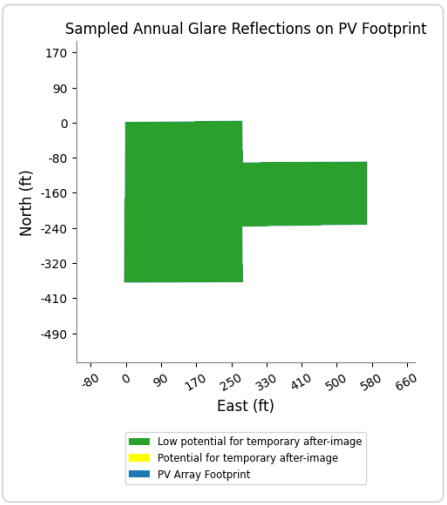
Green glare: 14,644 min.







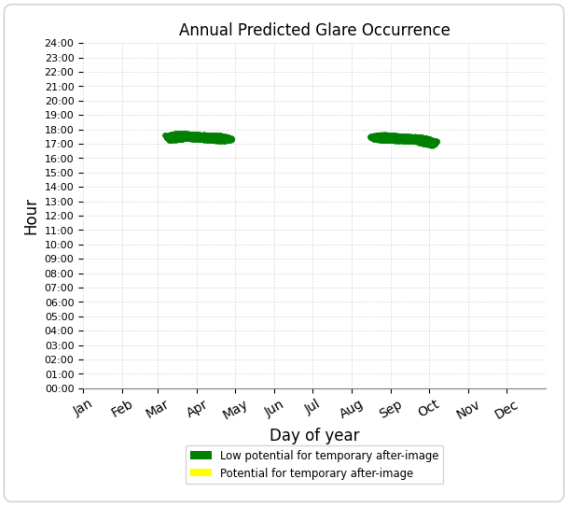


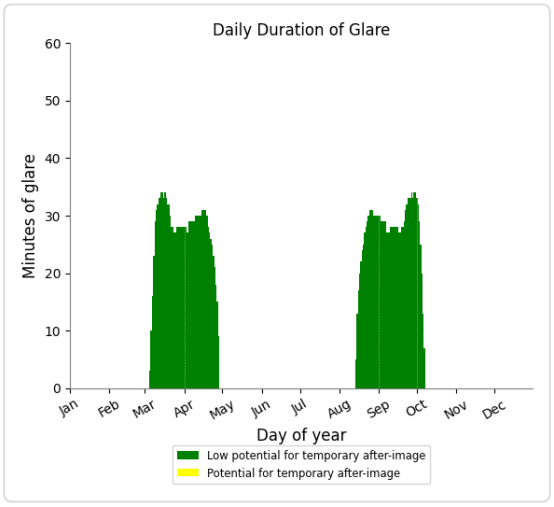


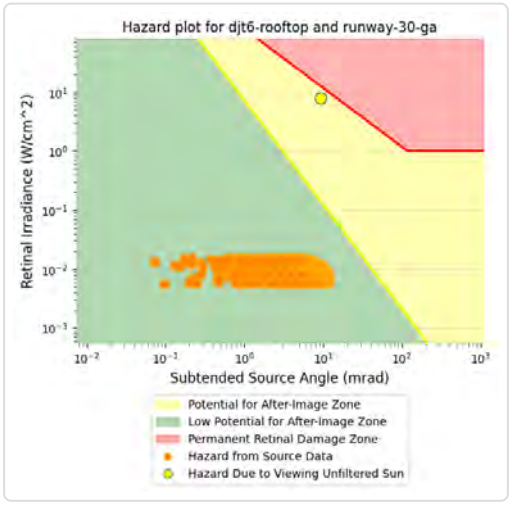
DJT6 Rooftop Array and Route: Runway 30 GA Rectangular Analysis

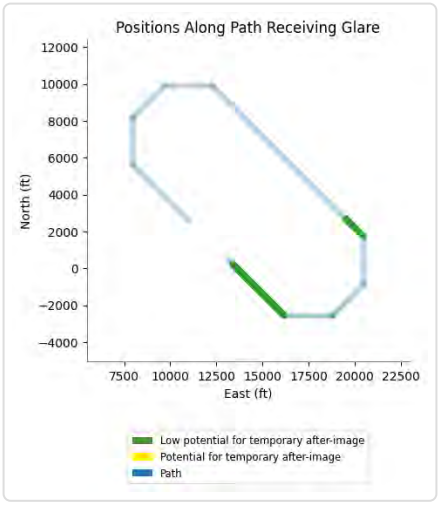
Yellow glare: none

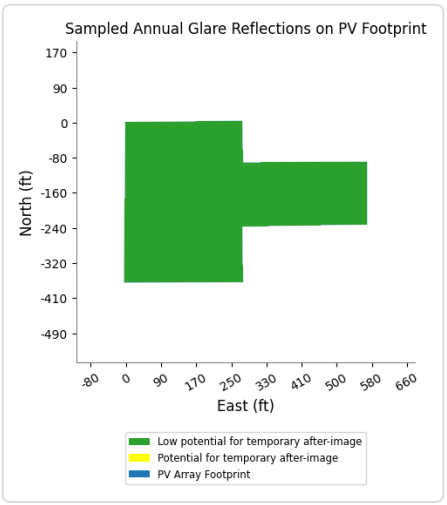
Green glare: 3,002 min.







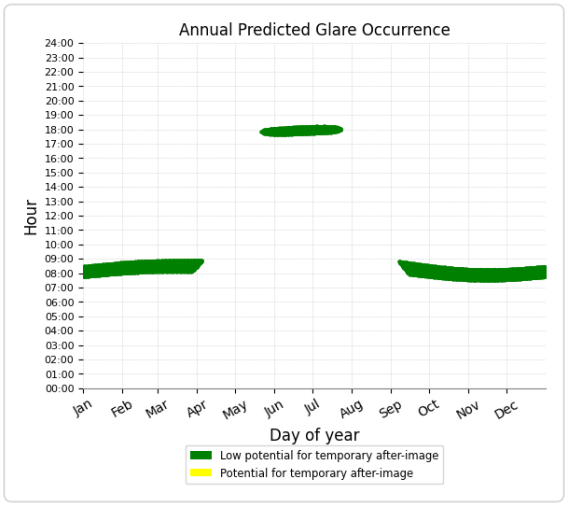


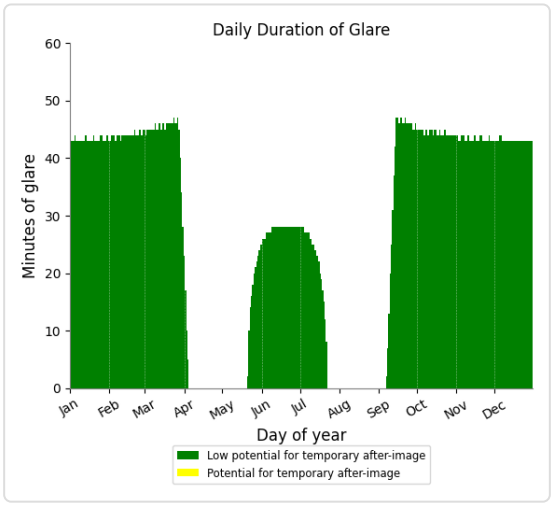


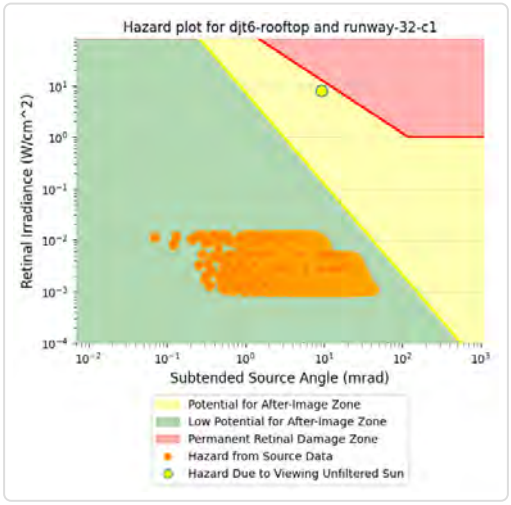
DJT6 Rooftop Array and Route: Runway 32 C17 KC135 Rectangular Analysis

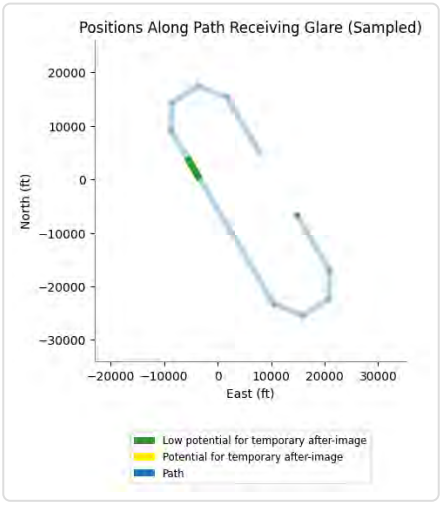
Yellow glare: none

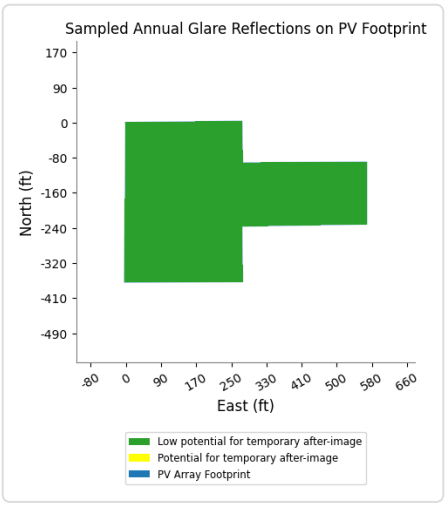
Green glare: 10,464 min.







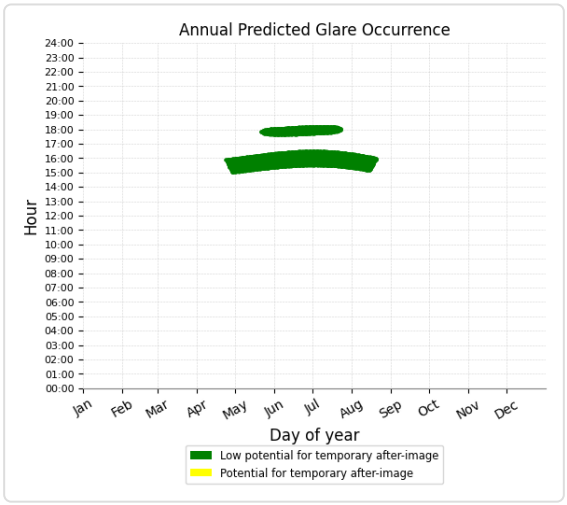


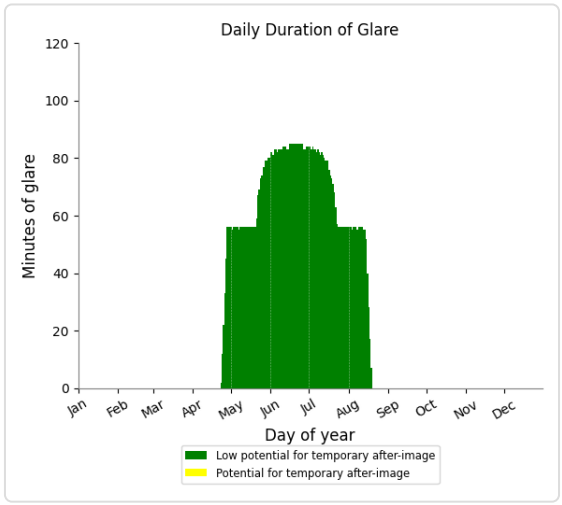


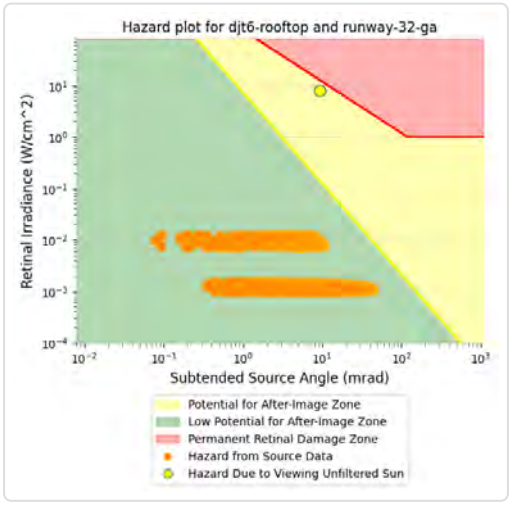
DJT6 Rooftop Array and Route: Runway 32 GA Rectangular Analysis

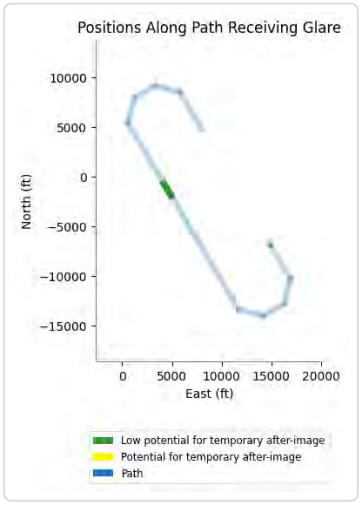
Yellow glare: none

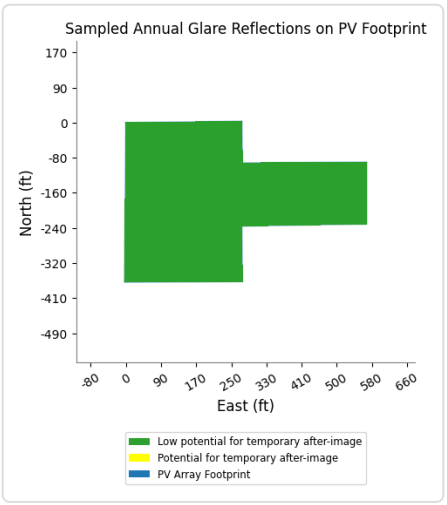
Green glare: 7,889 min.







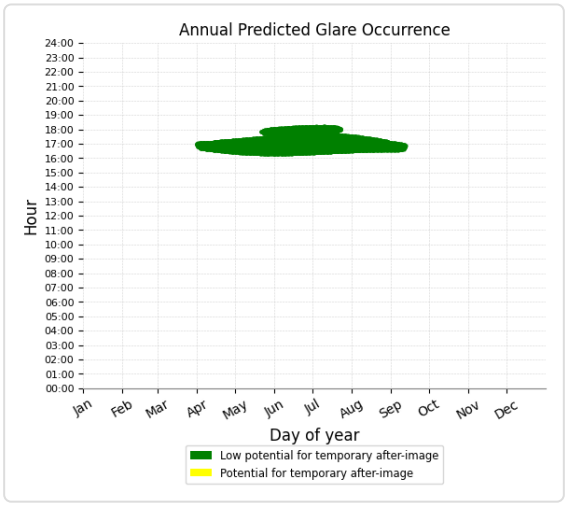


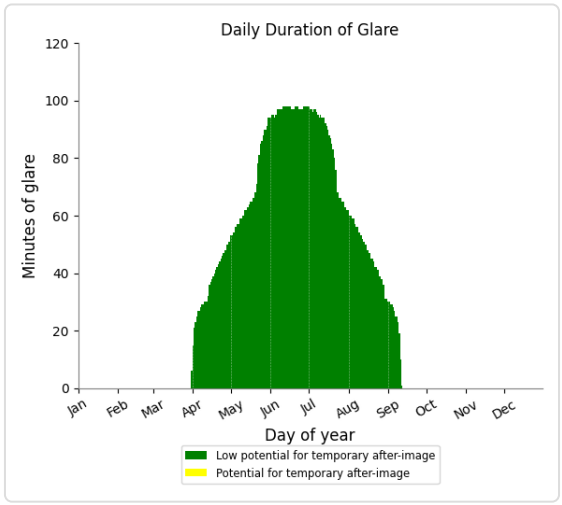


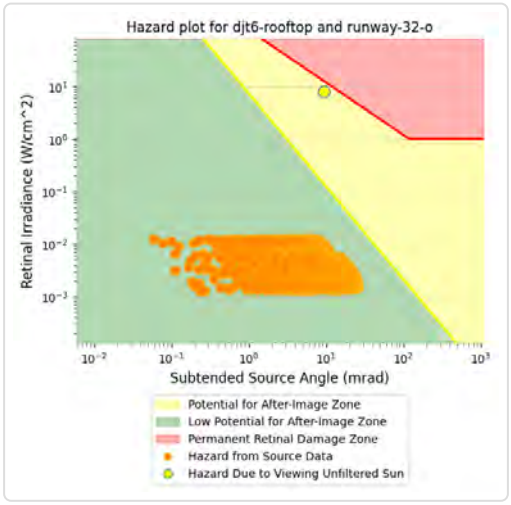
DJT6 Rooftop Array and Route: Runway 32 Overhead

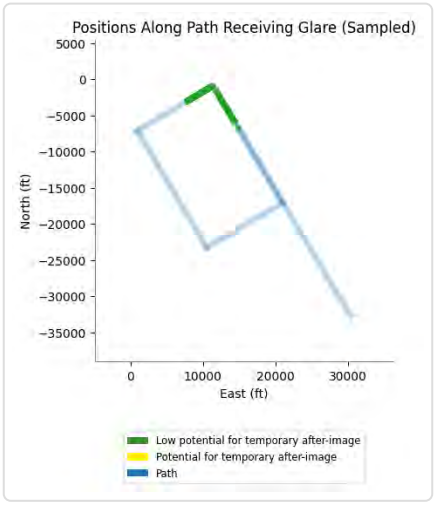
Yellow glare: none

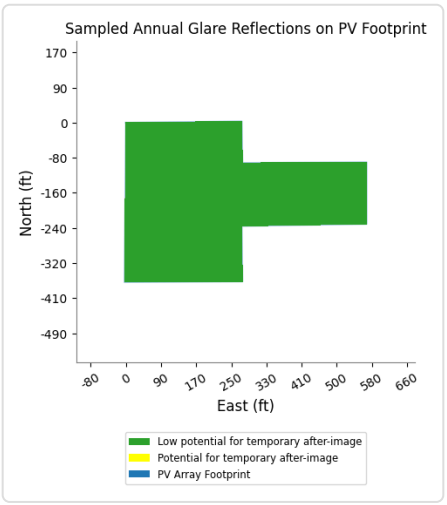
Green glare: 10,524 min.











DJT6 Rooftop Array and 1-ATCT

No glare found

Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
The algorithm does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results. However, we have validated our models against several systems, including a PV array causing glare to the air-traffic control tower at Manchester-Boston Regional Airport and several sites in Albuquerque, and the tool accurately predicted the occurrence and intensity of glare at different times and days of the year.
Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare. This primarily affects V1 analyses of path receptors.
Random number computations are utilized by various steps of the annual hazard analysis algorithm. Predicted minutes of glare can vary between runs as a result. This limitation primarily affects analyses of Observation Point receptors, including ATCTs. Note that the SGHAT/ ForgeSolar methodology has always relied on an analytical, qualitative approach to accurately determine the overall hazard (i.e. green vs. yellow) of expected glare on an annual basis.
The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.
The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
The variable direct normal irradiance (DNI) feature (if selected) scales the user-prescribed peak DNI using a typical clear-day irradiance profile. This profile has a lower DNI in the mornings and evenings and a maximum at solar noon. The scaling uses a clear-day irradiance profile based on a normalized time relative to sunrise, solar noon, and sunset, which are prescribed by a sun-position algorithm and the latitude and longitude obtained from Google maps. The actual DNI on any given day can be affected by cloud cover, atmospheric attenuation, and other environmental factors.
The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.
The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
Refer to the Help page at **www.forgesolar.com/help/** for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

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NOTICE OF PUBLIC HEARING

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

www.rcaluc.org

A PUBLIC HEARING has been scheduled before the Riverside County Airport Land Use Commission (ALUC) to consider the applications described below.

Any person may submit written comments to the ALUC before the hearing or may appear and be heard in support of or opposition to the project at the time of hearing. **Information on how to participate in the hearing will be available on the ALUC website at www.rcaluc.org.** The ALUC holds hearings for local discretionary permits within the Airport Influence Area, reviewing for aeronautical safety, noise and obstructions. ALUC reviews a proposed plan or project solely to determine whether it is consistent with the applicable Airport Land Use Compatibility Plan. For more information please contact **ALUC Planner Jackie Vega at (951) 955-0982**.

The March Joint Powers Authority Planning Department should be contacted on non-ALUC issues. For more information, please contact March Joint Powers Authority Planner Lauren Sotelo at 951-656-7000.

The proposed project application may be viewed by a prescheduled appointment and on the ALUC website www.rcaluc.org. Written comments may be submitted at the Riverside County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, California 92501, Monday through Friday from 8:00 a.m. to 3:30 p.m., or by e-mail to javega@rivco.org. Individuals with disabilities requiring reasonable modifications or accommodations, please contact Barbara Santos at (951) 955-5132.

PLACE OF HEARING: **Riverside County Administration Center**
4080 Lemon Street, 1st Floor Board Chambers
Riverside California

DATE OF HEARING: **July 13, 2023**

TIME OF HEARING: **9:30 A.M.**

CASE DESCRIPTION:

ZAP1571MA23 – Meridian Park, LLC (Representative: Jeff Gordon) – March Joint Powers Authority Case No. COM-Solar 23-003 (Building Permit). A proposal to construct a 57,271 square foot rooftop solar panel system on an industrial building on 45.84 acres, located northerly of Krameria Avenue, westerly of Village West Drive, and southerly of Van Buren Boulevard (Airport Compatibility Zone C2 of the March Air Reserve Base/Inland Port Airport Influence Area).

RIVERSIDE COUNTY
AIRPORT LAND USE COMMISSION

APPLICATION FOR MAJOR LAND USE ACTION REVIEW

ALUC STAFF ONLY

ALUC Case Number: ZAP1571MA23 Date Submitted: 4/26/23

AIA: Airport MARCH Zone: Zone C2 Public Hearing [X] Staff Review [ ]

Applicant

Applicant Full Name: Meridian Park, LLC

Applicant Address: 567 San Nicolas Drive, #270, Newport Beach, CA 92660

Phone: (949) 200-6755 **Email:** jgordon@waypointpg.com

Representative/ Property Owner Contact Information

Representative: Jeff Gordon **Email:** jgordon@waypointpg.com

Phone: (949) 279-7339

Address: same as applicant

Property Owner: same as applicant **Email:**

Phone:

Address: same as applicant

Local Jurisdiction Agency

Agency Name: March Joint Powers Authority Phone: (951) 656-7000

Staff Contact: Lauren Sotelo **Email:** sotelo@marchjpa.com

Address: 14205 Meridian Parkway, Suite 140, Riverside, CA 92518

Local Agency Case No.: COM-SOLAR-23-003

Project Location

Street Address: 20920 Krameria Ave, Riverside, CA Gross Parcel Size.: 45.84 acres

Assessor's Parcel No.: 294-100-034, 294-120-039, 294-120-041, 294-120-046, 294-120-047

Solar

Is the project proposing solar Panels? Yes [✓] No [ ] If yes, please provide solar glare study. (only if in Zone C or higher)

Data

Site Elevation:(above mean sea level) 1685'

Height of Building or structures: 40'

What type of drainage basins are being proposed and the square footage: Underground detention: approx 60,000 SF

Notice

A. NOTICE: Failure of an applicant to submit complete or adequate information pursuant to Sections 65940 to 65948 inclusive of the California Government Code, MAY constitute grounds for disapproval of actions, regulations, or permits.

B. REVIEW TIME: Estimated time for "staff level review" is approximately 30 days from date of submittal. Estimated time for "commission level review" is approximately 45 days from date of a complete application submittal to the next available commission hearing meeting.

C. SUBMISSION PACKAGE:

Please submit all application items DIGITALLY via USB or CD:

- Completed ALUC Application Form
- Plans Package: site plans, floor plans, building elevations, grading plans, subdivision maps
- Exhibits of change of zone, general plan amendment, specific plan amendment
- Project description of existing and proposed use

Additionally, please provide:

- ALUC fee payment (Checks made out to Riverside County ALUC)
- Gummed address labels of all surrounding property owners within a 300-foot radius of project site. (Only required if the project is scheduled for a public hearing).

Riverside County Airport Land Use Commission, County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, CA 92501, Phone: 951-955-5132 Fax: 951-955-5177 Website: www.rcaluc.org

RIVERSIDE COUNTY
AIRPORT LAND USE COMMISSION

STAFF REPORT

AGENDA ITEM:	3.7
HEARING DATE:	July 13, 2023
CASE NUMBER:	ZAP1575MA23 – PowerFlex Systems, LLC (Representative: United Natural Foods, Inc.)
APPROVING JURISDICTION:	March Joint Powers Authority
JURISDICTION CASE NO:	COM-Solar 23-006 (Building Permit)
LAND USE PLAN:	2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan
Airport Influence Area:	March Air Reserve Base
Land Use Policy:	Zone B2
Noise Levels:	Between 65 - 75 CNEL contour from aircraft

RECOMMENDATION: Staff recommends that the Commission find the proposed Building Permit CONSISTENT with the 2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, subject to the conditions included herein.

PROJECT DESCRIPTION: A proposal to construct a 720,250 square foot rooftop solar panel system on an existing industrial building on 59.45 acres.

PROJECT LOCATION: The site is located at 14900 Meridian Parkway, southerly of Innovation Drive and easterly of Meridian Parkway, approximately 1,772 feet westerly of the northerly end of Runway 14-32 at March Air Reserve Base.

BACKGROUND:

Non-Residential Land Use Intensity: Pursuant to the Airport Land Use Compatibility Plan for the March Air Reserve Base/Inland Port Airport, the site is located within Compatibility Zone B2, which limits average intensity to 100 people per acre and 250 people per single acre. The proposed rooftop solar panels will not generate any occupancy.

March Air Reserve Base/United States Air Force Input: Given that the project site is located in Zone B2 westerly of the northerly runway at March Air Reserve Base, the March Air Reserve Base staff was notified of the proposal to add rooftop solar panels and sent a solar glare hazard analysis study for their review. On June 19, 2023, the Air Force provided comments concurring with the analysis and conclusions of the glare study. The Base also identifies that the project's large scale

solar footprint adjoins the AICUZ safety area and APZ's and the project should be aware of and implement the design standards in the MCUS, in order to mitigate solar glare impacting the Base.

Prohibited and Discouraged Uses: The applicant does not propose any uses prohibited or discouraged in Compatibility Zone B2.

Flight Hazard Issues: Structure height, electrical interference, and reflectivity/glare are among the issues that solar panels in the airport influence area must address. The project's 720,250 square foot photovoltaic (PV) panel structures would be located on the rooftop of the industrial building within Compatibility Zone B2.

Glint and Glare/Reflectivity

Based on the Federal Aviation Administration's Interim Policy for Review of Solar Energy System Projects on Federally Obligated Airports, no glare potential or low potential for temporary after-image ("green" level) are acceptable levels of glare on final approach (within 2 miles from end of runway) for solar facilities located on airport property. However, potential for temporary after-image" ("yellow" level) and potential for permanent eye damage ("red" level) are not acceptable levels of glare on final approach. No glare is permitted at air traffic control towers.

The project proposes 720,250 square feet of solar panels on the existing industrial building rooftop with a fixed tilt of 10 degrees with no rotation, and an orientation of 239.5 degrees. The applicant has submitted a glare analysis utilizing the web-based Forge Solar, a copy of which is attached hereto. The analysis was based on a 2 mile straight in approach (as per FAA Interim Policy standards) to runways 14 and 32, and also based on the traffic patterns as identified by March Air Reserve Base staff (Runway 12/30 General Aviation, Runway 14/32 General Aviation, Runway 14/32 C-17/KC-135, Runway 14/32 Overhead). The analysis utilized a glide slope approach of 3.0 degrees. No glare would affect the Air Traffic Control Tower.

The analysis concluded that no glare would occur on the 2-mile approach to the runways, and some potential for glare was identified within the Air Force traffic pattern. Evaluation of the Air Force traffic patterns indicates that the panels would result in a low potential for temporary after-image ("green" level glare) or no glare. All times are in standard time.

Runway 12/30 General Aviation traffic pattern (totaling 12,827 minutes of 'green' level glare):

- Runway 12 General, totaling 1,425 minutes of "green" level glare, lasting up to 15 minutes a day, from November to February from 5:00 p.m. to 6:30 p.m.
- Runway 30 General, totaling 11,402 minutes of "green" level glare, lasting up to 60 minutes a day, from March to October from 6:00 p.m. to 8:00 p.m.

Runway 14/32 General Aviation traffic pattern (total 5,245 minutes of 'green' level glare):

- Runway 14 General, totaling 3,641 minutes of "green" level glare, lasting up to 55 minutes a day, throughout January to December from 9:00 a.m. to 12:00 p.m.
- Runway 32 General, totaling 1,604 minutes of "green" level glare, lasting up to 35 minutes a day, between April to May and August to September from 6:00 p.m. to 7:30 p.m.

Runway 14/32 C-17/KC-135 traffic pattern (totaling 2,929 minutes of 'green' level glare):

- Runway 32 C17 KC135, totaling 2,929 minutes of "green" level glare, lasting up to 30 minutes a day, from March to April and September to October from 8:00 a.m. to 9:00 a.m.

Runway 14/32 Overhead Aviation traffic pattern (totaling 4,946 minutes of 'green' level glare):

- Runway 14 Overhead, totaling 4,946 minutes of "green" level glare, lasting up to 35 minutes a day, throughout January to December from 8:00 a.m. to 9:30 a.m. and 2:00 p.m. to 3:00 p.m.
-

The total of 25,947 minutes of "green" level glare represents less than 10 percent of total day light time.

Electrical and Communication Interference

The applicant has indicated that they do not plan to utilize equipment that would interfere with aircraft communications. The PV panels themselves present little risk of interfering with radar transmission due to their low profiles. In addition, solar panels do not emit electromagnetic waves over distances that could interfere with radar signal transmissions, and any electrical facilities that do carry concentrated current will be buried beneath the ground and away from any signal transmission. There are no radar transmission or receiving facilities within the site.

Part 77: The elevation of Runway 14-32 at its northerly terminus is 1,535 feet above mean sea level (AMSL). At a distance of approximately 1,772 feet from the project to the nearest point on the runway, Federal Aviation Administration (FAA) review would be required for any structures with top of roof exceeding 1,553 feet AMSL. The site's finished floor elevation is 1,563 feet AMSL and building height is 40 feet, resulting in a top point elevation of 1,603 feet AMSL. Therefore, review by the FAA Obstruction Evaluation Service was required. However, the height of the solar panels will not significantly increase the overall height of the existing building.

Open Area: None of the Compatibility Zones for the March Air Reserve Base/Inland Port ALUCP require open area specifically.

CONDITIONS:

1. Any new outdoor lighting that is installed shall be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.

2. The following uses/activities are not included in the proposed project and shall be prohibited at this site:

   (a) Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight or circling climb following takeoff or toward an aircraft engaged in a straight or circling final approach toward a landing at an airport, other than a DoD or FAA-approved navigational signal light or visual approach slope indicator.

   (b) Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight or circling climb following takeoff or towards an aircraft engaged in a straight or circling final approach towards a landing at an airport.

   (c) Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the

area. (Such uses include landscaping utilizing water features, aquaculture, production of cereal grains, sunflower, and row crops, composting operations, wastewater management facilities, artificial marshes, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, and incinerators.)

(d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.

(e) Children's schools, day care centers, libraries, hospitals, skilled nursing and care facilities, congregate care facilities, hotels/motels, places of assembly (including but not limited to places of worship and theaters), buildings with more than 3 aboveground habitable floors, and critical community infrastructure facilities.

(f) Highly noise-sensitive outdoor nonresidential uses. Examples of noise-sensitive outdoor nonresidential uses that are prohibited include, but are not limited to, major spectator-oriented sports stadiums, amphitheaters, concert halls and drive-in theaters.

(g) Other Hazards to flight.

3. Prior to issuance of building permits, the landowner shall convey an avigation easement to the March Inland Port Airport Authority or its successor in interest, or provide evidence that such easement has been previously conveyed. The Airport Authority may waive this requirement in the event that the Authority determines that pre-existing avigation easements dedicated to the United States of America are sufficient to address its needs. Contact the March Joint Powers Authority at (951) 656-7000 for additional information.

4. March Air Reserve Base must be notified of any land use having an electromagnetic radiation component to assess whether a potential conflict with Air Base radio communications could result. Sources of electromagnetic radiation include radio wave transmission in conjunction with remote equipment inclusive of irrigation controllers, access gates, etc.

5. All solar arrays installed on the project site shall consist of smooth glass photovoltaic solar panels without anti-reflective coating, a fixed tilt of 10 degrees and orientation of 239.5 degrees. Solar panels shall be limited to a total of 720,250 square feet, and the locations and coordinates shall be as specified in the glare study. Any deviation from these specifications (other than reduction in square footage of panels), including change in orientation, shall require a new solar glare analysis to ensure that the amended project does not result in any glare impacting the air traffic control tower or creation of any "yellow" or "red" level glare in the flight paths, and shall require a new hearing by the Airport Land Use Commission.

6. In the event that any glint, glare, or flash affecting the safety of air navigation occurs as a result of project operation, upon notification to the airport operator of an event, the airport operator shall notify the project operator in writing. Within 30 days of written notice, the project operator shall be required to promptly take all measures necessary to eliminate such glint, glare, or flash. An "event" includes any situation that results in an accident, incident,

"near-miss," or specific safety complaint regarding an in-flight experience to the airport operator or to federal, state, or county authorities responsible for the safety of air navigation. The project operator shall work with the airport operator to prevent recurrence of the incidence. Suggested measures may include, but are not limited to, changing the orientation and/or tilt of the source, covering the source at the time of day when events of glare occur, or wholly removing the source to diminish or eliminate the source of the glint, glare, or flash. For each such event made known to the project operator, the necessary remediation shall only be considered to have been fulfilled when the airport operator states in writing that the situation has been remediated to the airport operator's satisfaction.

7. In the event that any electrical interference affecting the safety of air navigation occurs as a result of project operation, upon notification to the airport operator of an event, the airport operator shall notify the project operator in writing. Within 30 days of written notice, the project operator shall be required to promptly take all measures necessary to eliminate such interference. An "event" includes any situation that results in an accident, incident, "near-miss," report by airport personnel, or specific safety complaint to the airport operator or to federal, state, or county authorities responsible for the safety of air navigation. The project operator shall work with the airport operator to prevent recurrence of the event. For each such event made known to the project operator, the necessary remediation shall only be considered to have been fulfilled when the airport operator states in writing that the situation has been remediated to the airport operator's satisfaction.

X:\AIRPORT CASE FILES\March\ZAP1575MA23\ZAP1575MA23sr.doc

NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances [can vary from person to person. You may wish to consider what airport annoyances], if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. Business & Professions Code Section 11010 (b)(13)(A)

NOTICE

THERE IS AN AIRPORT NEARBY.

THIS STORM WATER BASIN IS DESIGNED TO HOLD STORM WATER FOR ONLY 48 HOURS AND NOT TO ATTRACT BIRDS

PROPER MAINTENANCE IS NECESSARY TO AVOID BIRD STRIKES

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION ALUC

IF THIS BASIN IS OVERGROWN, PLEASE CONTACT:

Name: _____ Phone: _____

LEGEND

Compatibility Zones

- Airport Influence Area Boundary
- Zone A
- Zone B1
- Zone B2
- Zone C1
- Zone C2
- Zone D
- Zone E
- Zone M
- High Terrain Zone
- FAR Part 77 Military Outer Horizontal Surface Limits
- FAR Part 77 Notification Area

Boundary Lines

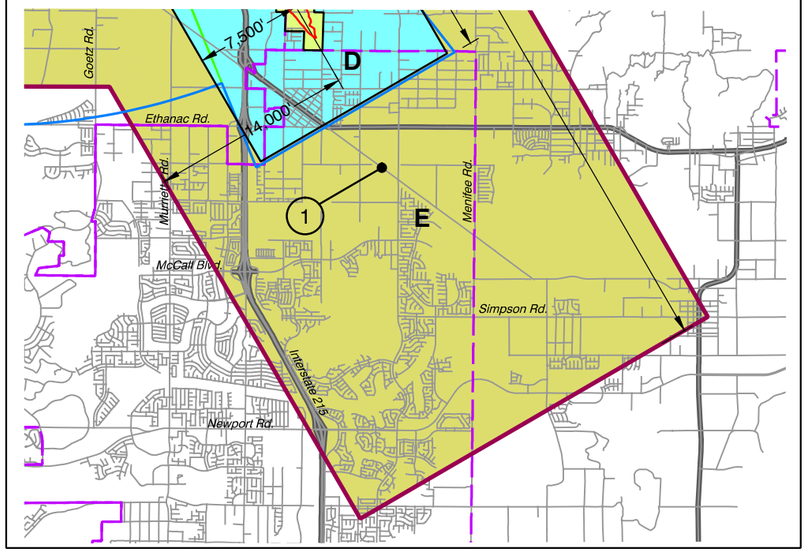
- March Air Reserve Base / Air Force Property
- March Joint Powers Authority Property Line
- County Boundary
- City Limits
- Site-Specific Exceptions (existing local agency commitments to development projects)

1. March JPA: March Business Center/Meridian
2. Perris: Harvest Landing
3. Perris: Park West
4. Moreno Valley: Affordable Housing
5. March JPA: Ben Clark Training Center
6. Riverside: Ridge Crest Subdivision

(1) Point at which aircraft on Runway 32 ILS approach descend below 3,000 feet above runway end. Airport Elevation is 1,535 feet MSL.

(2) Point at which departing aircraft typically reach 3,000 feet above runway end.

INSET



SEE INSET AT RIGHT

Note:
All dimensions are measured from runway ends and centerlines.

N

0 2 4 MILES

Base map source: County of Riverside 2013

Riverside County
Airport Land Use Commission

March Air Reserve Base / Inland Port Airport
Land Use Compatibility Plan

(Adopted November 13, 2014)

Map MA-1

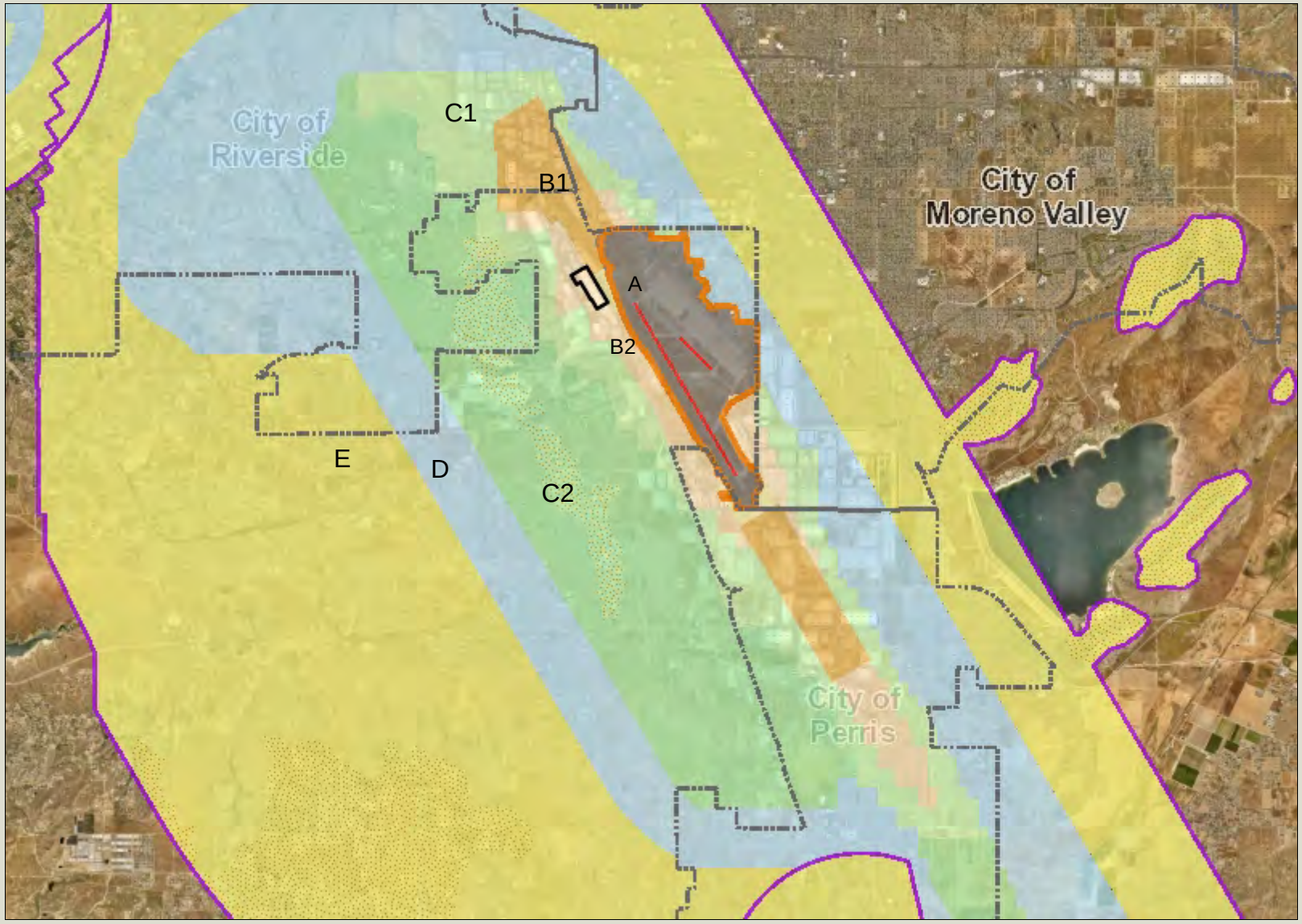
Compatibility Map

March Air Reserve Base / Inland Port Airport

Prepared by Mead & Hunt, Inc. (June 2013)

X:\18190-10\114627.01\TECH\CAD\MAR-compatibility2013.dwg Dec 10, 2014 - 1:38pm

Map My County Map



Legend

- Runways
- Airports
- Airport Influence Areas
- Airport Compatibility Zones
  - OTHER COMPATIBILITY ZONE
  - A
  - A-EXC1
  - B1
  - B1-APZ I
  - B1-APZ I-EXC1
  - B1-APZ II
  - B1-APZ II-EXC1
  - B1-EXC1
  - B2
  - B2-EXC1
  - C
  - C1
  - C1-EXC1
  - C1-EXC3
  - C1-EXC4
  - C1-HIGHT
  - C2
  - C2-EXC1
  - C2-EXC2
  - C2-EXC3
  - C2-EXC5
  - C2-EXC6

RCIT

0 12,314 24,629 Feet

IMPORTANT Maps and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of Riverside makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.

REPORT PRINTED ON... 6/15/2023 11:52:56 AM

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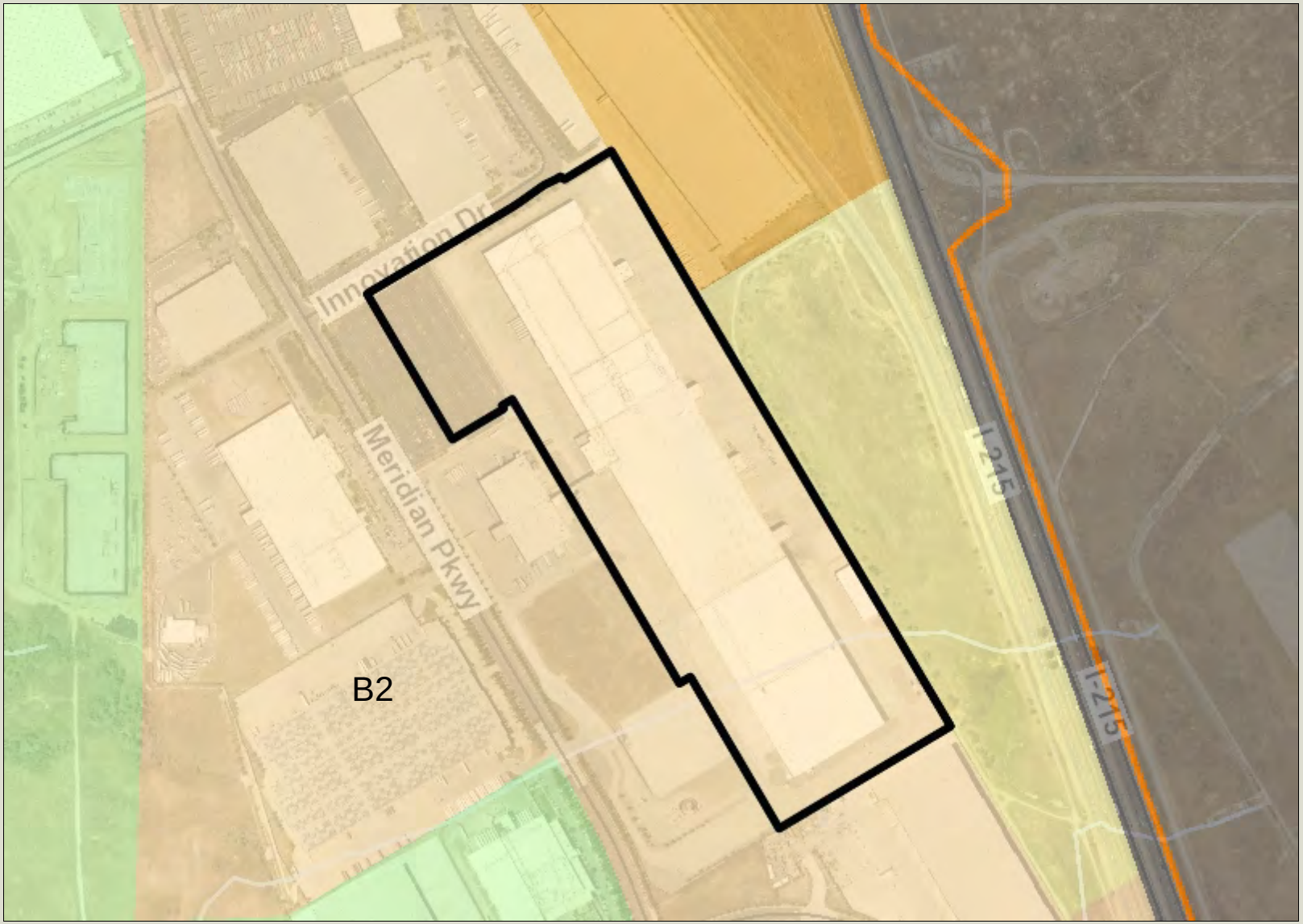
Notes

Map My County Map



Legend

- Runways
- Airports
- Airport Influence Areas
- Airport Compatibility Zones
  - OTHER COMPATIBILITY ZONE
  - A
  - A-EXC1
  - B1
  - B1-APZ I
  - B1-APZ I-EXC1
  - B1-APZ II
  - B1-APZ II-EXC1
  - B1-EXC1
  - B2
  - B2-EXC1
  - C
  - C1
  - C1-EXC1
  - C1-EXC3
  - C1-EXC4
  - C1-HIGHT
  - C2
  - C2-EXC1
  - C2-EXC2
  - C2-EXC3
  - C2-EXC5
  - C2-EXC6

RCIT

0 770 1,539 Feet

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Notes

Map My County Map

Legend

- County Centerline Names
- County Centerlines
- Blueline Streams
- City Areas
- World Street Map

0 1,539 3,079 Feet

IMPORTANT Maps and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of Riverside makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.

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Notes

Map My County Map

Legend

- Blueline Streams
- City Areas
- World Street Map

0 3,079 6,157 Feet

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Notes

Map My County Map

Legend

- County Centerline Names
- County Centerlines
- Blueline Streams
- City Areas
- World Street Map

0 1,539 3,079 Feet

IMPORTANT Maps and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of Riverside makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.

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Notes

Map My County Map

Legend

City Areas

World Street Map

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0 12,314 24,629 Feet

REPORT PRINTED ON... 6/15/2023 11:54:54 AM

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Notes

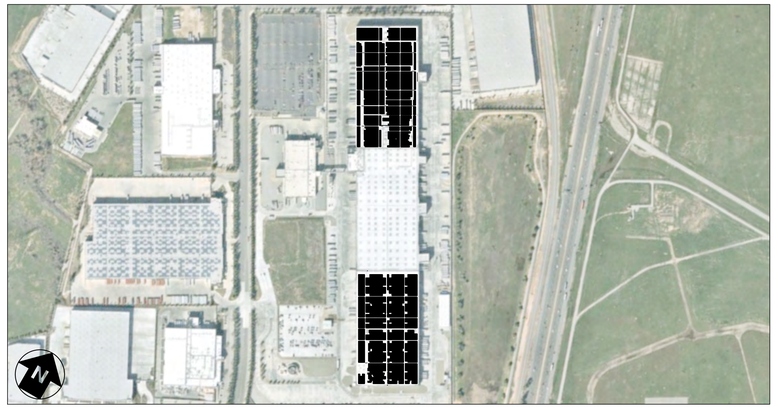
7,139.925 KW SOLAR ROOFTOP SYSTEM AT

UNFI RIVERSIDE

14900 MERIDIAN PKWY RIVERSIDE CA 92518

LOCATION MAP
SCALE: 1" = 2000'-0"

BIRDS-EYE VIEW FROM SOUTH
SCALE: 1" = 500'-0"



SYSTEM PLAN
SCALE: 1" = 500'-0"

TOTAL SYSTEM SUMMARY:

TOTAL DC SYSTEM SIZE:	7,139.925 kWDC
AC SYSTEM SIZE:	4,800.000 kWAC
MODULE MANUFACTURER:	HANWHA
MODULE MODEL:	Q. PEAK DUO XL-G11S 585W
MODULES PER STRING:	32, 34
MODULE QUANTITY:	12,205
STRING QUANTITY:	360
MODULE TILT:	10°
MODULE AZIMUTH:	239°
INVERTER MANUFACTURER:	SOLAREDGE
INVERTER MODEL:	SE120KUS
INVERTER QUANTITY:	40
OPTIMIZER MANUFACTURER:	SOLAREDGE
OPTIMIZER MODEL:	P1101
OPTIMIZER QUANTITY:	6,103

SUBSYSTEM SUMMARIES:

SYSTEM A

TOTAL DC SIZE:	3,532.230 kWDC
AC SYSTEM SIZE:	2,400.000 kWAC
MODULE QUANTITY:	6,038
STRING QUANTITY:	180

SYSTEM B

TOTAL DC SIZE:	3,607.695 kWDC
AC SYSTEM SIZE:	2,400.000 kWAC
MODULE QUANTITY:	6,167
STRING QUANTITY:	180

SCOPE OF WORK SUMMARY

ROOFTOP PV ARRAY:

- INSTALL SOLAR MODULES AND ROOFTOP RACKING SYSTEM ON TOP OF EXISTING BUILDING.
- INSTALL INVERTERS AND ELECTRICAL DISTRIBUTION EQUIPMENT.
- INTERCONNECT AT EXISTING ELECTRICAL DISTRIBUTION EQUIPMENT.

BILL OF MATERIAL

	FURNISH BY E.C.	FURNISH BY DEVELOPER	EQUIP. NOT APPLICABLE
SOLAR GENERATOR DISCONNECT SWITCH		●	
SOLAR AC SWITCHBOARD		●	
SOLAR AC PANELBOARDS		●	
GROUNDING TRANSFORMER		●	
INVERTERS		●	
RAPID SHUTDOWN DISCONNECTS		●	
DATA MONITORING PANEL, CTs, PTs		●	
UTILITY METER SOCKET OR CT CABINET		●	
DEMAND METER CIRCUIT BREAKER	●		
RACKING MATERIALS		●	
PV MODULES		●	
AC CONDUIT, TRAY, FITTINGS, & PULLBOXES	●		
DC CONDUIT, TRAY, FITTINGS & PULLBOXES	●		
PV CABLE CONNECTORS	●		
CROSSOVER RAMPS			●
CROSSOVER RAMPS OVER CABLE TRAY			●
BOLLARDS	●		
MECHANICAL ATTACHMENTS: RACKING		●	
MECHANICAL ATTACHMENTS: NON-RACKING		●	
EQUIPMENT RACKS	●		
INVERTER RACKS		●	
ROOFTOP SUPPORT BLOCKS + SLIPSHEETS	●		

MECHANICAL ATTACHMENT SUMMARY (NON-RACKING ATTACHMENTS ONLY)	
ATTACHMENT LOCATION	QTY
INVERTER RACKS	TBD
PANELBOARD RACKS	TBD
CABLE TRAY	TBD
OTHER ELECTRICAL EQUIPMENT	TBD
TOTAL	TBD

NOTE: ATTACHMENT QUANTITIES ARE ESTIMATED BASED ON ENGINEERING REQUIREMENTS. ACTUAL QUANTITY REQUIRED MAY VARY DUE TO FIELD CONDITIONS

DEVELOPER:

powerflex
EDF Renewables
805 THIRD AVE, 20TH FLOOR
NEW YORK, NY 10022

ENGINEERED BY:

PUREPOWER ENGINEERING
111 RIVER STREET, SUITE 1110
HOBOKEN, NEW JERSEY 07030

DRAWING INDEX

		04/03/2023 IC DOCS REV2	05/05/2023 CONCEPTUAL DESIGN	05/16/2023 CONCEPTUAL DESIGN REV1	05/19/2023 ISSUE FOR PERMIT	
GENERAL						
G001	TITLE SHEET	●	●	●	●	
G100	SITE PLAN	●	×	×	●	
G200	PARTIAL ARRAY PLAN – SYSTEM A		●	●	●	
G201	PARTIAL ARRAY PLAN – SYSTEM B		●	●	●	
G300	FIRE ACCESS PLAN – SYSTEM A				●	
G301	FIRE ACCESS PLAN – SYSTEM B				●	
ELECTRICAL						
E001	ELECTRICAL NOTES & SYMBOLS LIST	●	×	×	●	
E100	AC ELECTRICAL PLAN	●	×	×	●	
E101	POI PHOTOS				●	
E110	ELECTRICAL ROOM PLAN & INVERTER AREA				●	
E300	ONE LINE DIAGRAM – EXISTING SITE EQUIP.	●	●	○	○	
E301	ONE LINE DIAGRAM – SYSTEM A	●	●	●	●	
E302	ONE LINE DIAGRAM – EXISTING SITE EQUIP.	●	●	○	●	
E303	ONE LINE DIAGRAM – SYSTEM B	●	●	●	●	
E310	SCHEDULES & CALCULATIONS – SYSTEM A	●	×	×	●	
E311	SCHEDULES & CALCULATIONS – SYSTEM B	●	×	×	●	
E312	CABLE TRAY CALCULATIONS				●	
E410	GROUNDING DETAILS				●	
E420	ELECTRICAL DETAILS				●	
E421	EQUIPMENT DETAILS				●	
E430	CABLE TRAY DETAILS				●	
E500	LABELS & SIGNAGE				●	
E600	EQUIPMENT DATA SHEETS				●	

LEGEND:

UPDATED DRAWING ISSUED	●
UNCHANGED, PREVIOUSLY ISSUED DRAWING STILL CURRENT	○
DRAWING REMOVED FROM SET	×

DRAWING TITLE: TITLE SHEET

DRAWING #: G001

DATE	REVISION DESCRIPTION	PM	ENG	CHK
05/19/2023	ISSUE FOR PERMIT	TL	AM	MD
05/05/2023	CONCEPTUAL DESIGN	TL	AM	TL
04/03/2023	IC DOCS - REV2	TL	AM	TL
10/18/2022	IC DOCS - REV1	BA	AM	MD

PUREPOWER ENGINEERING
111 RIVER STREET, SUITE 1110, HOBOKEN, NJ 07030
WWW.PUREPOWER.COM
RICHARD A. WINS
CA LICENSE No: 20357

PROFESSIONAL ENGINEER – RICHARD A. WINS – C 20357 – STATE OF CALIFORNIA

POWERFLEX
805 THIRD AVENUE 20TH FLOOR
NEW YORK, NY 10022
WWW.POWERFLEX.COM

DEVELOPER: powerflex EDF Renewables

PAGE SIZE: 36" x 24"

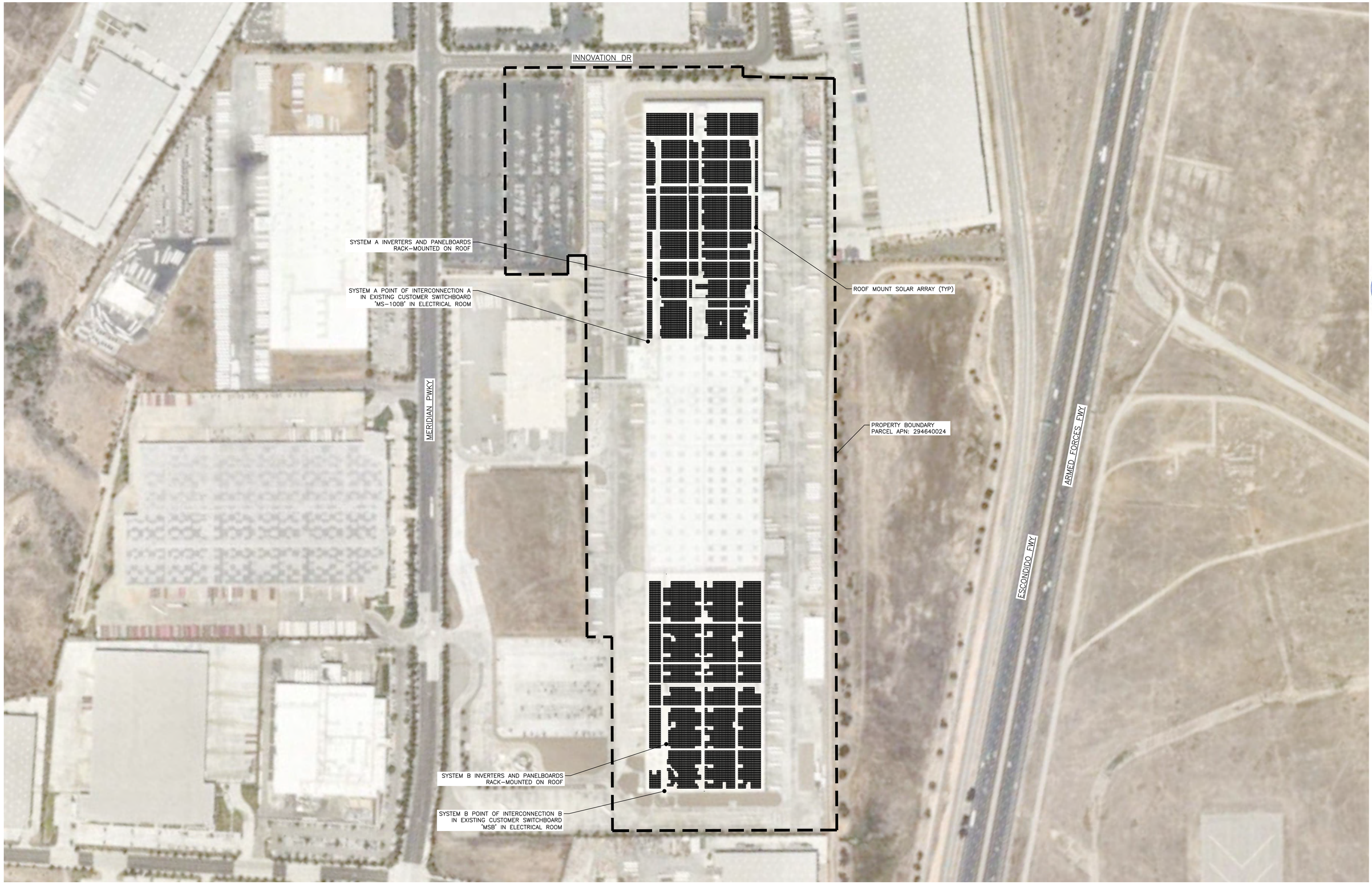
PROJECT #: 04862.01

DC SYSTEM SIZE: 7,139.925 kWDC
AC SYSTEM SIZE: 4,800.000 kWAC
MODULE TYPE: HANWHA Q.PEAK DUO XL 585W
MODULE QUANTITY: 12,205
ORIENTATION: 10° TILT, 239° AZIMUTH

PROJECT: SOLAR ROOFTOP SYSTEM AT
UNFI RIVERSIDE
14950 MERIDIAN PKWY
RIVERSIDE, CA 92518

PLOT DATE: 5/22/2023 4:04 PM

RULER IN INCHES: 0 ½ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18



1 SITE PLAN
SCALE: 1" = 150'

DATE	REVISION DESCRIPTION	PM	ENG	CHK
05/19/2023	ISSUE FOR PERMIT	TL	AM	MD
05/05/2023	CONCEPTUAL DESIGN	TL	AM	TL
04/03/2023	IC DOCS - REV2	TL	KM	TL
10/18/2022	IC DOCS - REV1	BA	AM	MD

PUREPOWER ENGINEERING
111 RIVER STREET, HOBOKEN, NJ
WWW.PUREPOWER.COM
RICHARD A. IVINS
CA LICENSE No. 20357

ENGINEER
LICENSED PROFESSIONAL ENGINEER
RICHARD A. IVINS
E 20357
Exp. 06/30/23
STATE OF CALIFORNIA

DEVELOPER
powerflex
EDF Renewables
POWERFLEX
805 THIRD AVENUE 20TH FLOOR
NEW YORK, NY 10022
WWW.POWERFLEX.COM

PAGE SIZE 36" x 24"
PROJECT # 04862.01

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AC SYSTEM SIZE: 4,800.000 kWAC
MODULE TYPE: HANWHA Q.PEAK DUO XL 585W
MODULE QUANTITY: 12,205
ORIENTATION: 10° TILT, 239° AZIMUTH

PROJECT
SOLAR ROOFTOP SYSTEM AT
UNFI RIVERSIDE
14950 MERIDIAN PKWY
RIVERSIDE, CA 92518

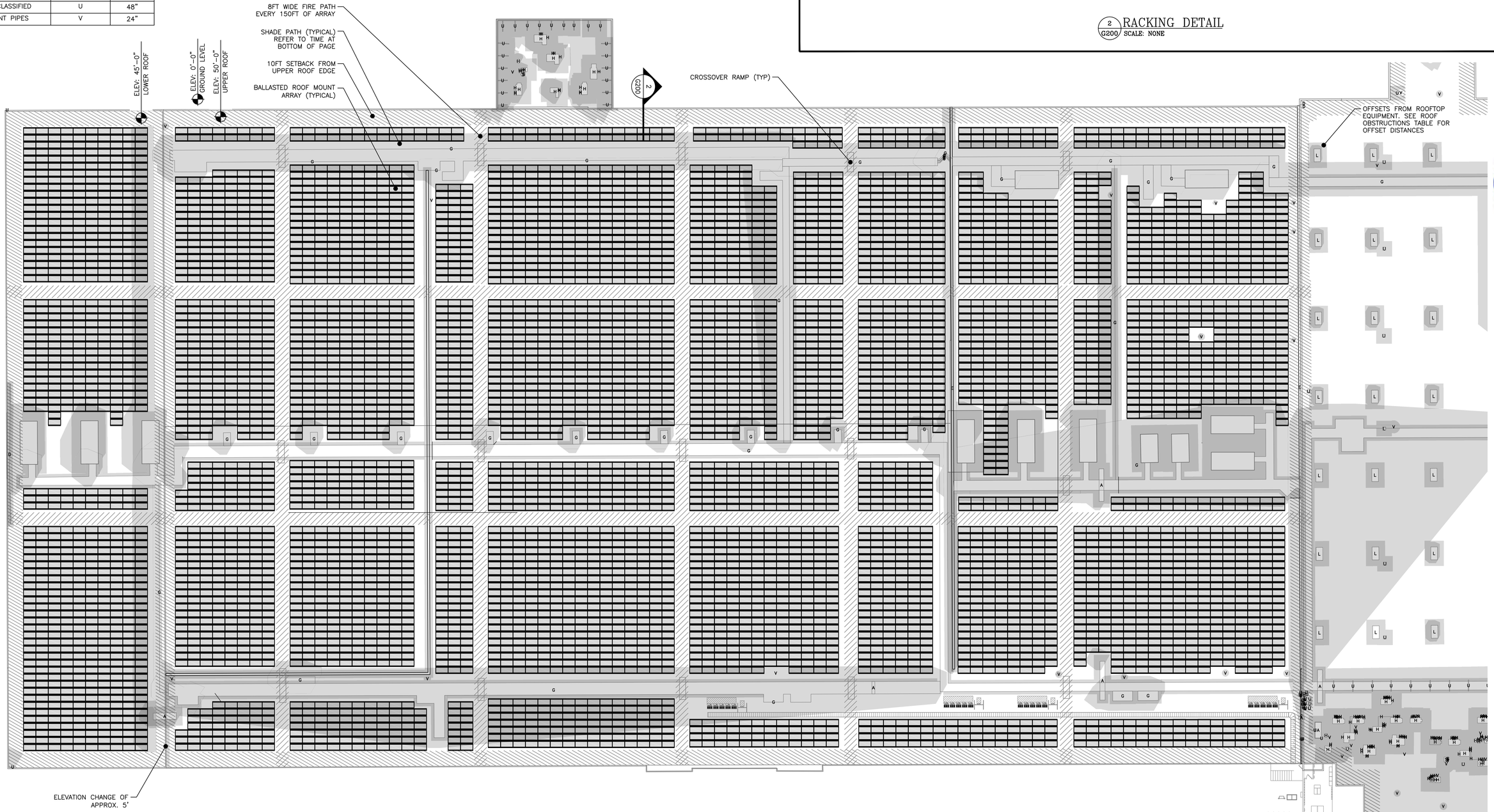
DRAWING TITLE
SITE PLAN

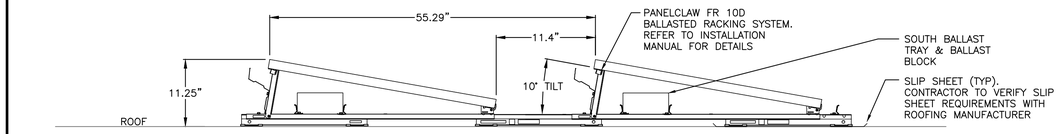
DRAWING #
G100

PLOT DATE: 5/22/2023 4:08 PM

RULER IN INCHES:

ROOFTOP OBSTRUCTIONS		
OBSTRUCTION TYPE	IDENTIFIER	OFFSET [IN]
ROOF ACCESS	A	48"
DRAINS	D	24"
EXPANSION JOINT	E	24"
GAS LINES	G	24"
HVAC	H	48"
LARGE HVAC	H	72"
LIGHTNING ROD	R	N/A
SATELLITE	S	48"
SKYLIGHTS	L	48"
UNCLASSIFIED	U	48"
VENT PIPES	V	24"





2 G200 RACKING DETAIL
SCALE: NONE

NOTE: ELEVATIONS ARE APPROXIMATE AND SHOWN TO LOCAL GRADE. ADJUSTED VALUES MAY BE APPROPRIATE FOR STRUCTURAL ANALYSIS.

IMPORTANT:
DO NOT STEP OR KNEEL ON PV MODULES

1 G200 PARTIAL ARRAY PLAN – SYSTEM A
SCALE: 1" = 30'

SHADING ZONES:
WINTER: 10:00–2:00
SPRING: 9:00–3:00
SUMMER: 8:00–4:00

DATE	REVISION DESCRIPTION	PM	ENG	CHK
05/19/2023	ISSUE FOR PERMIT	TL	AM	MD
05/05/2023	CONCEPTUAL DESIGN	TL	AM	TL
04/03/2023	IC DOCS – REV2	TL	KM	TL
10/18/2022	IC DOCS – REV1	BA	AM	MD

PUREPOWER ENGINEERING
111 RIVER STREET, HOBOKEN, NJ
WWW.PUREPOWER.COM
RICHARD A. IVINS
CA LICENSE No. 20357

LICENSED PROFESSIONAL ENGINEER RICHARD A. IVINS E 20357 REV. 06/30/23 STATE OF CALIFORNIA

DEVELOPER
powerflex EDF Renewables
POWERFLEX
805 THIRD AVENUE 20TH FLOOR
NEW YORK, NY 10022
WWW.POWERFLEX.COM

PAGE SIZE 36" x 24"
PROJECT # 04862.01

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AC SYSTEM SIZE: 4,800.000 kWAC
MODULE TYPE: HANWHA Q.PEAK DUO XL 585W
MODULE QUANTITY: 12,205
ORIENTATION: 10° TILT, 239° AZIMUTH

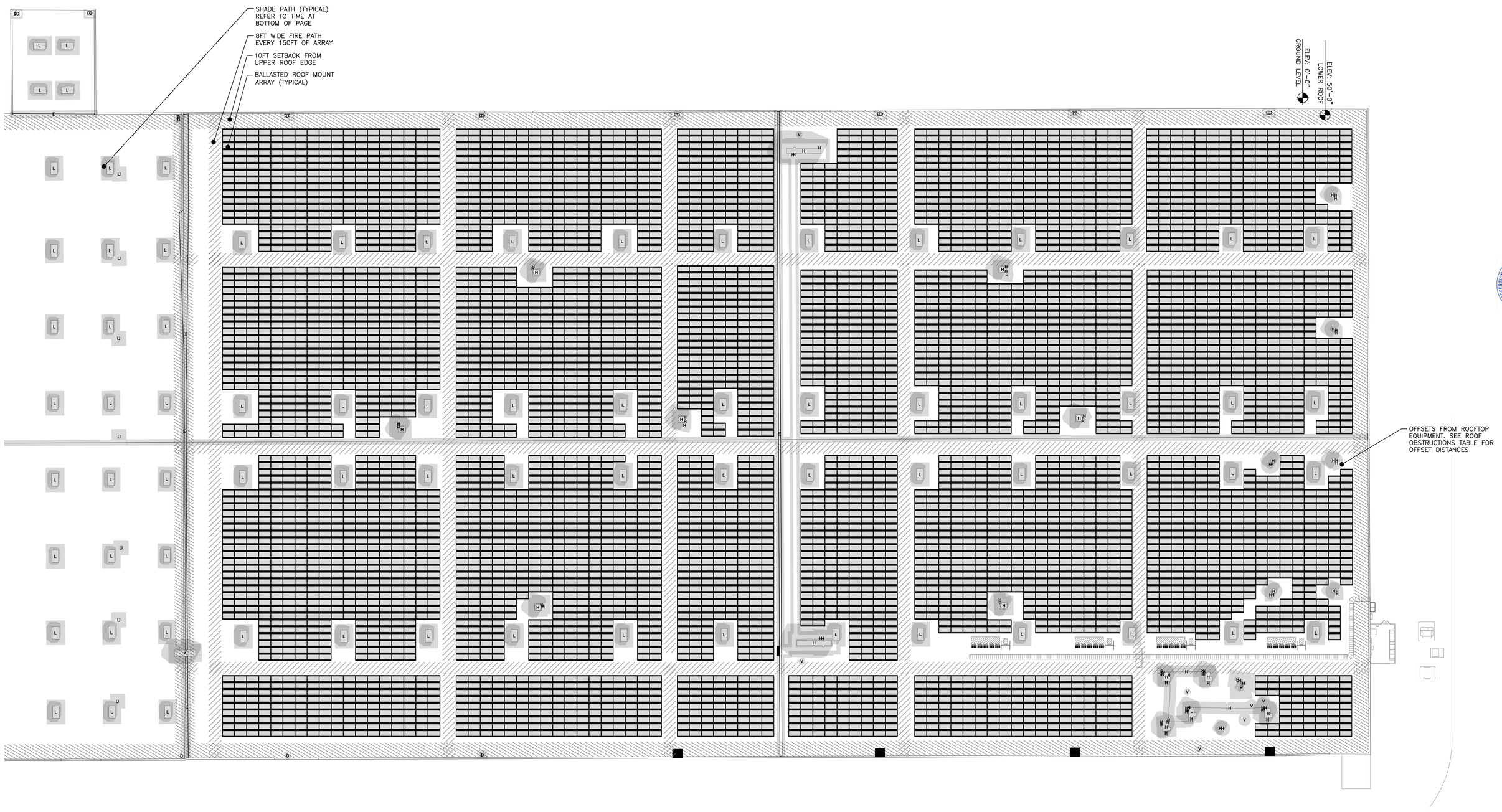
PROJECT
SOLAR ROOFTOP SYSTEM AT
UNFI RIVERSIDE
14950 MERIDIAN PKWY
RIVERSIDE, CA 92518

DRAWING TITLE
PARTIAL ARRAY PLAN
SYSTEM A

DRAWING #
G200

PLOT DATE: 5/22/2023 4:10 PM

RULER IN INCHES:



ROOFTOP OBSTRUCTIONS		
OBSTRUCTION TYPE	IDENTIFIER	OFFSET [IN]
ROOF ACCESS	A	48"
DRAINS	D	24"
EXPANSION JOINT	E	24"
GAS LINES	G	24"
HVAC	H	48"
LARGE HVAC	H	72"
LIGHTNING ROD	R	N/A
SATELLITE	S	48"
SKYLIGHTS	L	48"
UNCLASSIFIED	U	48"
VENT PIPES	V	24"

IMPORTANT:
DO NOT STEP OR KNEEL ON PV MODULES

1 G201 PARTIAL ARRAY PLAN – SYSTEM B
SCALE: 1" = 30'

SHADING ZONES:
WINTER: 10:00–2:00
SPRING: 9:00–3:00
SUMMER: 8:00–4:00

DATE	REVISION DESCRIPTION	PM	ENG	CHK
05/19/2023	ISSUE FOR PERMIT	TL	AM	MD
05/05/2023	CONCEPTUAL DESIGN	TL	AM	TL
04/03/2023	IC DOCS – REV2	TL	KM	TL
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PUREPOWER ENGINEERING
111 RIVER STREET, HOBOKEN, NJ
WWW.PUREPOWER.COM
RICHARD A. IVINS
CA LICENSE No. 20357

ENGINEER PROFESSIONAL LICENSE
RICHARD A. IVINS
E 20357
REV. 06/30/23
STATE OF CALIFORNIA

DEVELOPER
powerflex
EDF Renewables
POWERFLEX
805 THIRD AVENUE 20TH FLOOR
NEW YORK, NY 10022
WWW.POWERFLEX.COM

PAGE SIZE 36" x 24"
PROJECT # 04862.01

DC SYSTEM SIZE: 7,139.925 kWDC
AC SYSTEM SIZE: 4,800.000 kWAC
MODULE TYPE: HANWHA Q.PEAK DUO XL 585W
MODULE QUANTITY: 12,205
ORIENTATION: 10° TILT, 239° AZIMUTH

PROJECT
SOLAR ROOFTOP SYSTEM AT
UNFI RIVERSIDE
14950 MERIDIAN PKWY
RIVERSIDE, CA 92518

DRAWING TITLE
PARTIAL ARRAY PLAN
SYSTEM B

DRAWING #
G201

PLOT DATE: 5/22/2023 4:12 PM

RULER IN INCHES:

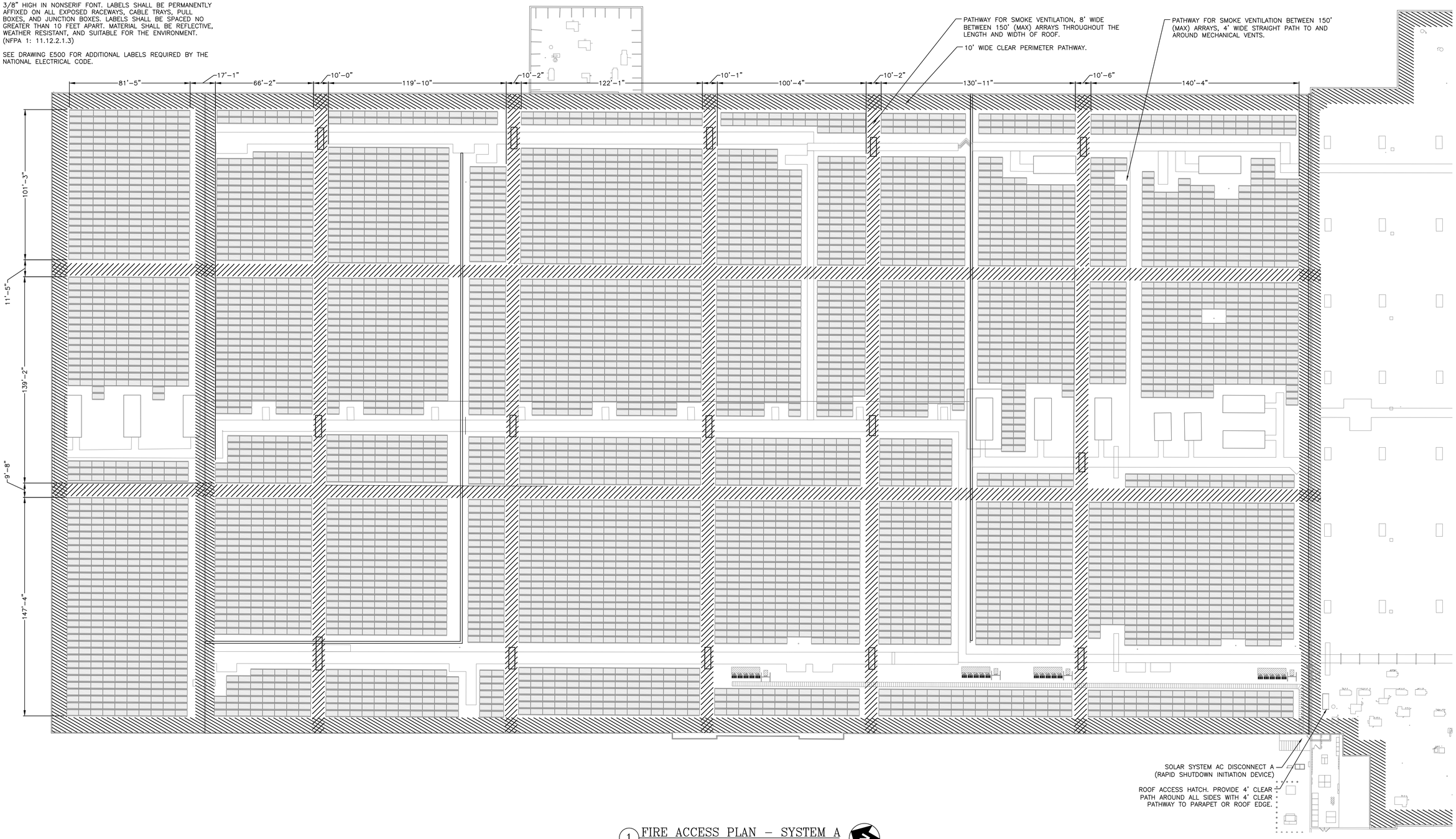
NFPA 1 REQUIRED LABELS:

1. MAIN SERVICE DISCONNECT – THE LABEL "WARNING: PHOTOVOLTAIC POWER SOURCE" SHALL BE PERMANENTLY AFFIXED TO THE MAIN SERVICE DISCONNECT. LABEL SHALL BE RED WITH WHITE CAPITAL LETTERS AT LEAST 3/4" HIGH IN NONSERIF FONT. MATERIAL SHALL BE REFLECTIVE, WEATHER RESISTANT, AND SUITABLE FOR THE ENVIRONMENT. (NFPA 1: 11.12.2.1.1)

2. INVERTER DISCONNECTS – THE LABEL "PHOTOVOLTAIC DISCONNECT" SHALL BE AFFIXED TO EACH CIRCUIT BREAKER PANEL SERVING THE INVERTERS. LABEL SHALL BE CONTRASTING COLOR WITH CAPITAL LETTERS AT LEAST 3/8" HIGH IN NONSERIF FONT. THE LABEL SHALL BE CONSTRUCTED OF DURABLE ADHESIVE MATERIAL OR OTHER APPROVED MATERIAL. (NFPA 1: 11.12.2.1.2)

3. SOLAR RACEWAYS – THE LABEL "PHOTOVOLTAIC POWER SOURCE" SHALL BE RED WITH WHITE CAPITAL LETTERS AT LEAST 3/8" HIGH IN NONSERIF FONT. LABELS SHALL BE PERMANENTLY AFFIXED ON ALL EXPOSED RACEWAYS, CABLE TRAYS, PULL BOXES, AND JUNCTION BOXES. LABELS SHALL BE SPACED NO GREATER THAN 10 FEET APART. MATERIAL SHALL BE REFLECTIVE, WEATHER RESISTANT, AND SUITABLE FOR THE ENVIRONMENT. (NFPA 1: 11.12.2.1.3)

4. SEE DRAWING E500 FOR ADDITIONAL LABELS REQUIRED BY THE NATIONAL ELECTRICAL CODE.



1 FIRE ACCESS PLAN – SYSTEM A
SCALE: 1" = 30'

DATE	REVISION DESCRIPTION	PM	ENG	CHK
05/19/2023	ISSUE FOR PERMIT	TL	AM	MD
05/05/2023	CONCEPTUAL DESIGN	TL	AM	TL
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LICENSED PROFESSIONAL ENGINEER RICHARD A. IVINS E 20357 PROV. 06/30/23 ELECTRICAL STATE OF CALIFORNIA

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PROJECT
SOLAR ROOFTOP SYSTEM AT
UNFI RIVERSIDE
14950 MERIDIAN PKWY
RIVERSIDE, CA 92518

DRAWING TITLE
FIRE ACCESS PLAN
SYSTEM A

DRAWING #
G300

PLOT DATE: 5/22/2023 4:12 PM

RULER IN INCHES:

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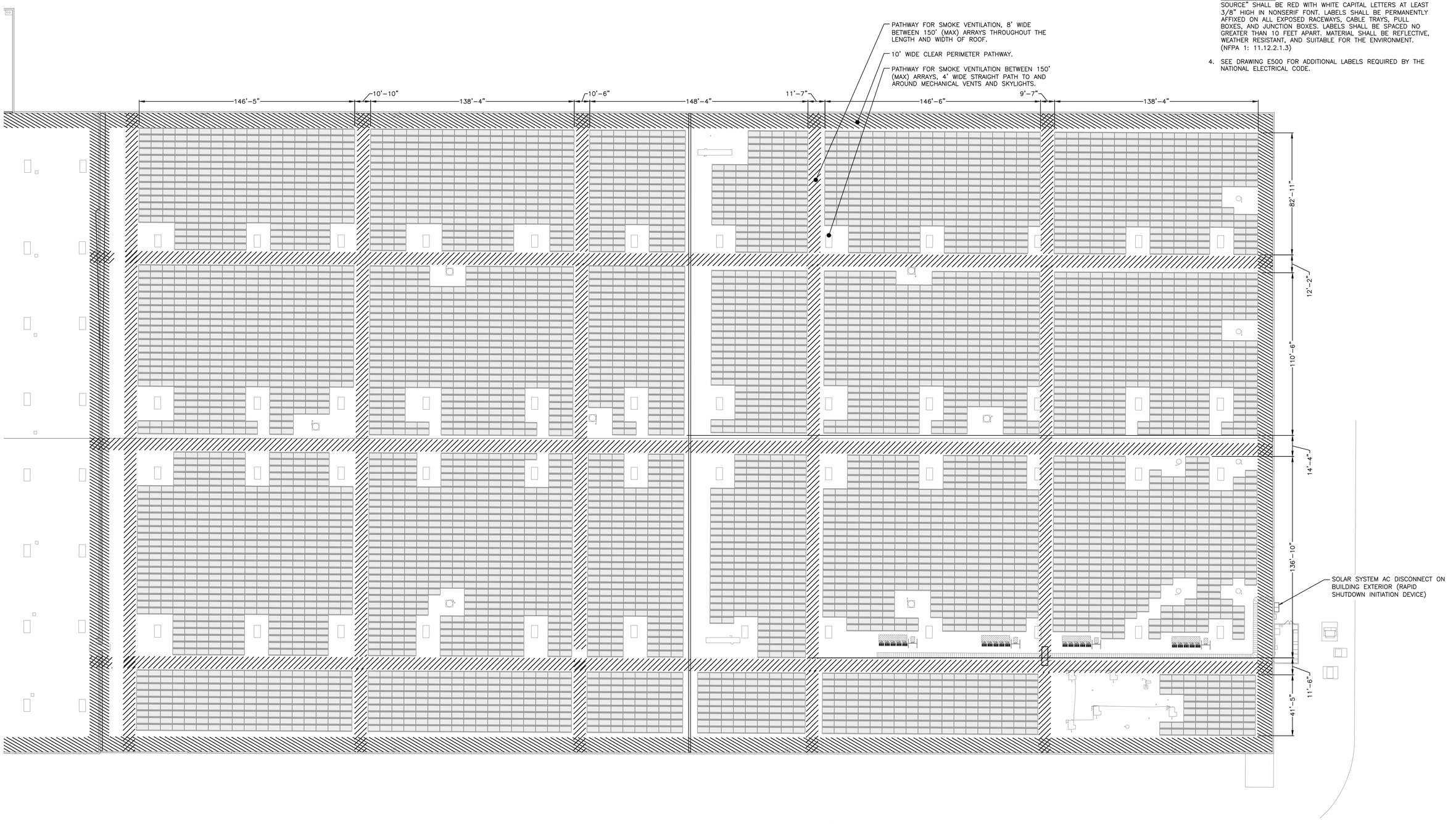
4. SEE DRAWING E500 FOR ADDITIONAL LABELS REQUIRED BY THE NATIONAL ELECTRICAL CODE.



1 FIRE ACCESS PLAN – SYSTEM B
SCALE: 1" = 30'

DATE	REVISION DESCRIPTION	PM	ENG	CHK
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RIVERSIDE, CA 92518

DRAWING TITLE
FIRE ACCESS PLAN
SYSTEM B

DRAWING #
G301

PLOT DATE: 5/22/2023 4:12 PM

RULER IN INCHES:

PLOT DATE: 5/22/2023 4:12 PM

ELECTRICAL NOTES

1. GENERAL
- 1.A. ALL WORK AND MATERIALS SHALL BE IN FULL ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND ALL EQUIPMENT SHALL BE LISTED BY A NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL) TO APPLICABLE UL STANDARDS. THE CONTRACTOR SHALL PROCURE ALL NECESSARY CERTIFICATIONS FOR ALL WORK INSTALLED, PAY ALL FEES AND CHARGES CONNECTED THEREWITH AND DELIVER ALL CERTIFICATES AND INSPECTION APPROVALS TO THE OWNER THROUGH THE ENGINEER, BEFORE WORK WILL BE FINALLY ACCEPTED.
- 1.B. ALL INVERTERS SHALL BE IEEE 1547 COMPLIANT AND SHALL BE INSPECTED BY LOCAL UTILITY BEFORE COMMISSIONING, TESTING AND OPERATION OF THE SYSTEM.
- 1.C. UNLESS OTHERWISE NOTED, NEW EQUIPMENT SHALL HAVE AN INTERRUPT RATING (kAIC) OR SHORT CIRCUIT CURRENT RATING (SCCR) GREATER THAN OR EQUAL TO THE EXISTING EQUIPMENT.

2. MANNER OF INSTALLATION
- 2.A. ALL WORK SHALL BE INSTALLED IN A FIRST CLASS, NEAT AND WORKMANLIKE MANNER BY MECHANICS SKILLED IN THE TRADE INVOLVED. ALL DETAILS OF THE INSTALLATION SHALL BE MECHANICALLY AND ELECTRICALLY CORRECT.
- 2.B. TORQUE AND MARK ALL RACKING AND MECHANICAL LUGS.

3. CONDUCTORS AND CONDUCTOR INSTALLATION
- 3.A. WHERE POSSIBLE, ALUMINUM CABLE TERMINATIONS SHALL BE MADE WITH COMPRESSION LUGS OR MECHANICAL LUGS WITH COMPRESSION PIN ADAPTORS. REQUEST CLIENT APPROVAL FOR ALTERNATIVES.
- 3.B. IF ALUMINUM MC CABLE IS USED, THHN/THWN–2 INSULATION IS ACCEPTABLE. FOR ALUMINUM CONDUCTORS, XHHW–2 SHALL BE USED.
- 3.C. ANTI–OXIDANT COMPOUND SHALL BE USED WITH ALL ALUMINUM LUGS. CLEAN OXIDATION FROM WIRE STRANDS WITH STEEL WIRE BRUSH PRIOR TO APPLICATION OF COMPOUND.
- 3.D. PV SYSTEM CONDUCTORS SHALL BE MARKED AND IDENTIFIED PER NEC 690.31(B).
- 3.E. INSTALL WIRE AND CABLE IN ACCORDANCE WITH THE NEC AND AS HEREINAFTER SPECIFIED. USE THE NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION'S "STANDARD OF INSTALLATION", THE MANUFACTURER'S WRITTEN INSTRUCTIONS, UNLESS SUPERSEDED BY THESE SPECIFICATIONS. IN ALL CASES THE INSTALLATION SHALL BE IN ACCORDANCE WITH RECOGNIZED INDUSTRY PRACTICES.
- 3.F. THE USE OF WIRE SPLICES AT ANY POINT IN THE INSTALLATION IS STRICTLY PROHIBITED
- 3.G. THE USE OF WIRE LUBE IS REQUIRED FOR ALL WIRE PULLS THROUGH CONDUIT RUNS OF 20' OR LONGER, OR WITH BENDS IN 180° OR MORE. WIRE LUBE IS REQUIRED EVEN WHEN USING SELF LUBRICATING CABLES SUCH AS SOUTHWIRE 'SIMPULL'.
- 3.H. STRING WIRING & HOMERUNS SHALL BE SECURED TO UNDERSIDE OF THE RACKING & MODULES USING SUNBUNDLERS OR EQUIVALENT APPROVED BY EEOR. TRANSITION TO EMT OUTSIDE OF ARRAY. NEGATIVE HOMERUN SHALL BE RUN PARALLEL TO POSITIVE HOMERUN.
- 3.I. ALL PV SOURCE CIRCUITS WHICH WOULD BE EXPOSED TO PHYSICAL DAMAGE SHALL BE PROTECTED IN CONDUIT OR CABLE TRAY.
- 3.J. ALL PV SOURCE CIRCUITS WITH DIRECT EXPOSURE TO SUNLIGHT SHALL BE PROTECTED THROUGH THE USE OF CONDUIT, PROTECTIVE WRAP, SPLIT LOOM, OR EQUIVALENT, WHICH ARE DURABLE FOR THE ENVIRONMENT AND RATED FOR THE APPLICATION.
- 3.K. ALL PLUG AND SOCKET CONNECTORS MATED TOGETHER SHALL BE OF THE SAME TYPE AND OF THE SAME MANUFACTURER. "COMPATIBLE" CONNECTORS SHALL NOT BE ACCEPTED (IEC 62446–1).
- 3.L. ALL FIELD–MADE PLUG & SOCKET CONNECTORS SHALL BE INSTALLED USING MANUFACTURER APPROVED TOOLS AND METHODS, AND CABLE GLANDS SHALL BE TIGHTENED TO MANUFACTURER'S SPECIFIED TORQUE VALUE.
- 3.M. ALL CONDUCTORS AND CABLES RATED OVER 1000V SHALL NOT BE BENT AT RADIUS LESS THAN 12X THEIR DIAMETER, OR AS SPECIFIED BY DATASHEET.

4. PHASE RELATIONSHIP
- 4.A. CONNECT FEEDERS TO MAINTAIN PHASE RELATIONSHIP THROUGH SYSTEM. PHASE LEGS OF FEEDERS SHALL MATCH BUS OR CABLE ARRANGEMENTS IN EQUIPMENT TO WHICH THE FEEDERS ARE CONNECTED. COLOR CODING SHALL BE AS FOLLOWS:

  208/120 VAC
  A PHASE: BLACK, B PHASE: RED, C PHASE: BLUE

  277/480 VAC OR 346/600 VAC
  A PHASE: BROWN, B PHASE; ORANGE, C PHASE: YELLOW

  1500 VDC, 1000 VDC, OR 600 VDC
  UNGROUNDED POSITIVE CONDUCTOR: RED
  UNGROUNDED NEGATIVE CONDUCTOR: BLACK

  AC AND DC SYSTEMS:
  GROUNDED CONDUCTOR: WHITE
  GROUND: GREEN

- 4.B. GROUNDED CONDUCTORS (NEUTRAL) AND EQUIPMENT GROUNDING CONDUCTORS SMALLER THAN #4 MUST HAVE COLOR CODED INSULATION. WHERE COLOR CODED CABLE IS NOT USED, TAPE CONDUCTOR WITH OVERLAPPED COLORED TAPE FOR A MINIMUM OF 6" IN ACCESSIBLE LOCATIONS. COLOR CODING MUST BE USED CONSISTENTLY FOR THE ENTIRE PROJECT.

5. CONDUITS AND RACEWAYS
- 5.A. PROVIDE RACEWAYS MINIMUM SIZE 3/4".
- 5.B. CONDUITS SHALL BE EMT WHERE NOT SUBJECT TO PHYSICAL DAMAGE. CONDUITS SHALL BE IMC OR RMC WHERE SUBJECT TO PHYSICAL DAMAGE. PVC CONDUITS ONLY PERMITTED IN BELOW GRADE DUCT BANKS.
- 5.C. DRAWINGS SHOW RACEWAY LOCATIONS DIAGRAMMATICALLY. CONTRACTOR SHALL ADJUST ROUTING TO SUIT FIELD LOCATIONS. ANY CHANGES TO PROPOSED ROUTING SHALL BE SUBMITTED TO ENGINEER FOR REVIEW AND APPROVAL.
- 5.D. FURNISH AND INSTALL ALL FITTINGS AND SPECIAL DEVICES NECESSARY FOR THE PROPER INSTALLATION, CONNECTION AND OPERATION OF THE SYSTEM. CONDUIT ELBOWS SHALL BE OF THE SAME MAKE, QUALITY AND FINISH AS THE CONDUIT USED.
- 5.E. A PROTECTIVE COATING OF ASPHALT COMPOUND, PLASTIC SHEATH, OR OTHER EQUIVALENT PROTECTION SHALL BE APPLIED TO ANY GALVANIZED STEEL CONDUITS DIRECTLY BURIED IN EARTH.
- 5.F. EMT CONDUIT SHALL USE COMPRESSION RAINTIGHT CONNECTORS, FACTORY STAMPED RAINTIGHT WITH COMPONENTS PROPERLY INSTALLED.
- 5.G. PROVIDE EXPANSION FITTINGS WITH BONDING JUMPERS FOR EVERY 100' OF STRAIGHT METAL CONDUIT RUN.
- 5.H. CONDUIT EXPANSION AND DEFLECTION FITTINGS WITH BONDING JUMPERS SHALL BE USED WHENEVER CROSSING BUILDING EXPANSION AND SEISMIC SEPARATION JOINTS.
- 5.I. LEAVE WIRE SUFFICIENTLY LONG TO PERMIT MAKING FINAL CONNECTIONS. ALL EMPTY CONDUITS OVER 10' IN LENGTH SHALL BE PROVIDED WITH SYNTHETIC FIBER ROPE PULL WIRE.
- 5.J. PATCH AND REPAIR ALL SURFACES DAMAGED BY TRENCHING TO MATCH THE PREVIOUSLY EXISTING CONDITIONS.
- 5.K. ALL PENETRATIONS SHALL BE SEALED TO MAINTAIN THE EXISTING FIRE RATING.
- 5.L. ALL ROOFTOP CONDUITS SHALL BE MARKED PER LOCAL FIRE CODES.
- 5.M. ALL CONDUITS ENTERING ENCLOSURES SHALL BE FITTED WITH PROTECTIVE BUSHINGS, INCLUDING CONDUIT WITH CONDUCTOR SIZES SMALLER THAN #4 AWG. METALLIC CONDUIT/BUSHINGS SHALL BE BONDED PER NEC.
- 5.N. ALL CONDUIT ENTERING ENCLOSURES SHALL BE SEALED WITH AN APPROVED SEALANT.

6. ELECTRICAL ENCLOSURES
- 6.A. ALL OUTDOOR ENCLOSURES (PANELBOARDS, DISCONNECT SWITCHES, JUNCTION BOXES, COMBINER BOXES, ETC.) SHALL BE NEMA 3R, 4, OR 4X. INDOOR ENCLOSURES SHALL BE NEMA 1.
- 6.B. PANELBOARD DOORS SHALL BE QUARTER TURN LATCHES OR EXTERNAL HANDLE WITH INTERNAL LATCHES, NO SETS OF EXTERNAL SCREW DOWN CLAMPS.
- 6.C. CONDUIT TERMINATING IN OUTDOOR ENCLOSURES SHALL USE MYERS–TYPE HUBS WITH GROUND SCREW. UTILIZE RAINTIGHT FITTINGS FOR ALL CABLE ENTRIES.
- 6.D. NO PENETRATIONS OR CABLE ENTRIES IN THE TOP OF OUTDOOR ENCLOSURES. ENTER OUTDOOR ENCLOSURES FROM THE BOTTOM (PREFERRED) OR SIDE.
- 6.E. ALL ELECTRICAL EQUIPMENT SHALL BE LISTED OR LABELED BY A RECOGNIZED TESTING AGENCY.
- 6.F. ARC FLASH HAZARD WARNING LABELS SHALL BE PROVIDED AND MOUNTED ON EVERY COMBINER BOX, TERMINAL BOX, INVERTER, AC AND DC SWITCH, TRANSFORMER, AND SWITCHGEAR.
- 6.G. HAND HOLES, PULL BOXES, OR CONDUIT BODIES SHALL BE INSTALLED (WHETHER OR NOT SHOWN ON DRAWINGS) WHEN THE RACEWAY HAS MORE THAN 360° OF BENDS, OR AS NECESSARY TO NOT EXCEED MANUFACTURER'S MAXIMUM CABLE PULLING TENSION.
- 6.H. SWITCHBOARDS AND SWITCHGEARS SHALL BE PROVIDED WITH TEMPORARY INTERNAL HEATERS DURING LONG TERM STORAGE WHILE NOT ENERGIZED AS REQUIRED BY THE MANUFACTURER. ALL OTHER EQUIPMENT SHALL BE STORED IN ACCORDANCE WITH MANUFACTURER INSTRUCTIONS.

7. GROUNDING
- 7.A. THE CONTRACTOR SHALL FURNISH AND INSTALL GROUNDING NECESSARY IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.

8. TESTS
- 8.A. FINAL TESTS AND INSPECTION SHALL BE HELD IN THE PRESENCE OF OWNER'S REPRESENTATIVES AND TO THEIR SATISFACTION.
- 8.B. MEGGER TEST ALL DC STRING WIRING, DC COMBINER BOX OUTPUT FEEDERS, AND AC FEEDERS. SUBMIT RESULTS TO OWNER FOR REVIEW.
- 8.C. HI–POT TEST ALL MEDIUM VOLTAGE FEEDERS IN ACCORDANCE WITH CABLE MANUFACTURER INSTRUCTIONS.
- 8.D. IV CURVE TRACES OF STRINGS SHALL BE GENERATED USING THE SOLMETRIC PV ANALYZER (OR EQUIVALENT DEVICE) AND SUBMITTED TO OWNER FOR APPROVAL.
- 8.E. OPEN–CIRCUIT VOLTAGE (Voc) MEASUREMENTS OF ALL DC STRING CONDUCTORS.
- 8.F. GROUND FAULT PROTECTION SYSTEMS SHALL BE FUNCTIONAL TESTED IN ACCORDANCE WITH MANUFACTURER INSTRUCTIONS (NEC 230.95(C))
- 8.G. MEDIUM VOLTAGE EQUIPMENT SHALL BE TESTED IN ACCORDANCE WITH MANUFACTURER INSTRUCTIONS.

GENERAL NOTES

1. THE GENERAL NOTES APPLY TO ALL DRAWINGS UNDER THE CONTRACT. REFER TO INDIVIDUAL DRAWINGS FOR ADDITIONAL NOTES.
2. DRAWINGS ARE DIAGRAMS AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK. FOLLOW DRAWINGS IN LAYING OUT OF WORK AND CHECK DRAWINGS OF OTHER TRADES TO VERIFY SPACE CONDITIONS. MAINTAIN HEADROOM, SPACE CONDITIONS, AND REQUIRED CLEARANCES.
3. PV SYSTEM CONTRACTOR SHALL COORDINATE ALL THE WORK WITH THE ENGINEER, THE CONSTRUCTION MANAGER AND ALL OTHER CONTRACTORS TO INSURE THAT THE PV SYSTEM IS INSTALLED AS SPECIFIED IN THESE DRAWINGS.
4. PERSONAL PROTECTIVE EQUIPMENT (PPE) SHALL BE PROVIDED AS REQUIRED IN ACCORDANCE WITH NEC 70E AND OSHA REQUIREMENTS.
5. UNFORSEEN OBSTRUCTIONS ON THE SITE MAY NECESSITATE A CHANGE IN THE LAYOUT. ANY CHANGES TO THE RACKING LAYOUT SHOULD BE REPORTED TO THE ENGINEER. CHANGES IN UP TO 5% OF THE MODULES SHOULD BE ANTICIPATED. CHANGES TO THE ARRAY LAYOUT SHOULD BE MADE AS TO NOT IMPACT THE NUMBER OF MODULES ON A COMBINER BOX OR INVERTER.
6. LANDSCAPING: RESTORE TO ORIGINAL CONDITIONS.
7. ALL STRUCTURAL AND MISCELLANEOUS EXTERIOR STEEL, INCLUDING STRUT CHANNEL (SUCH AS UNISTRUT OR KINDORF) SHALL BE CORROSION RESISTANT, HOT DIP GALVANIZED OR GALVANNEALED WITH A COATED FINISH MINIMUM.

NOTES SPECIFIC TO CALIFORNIA

ADOPTED ELECTRICAL CODE: 2019 CALIFORNIA ELECTRICAL CODE (BASED ON THE 2017 NEC).

ADOPTED BUILDING CODE: 2019 CALIFORNIA BUILDING CODE
ADOPTED FIRE CODE: 2019 CALIFORNIA FIRE CODE

BY LAW, ANYONE PLANNING TO EXCAVATE OR DEMOLISH IS REQUIRED TO CALL 811 AT LEAST TWO FULL BUSINESS DAYS BEFORE WORK BEGINS

UTILITY: SOUTHERN CALIFORNIA EDISON (SCE)

UTILITY DISCONNECT SWITCH REQUIREMENTS:
THE PRODUCER SHALL FURNISH AND INSTALL A GANGED, MANUALLY–OPERATED ISOLATING DEVICE NEAR THE POINT OF COMMON COUPLING TO ISOLATE THE GENERATING FACILITY FROM SCE's ELECTRIC SYSTEM. THE DEVICE MUST ALLOW VISIBLE VERIFICATION THAT SEPARATION HAS BEEN ACCOMPLISHED, INCLUDE MARKING OR SIGNAGE THAT CLEARLY INDICATES OPEN AND CLOSED POSITIONS, BE CAPABLE OF BEING REACHED QUICKLY AND CONVENIENTLY 24HOURS A DAY BY SCE PERSONNEL, BE CAPABLE OF BEING LOCKED IN THE OPEN POSITION AND BE CLEARLY LABELED WITH PERMANENT SIGNAGE.

LEGEND – GENERAL

SYMBOL	DESCRIPTION
	LIGHT LINE INDICATES EXISTING OR BEYOND THE SCOPE OF PROJECT
	DARK LINE INDICATES NEW OR WITHIN THE SCOPE OF PROJECT
– – – – –	DASHED LINE INDICATES EQUIPMENT AT A DIFFERENT ELEVATION
EXISTING TEXT	LIGHT TEXT INDICATES EXISTING OR BEYOND THE SCOPE OF PROJECT
NEW TEXT	DARK TEXT INDICATES NEW OR WITHIN THE SCOPE OF PROJECT

LEGEND – CIRCUITS

SYMBOL	DESCRIPTION
—xx————xx—	ABOVE–GROUND CABLE
—xx— — — —xx—	UNDER–GROUND CABLE

NOTE: XX REPRESENTS CIRCUIT TYPE BELOW

ABBREVIATION	DESCRIPTION
DC	DIRECT CURRENT
AC	ALTERNATING CURRENT
MV	MEDIUM VOLTAGE
C	COMMUNICATIONS
GND	GROUND
CAB	CAB MESSENGER
FO	FIBER OPTIC

LEGEND – PLAN SYMBOLS

SYMBOL	DESCRIPTION
	RACEWAY TURNING UP OR TOWARDS OBSERVER
	RACEWAY TURNING DOWN OR AWAY FROM OBSERVER
P OR P	PULLBOX
J OR J	JUNCTION BOX
	GROUND FAULT CIRCUIT INTERRUPTER DUPLEX RECEPTACLE, RATED: 125–VOLTS AC, 20A
	GROUND ROD
	GROUND ROD W/ TEST WELL
	SLOPE DIRECTION INDICATOR

LEGEND – ONE LINE DIAGRAM & WIRING DIAGRAM SYMBOLS

SYMBOL	DESCRIPTION
	CIRCUIT BREAKER, FRAME SIZE AND TRIP SETTING AS NOTED
	DISCONNECT SWITCH
	INVERTER
	BUSS CONNECTION POINT
	CROSSING POINT (NO CONNECTION)
	NORMALLY CLOSED – NORMALLY OPEN CONTACTS
	TRANSFORMER CONTROL/POWER, SIZE AND RATING AS NOTED
	CURRENT TRANSFORMER
	POTENTIAL TRANSFORMER
	FUSE, SIZE/RATING AS NOTED
	FUSED DISCONNECT SWITCH
	EARTH GROUND
NC NO	PUSHBUTTON SWITCHES; NUMBER AND TYPE OF CONTACT BLOCKS MAY VARY
NC NO	PUSHBUTTON SWITCHES MUSHROOM HEAD; NUMBER AND TYPE OF CONTACT BLOCKS MAY VARY
K	KEYED INTERLOCK (KIRK KEY OR EQ.)
ST	SHUNT TRIP COIL

ABBREVIATIONS

ABBREVIATION	DESCRIPTION
A	AMPERES
AERMS	ARC ENERGY REDUCING MAINTENANCE SWITCH
AF	AMPERE FRAME
A.F.F.	ABOVE FINISH FLOOR
A.F.G.	ABOVE FINISH GRADE
AFDI	ARC FAULT DETECTION & INTERRUPTER
AIC	AMPS INTERRUPTING CAPACITY
AT	AMPERE TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BKR	CIRCUIT BREAKER
C	CONDUIT
CB	COMBINER BOX
CKT	CIRCUIT
COU	CONDITIONS OF USE
CP	CONTROL PANEL
CT	CURRENT TRANSFORMER
CU	COPPER
DISC	DISCONNECT
EGC	EQUIPMENT GROUNDING CONDUCTOR
ELEC	ELECTRIC, ELECTRICAL
EMERG	EMERGENCY
EMT	ELECTRIC METALLIC TUBING
EQUIP	EQUIPMENT
EXIST	EXISTING
G, GND	GROUND
GEC	GROUNDING ELECTRODE CONDUCTOR
GFCI	GROUND–FAULT CIRCUIT INTERRUPTER
GFPE	GROUND–FAULT PROTECTION OF EQUIPMENT
HID	HIGH–INTENSITY DISCHARGE (LIGHTING)
HZ	HERTZ
IMC	IMC
kAIC	1000 AMPS INTERRUPT CAPACITY
kCMIL	1000 CIRCULAR MILS
kVA	KILO–VOLT AMPERE
kW	KILOWATT
LA	LIGHTNING & SURGE ARRESTOR
LED	LIGHT–EMITTING DIODE
LSIG	LONG, SHORT, INSTANTANEOUS, & GROUND–FAULT
LTG	LIGHTING
MAX	MAXIMUM
MCM	1000 CIRCULAR MILS
MFG	MANUFACTURER
MLO	MAIN LUGS ONLY
MLPE	MODULE LEVEL POWER ELECTRONICS
MPPT	MAXIMUM POWER POINT TRACKING
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NTS	NOT TO SCALE
P	POLE
PF	POWER FACTOR
PLC	PROGRAMMABLE LOGIC CONTROLLER
POA	PLANE OF ARRAY
POI	POINT OF INTERCONNECTION
PRI	PRIMARY
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE
PWR	POWER
RAC	RIGID ALUMINUM CONDUIT
RCPT	RECEPTACLE
RGS	RIGID GALVANIZED STEEL CONDUIT
RMC	RIGID METAL CONDUIT
SA	SURGE ARRESTOR
SEC	SECONDARY
SPD	SURGE PROTECTION DEVICE
SSBJ	SUPPLY SIDE BONDING JUMPER
ST	SHUNT TRIP
STP	SHIELDED TWISTED PAIR
SW	SWITCH
TBD	TO BE DETERMINED
TP	TWISTED PAIR
TYP	TYPICAL
V	VOLT
VA	VOLT–AMPERE
W	WATT
WR	WEATHER RESISTANT
XFMR	TRANSFORMER
ø	DIAMETER OR PHASE

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MODULE TYPE: HANWHA Q.PEAK DUO XL 585W
MODULE QUANTITY: 12,205
ORIENTATION: 10° TILT, 239° AZIMUTH

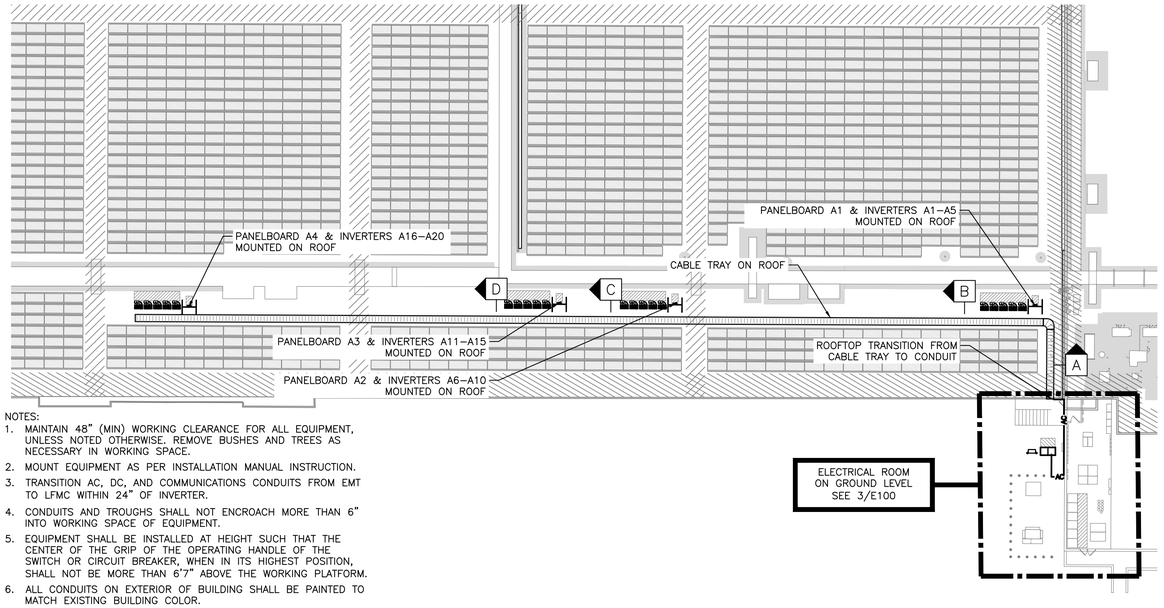
PROJECT
SOLAR ROOFTOP SYSTEM AT
UNFI RIVERSIDE
14950 MERIDIAN PKWY
RIVERSIDE, CA 92518

DRAWING TITLE
ELECTRICAL NOTES & SYMBOLS LIST

DRAWING #
E001

RULER IN INCHES:

PLOT DATE: 5/22/2023 4:16 PM



NOTES:

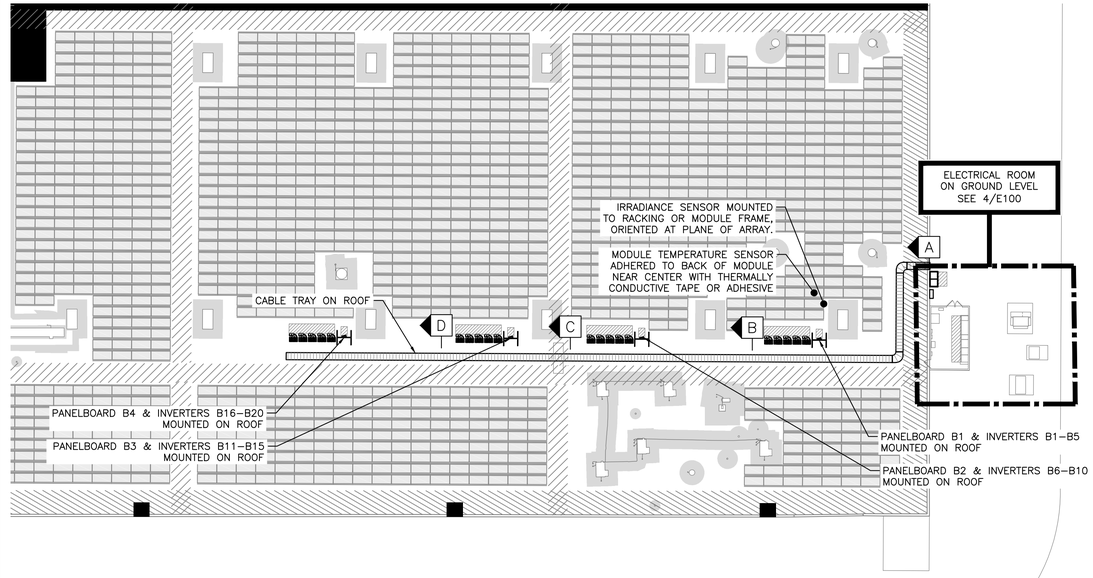
1. MAINTAIN 48" (MIN) WORKING CLEARANCE FOR ALL EQUIPMENT, UNLESS NOTED OTHERWISE. REMOVE BUSHES AND TREES AS NECESSARY IN WORKING SPACE.
2. MOUNT EQUIPMENT AS PER INSTALLATION MANUAL INSTRUCTION.
3. TRANSITION AC, DC, AND COMMUNICATIONS CONDUITS FROM EMT TO LFMC WITHIN 24" OF INVERTER.
4. CONDUITS AND TROUGHS SHALL NOT ENCROACH MORE THAN 6" INTO WORKING SPACE OF EQUIPMENT.
5. EQUIPMENT SHALL BE INSTALLED AT HEIGHT SUCH THAT THE CENTER OF THE GRIP OF THE OPERATING HANDLE OF THE SWITCH OR CIRCUIT BREAKER, WHEN IN ITS HIGHEST POSITION, SHALL NOT BE MORE THAN 6'7" ABOVE THE WORKING PLATFORM.
6. ALL CONDUITS ON EXTERIOR OF BUILDING SHALL BE PAINTED TO MATCH EXISTING BUILDING COLOR.
7. SEAL CONDUIT PENETRATIONS THROUGH BUILDING WALL TO PREVENT MOISTURE FROM ENTERING BUILDING, WITH POLYWATER FST OR EQUIVALENT. USE PULL BOX AS NECESSARY.
8. TROUGHS AND WIREWAYS SHALL BE SIZED SUCH THAT THE SUM OF THE CROSS–SECTIONAL AREAS OF ALL CONDUCTORS AND CABLES AT ANY CROSS SECTION SHALL NOT EXCEED 20 PERCENT OF THE AREA OF THE TROUGH. THE NUMBER OF CURRENT CARRYING CONDUCTORS SHALL NOT EXCEED 30 AT ANY CROSS–SECTION OF THE TROUGH.
9. INVERTERS AND PANELBOARDS SHALL BE PLACED AT MINIMUM OF 15FT FROM UNPROTECTED ROOF EDGE.
10. PERMANENT WEAR PADS SHALL BE PLACED IN THE WORKING SPACES OF ALL EQUIPMENT.

1 OVERALL AC ELECTRICAL PLAN – SYSTEM A

SCALE: 1" = 30'

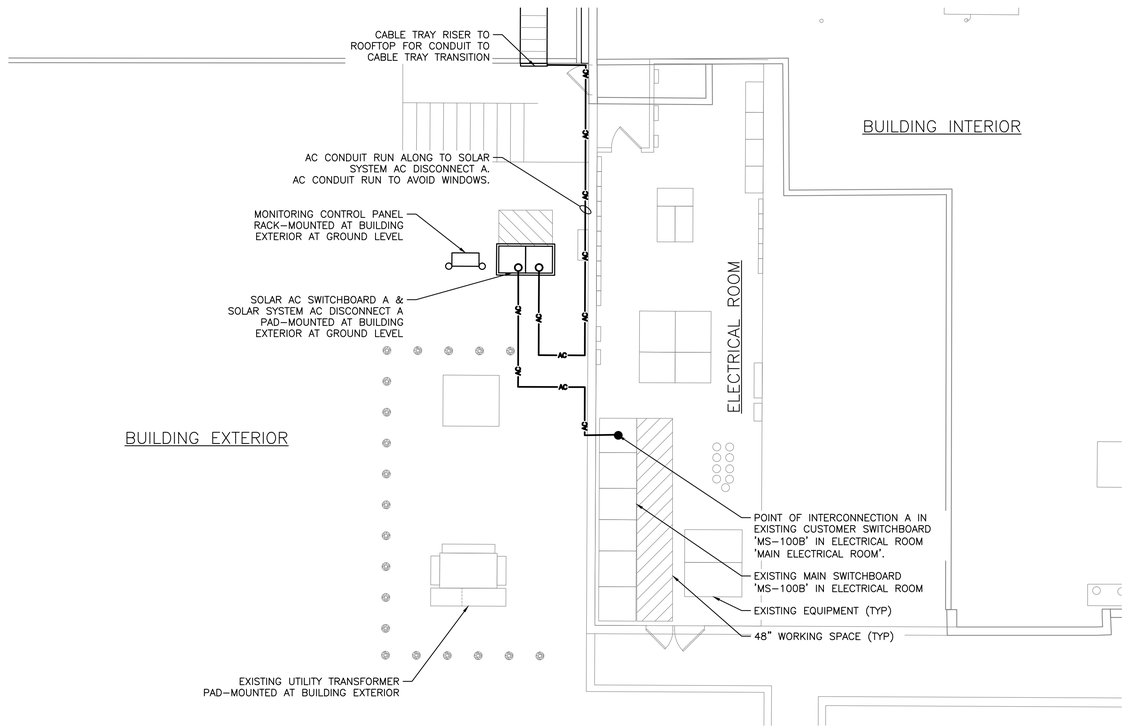
CABLE TRAY CALLOUT KEY

- A — INDICATES CONTINUOUS CABLE TRAY OF WIDTH A. SEE CABLE TRAY CALCULATIONS ON E310 SERIES FOR SIZES.
- A B — INDICATES TRANSITION IN CABLE TRAY CONTENTS AND/OR WIDTH FROM A TO B. SEE CABLE TRAY CALCULATIONS ON E310 SERIES FOR SIZES.



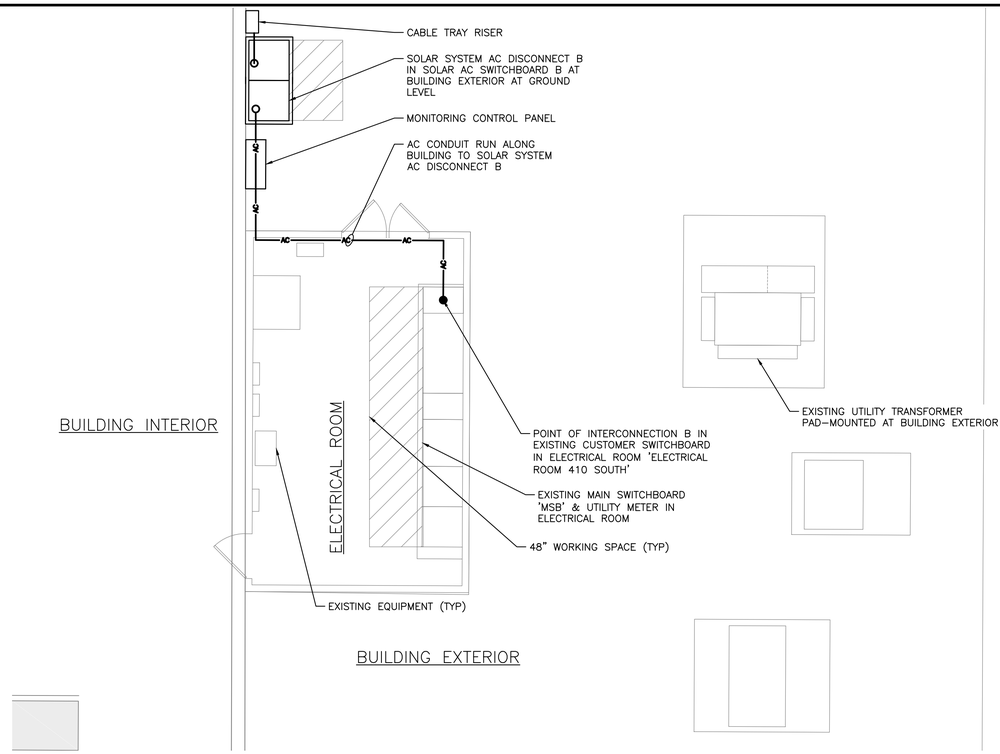
2 OVERALL AC ELECTRICAL PLAN – SYSTEM B

SCALE: 1" = 30'



3 ELECTRICAL ROOM PLAN – SYSTEM A

SCALE: 1/8" = 1'–0"



4 ELECTRICAL ROOM PLAN – SYSTEM B

SCALE: 3/16" = 1'–0"

DATE	REVISION DESCRIPTION	PM	ENG CHK
05/19/2023	ISSUE FOR PERMIT	TL	AM MD
05/02/2023	CONCEPTUAL DESIGN	TL	AM TL
04/03/2023	IC DOCS – REV2	TL	KM TL
10/18/2022	IC DOCS – REV1	BA	AM MD

PUREPOWER ENGINEERING
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CA LICENSE No: 20357

PROFESSIONAL ENGINEER — RICHARD A. WINS — LICENSE E 20357 — 5/19/23 — ELECTRICAL — STATE OF CALIFORNIA

POWERFLEX
805 THIRD AVENUE 20TH FLOOR
NEW YORK, NY 10022
WWW.POWERFLEX.COM

DEVELOPER: powerflex, EDF Renewables

PAGE SIZE: 36" x 24"

PROJECT #: 04862.01

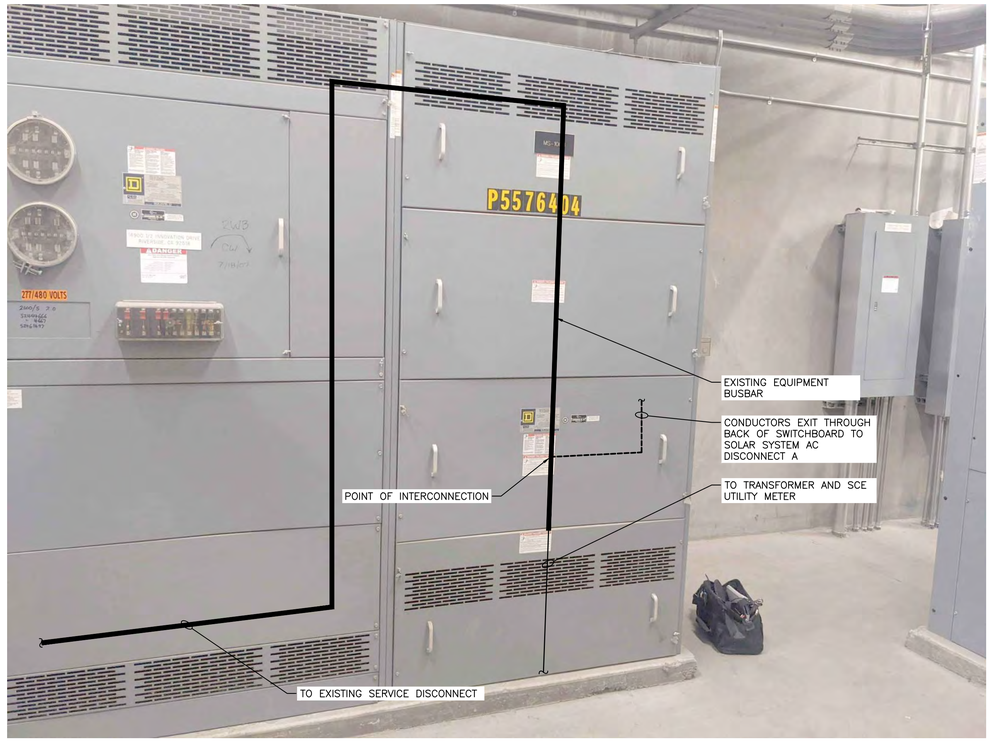
DC SYSTEM SIZE: 7,139.925 kWDC
AC SYSTEM SIZE: 4,800.000 kWAC
MODULE TYPE: HANWHA Q.PEAK DUO XL 585W
MODULE QUANTITY: 12,205
ORIENTATION: 10° TILT, 239° AZIMUTH

PROJECT: SOLAR ROOFTOP SYSTEM AT
UNFI RIVERSIDE
14950 MERIDIAN PKWY
RIVERSIDE, CA 92518

DRAWING TITLE: AC ELECTRICAL PLAN

DRAWING #: E100

RULER IN INCHES: 0 ½ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18



1 E101 POI PHOTO – SYSTEM A
SCALE: NONE

2 E101 POI PHOTO – SYSTEM B
SCALE: NONE

DATE	REVISION DESCRIPTION	PM	ENG	CHK
05/19/2023	ISSUE FOR PERMIT	TL	AM	MD
05/05/2023	CONCEPTUAL DESIGN	TL	AM	TL
04/03/2023	IC DOCS – REV2	TL	KM	TL
10/18/2022	IC DOCS – REV1	BA	AM	MD

PUREPOWER ENGINEERING
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LICENSED PROFESSIONAL ENGINEER RICHARD A. IVINS E 20357 PE 06/30/23 STATE OF CALIFORNIA

DEVELOPER
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NEW YORK, NY 10022
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PAGE SIZE 36" x 24"
PROJECT # 04862.01

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AC SYSTEM SIZE: 4,800.000 kWAC
MODULE TYPE: HANWHA Q.PEAK DUO XL 585W
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ORIENTATION: 10° TILT, 239° AZIMUTH

PROJECT
SOLAR ROOFTOP SYSTEM AT
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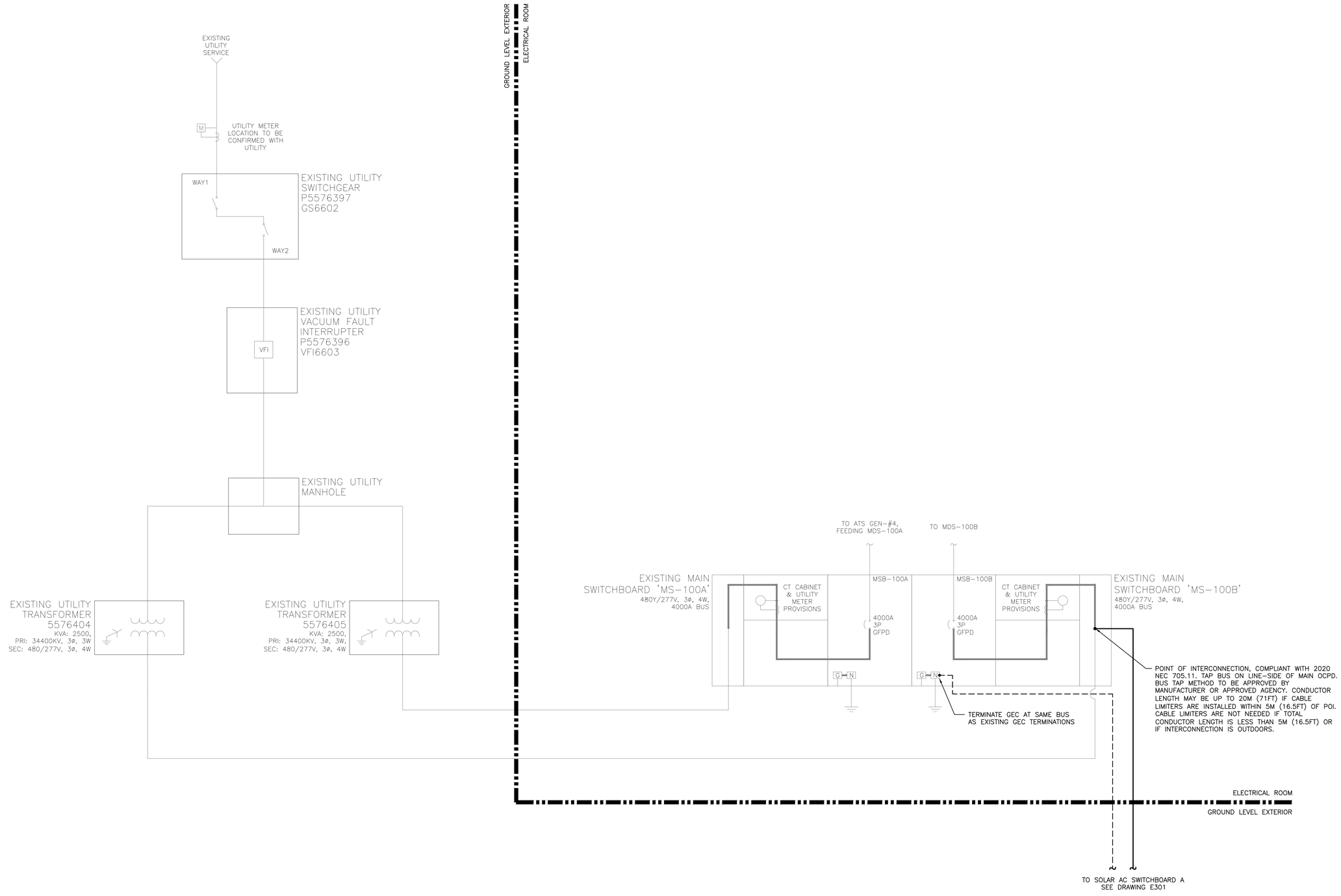
14950 MERIDIAN PKWY
RIVERSIDE, CA 92518

DRAWING TITLE
POI PHOTOS

DRAWING #
E101

PLOT DATE: 5/22/2023 4:18 PM

RULER IN INCHES:



1 E300 ONE LINE DIAGRAM – EXISTING SITE EQUIPMENT (SYSTEM A)
SCALE: NONE

DATE	REVISION DESCRIPTION	PM	ENG	CHK
05/19/2023	ISSUE FOR PERMIT	TL	AM	MD
05/05/2023	CONCEPTUAL DESIGN	TL	AM	TL
04/03/2023	IC DOCS – REV2	TL	KM	TL
10/18/2022	IC DOCS – REV1	BA	AM	MD

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PAGE SIZE 36" x 24"
PROJECT # 04862.01

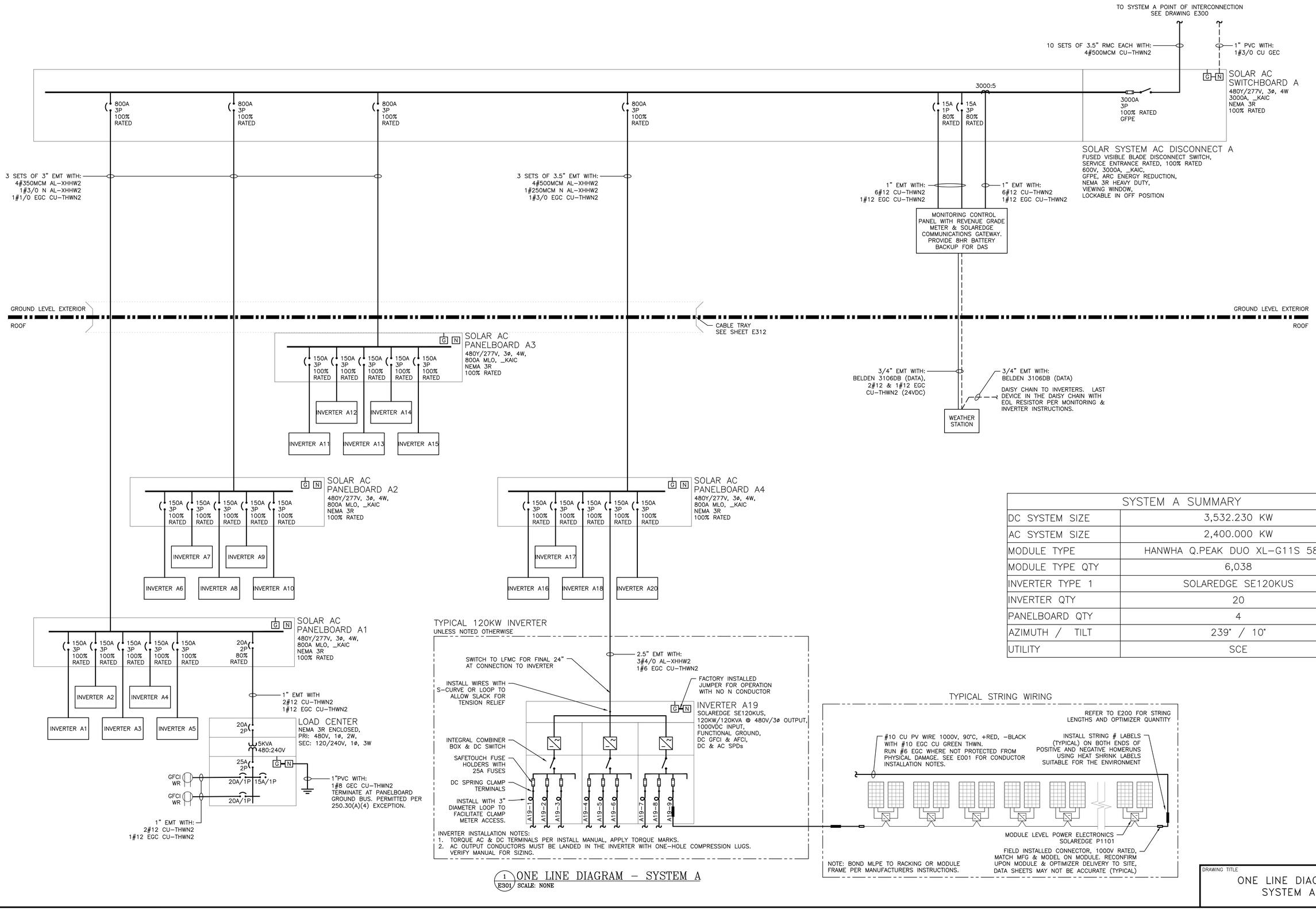
DC SYSTEM SIZE: 7,139.925 kWDC
AC SYSTEM SIZE: 4,800.000 kWAC
MODULE TYPE: HANWHA Q.PEAK DUO XL 585W
MODULE QUANTITY: 12,205
ORIENTATION: 10° TILT, 239° AZIMUTH

PROJECT
SOLAR ROOFTOP SYSTEM AT
UNFI RIVERSIDE
14950 MERIDIAN PKWY
RIVERSIDE, CA 92518

DRAWING TITLE
ONE LINE DIAGRAM
EXISTING SITE EQUIPMENT

DRAWING #
E300

PLOT DATE: 5/22/2023 4:18 PM
RULER IN INCHES:



SYSTEM A SUMMARY	
DC SYSTEM SIZE	3,532.230 KW
AC SYSTEM SIZE	2,400.000 KW
MODULE TYPE	HANWHA Q.PEAK DUO XL-G11S 585W
MODULE TYPE QTY	6,038
INVERTER TYPE 1	SOLAREDGE SE120KUS
INVERTER QTY	20
PANELBOARD QTY	4
AZIMUTH / TILT	239° / 10°
UTILITY	SCE

1 E301 ONE LINE DIAGRAM – SYSTEM A
SCALE: NONE

DATE	REVISION DESCRIPTION	PM	ENG CHK
05/19/2023	ISSUE FOR PERMIT	TL	AM MD
05/02/2023	CONCEPTUAL DESIGN	TL	AM TL
04/03/2023	IC DOCS – REV2	TL	KM TL
10/18/2022	IC DOCS – REV1	BA	AM MD

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PROJECT
SOLAR ROOFTOP SYSTEM AT
UNFI RIVERSIDE
14950 MERIDIAN PKWY
RIVERSIDE, CA 92518

DC SYSTEM SIZE: 7,139.925 kWDC
AC SYSTEM SIZE: 4,800.000 kWAC
MODULE TYPE: HANWHA Q.PEAK DUO XL 585W
MODULE QUANTITY: 12,205
ORIENTATION: 10° TILT, 239° AZIMUTH

PAGE SIZE 36" x 24"
PROJECT # 04862.01

DRAWING TITLE
ONE LINE DIAGRAM
SYSTEM A

DRAWING # E301

PLOT DATE: 5/22/2023 4:18 PM
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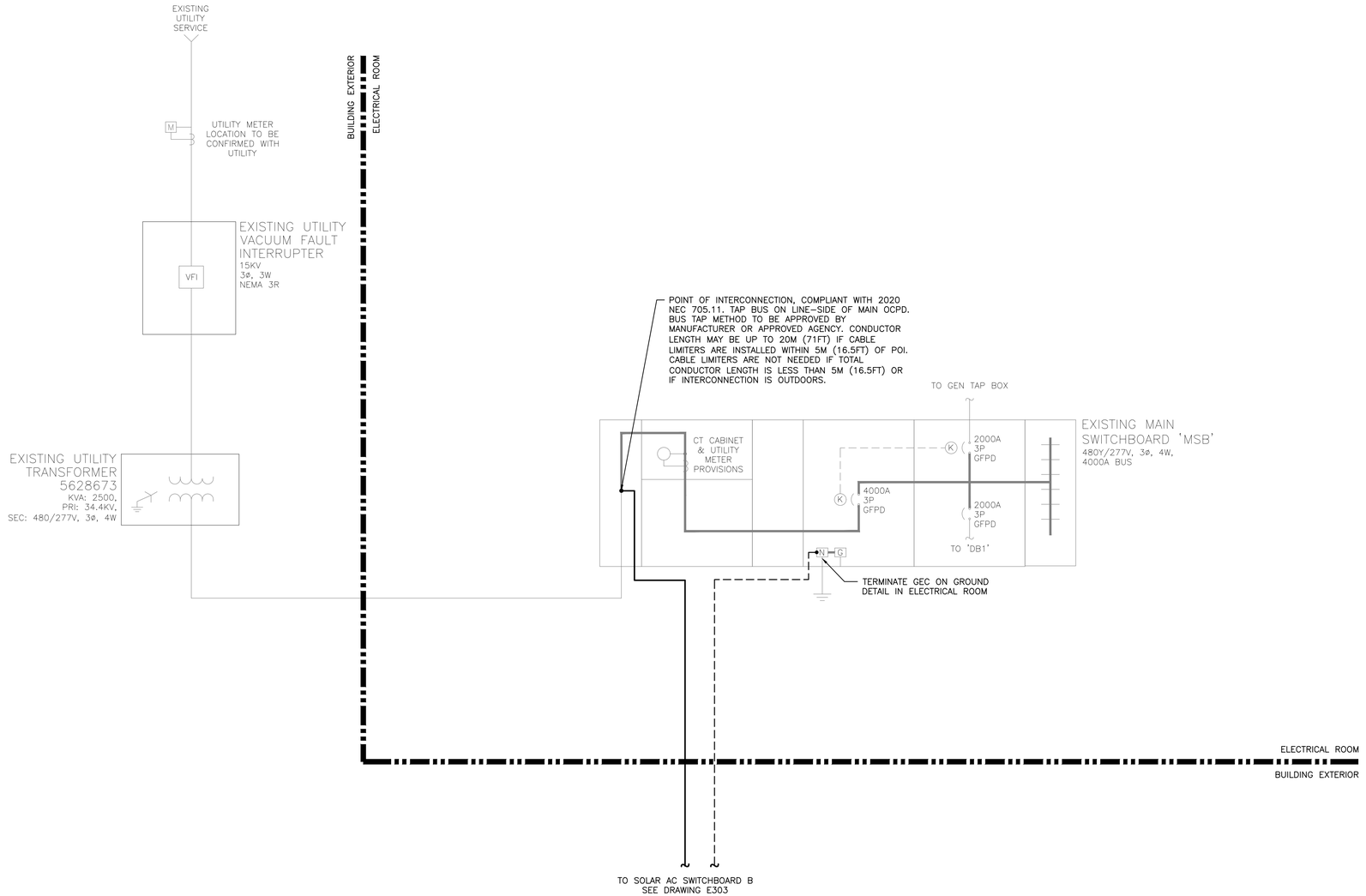

1 E302 ONE LINE DIAGRAM – EXISTING SITE EQUIPMENT (SYSTEM B)
SCALE: NONE

DRAWING TITLE	DRAWING #
ONE LINE DIAGRAM EXISTING SITE EQUIPMENT	E302

PLOT DATE: 5/22/2023 4:19 PM

RULER IN INCHES: 0 ½ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

DATE	REVISION DESCRIPTION	PM	ENG	CHK
05/19/2023	ISSUE FOR PERMIT	TL	AM	MD
05/05/2023	CONCEPTUAL DESIGN	TL	AM	TL
04/03/2023	IC DOCS – REV2	TL	KM	TL
10/18/2022	IC DOCS – REV1	BA	AM	MD

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EDF Renewables

PAGE SIZE: 36" x 24"
PROJECT #: 04862.01

DC SYSTEM SIZE: 7,139,925 kWdc
AC SYSTEM SIZE: 4,800,000 kWac
MODULE TYPE: HANWHA Q.PEAK DUO XL 585W
MODULE QUANTITY: 12,205
ORIENTATION: 10° TILT, 239° AZIMUTH

PROJECT
SOLAR ROOFTOP SYSTEM AT
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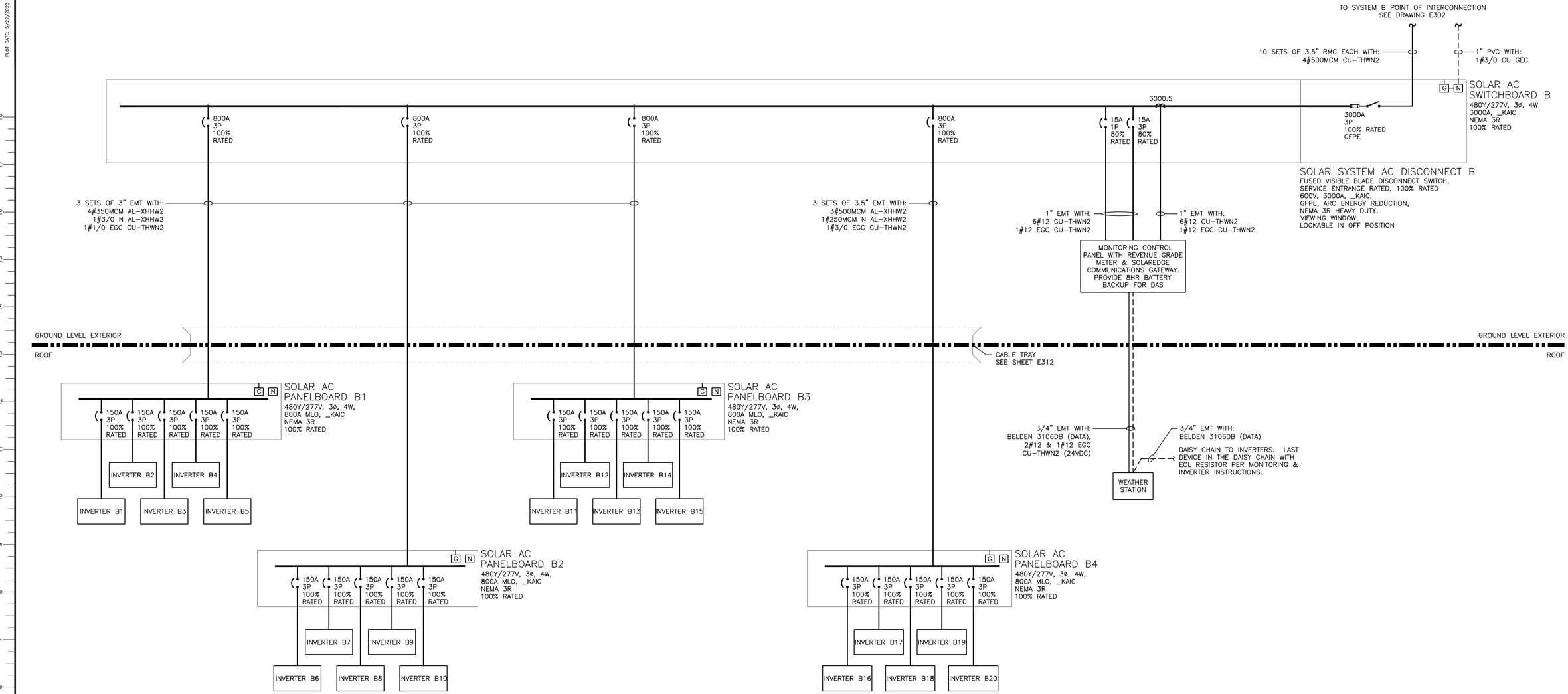
14950 MERIDIAN PKWY
RIVERSIDE, CA 92518



SYSTEM B SUMMARY	
DC SYSTEM SIZE	3,607.695 KW
AC SYSTEM SIZE	2,400.000 KW
MODULE TYPE	HANWHA Q.PEAK DUO XL-G11S 585W
MODULE TYPE QTY	6,167
INVERTER TYPE 1	SOLAREDGE SE120KUS
INVERTER QTY	20
PANELBOARD QTY	4
AZIMUTH / TILT	239° / 10°
UTILITY	SCE

1 E303 ONE LINE DIAGRAM – SYSTEM B
SCALE: NONE

PLOT DATE: 5/22/2023 4:19 PM

RULER IN INCHES: 0 ½ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

DATE	REVISION DESCRIPTION	PM	ENG CHK
05/19/2023	ISSUE FOR PERMIT	TL	AM MD
05/02/2023	CONCEPTUAL DESIGN	TL	AM TL
04/20/2023	IC DOCS – REV2	TL	KM TL
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DEVELOPER: powerflex
EDF Renewables

POWERFLEX
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PAGE SIZE: 36" x 24"
PROJECT #: 04862.01

DC SYSTEM SIZE: 7,139.925 kWDC
AC SYSTEM SIZE: 4,800.000 kWAC
MODULE TYPE: HANWHA Q.PEAK DUO XL 585W
MODULE QUANTITY: 12,205
ORIENTATION: 10° TILT, 239° AZIMUTH

PROJECT
SOLAR ROOFTOP SYSTEM AT
UNFI RIVERSIDE
14950 MERIDIAN PKWY
RIVERSIDE, CA 92518

DRAWING TITLE
ONE LINE DIAGRAM
SYSTEM B

DRAWING #
E303

PLOT DATE: 5/22/2023 4:19 PM

AC CIRCUIT CALCULATIONS - SYSTEM A

EQUIPMENT SUPPLIED	FED FROM	VOLTAGE	FULL LOAD AMPS 'FLA'	FLA x 1.25	OCPD SIZE [A]	GROUND SIZE	CONDUCTORS PER PHASE	PHASE CONDUCTOR SIZE	NEUTRAL CONDUCTOR SIZE	75° AMPACITY	90° AMPACITY	90° AMPACITY WITH C.O.U.	C.O.U DERATE AMBIENT TEMP	C.O.U. DERATE CONDUIT FILL	FEEDER LENGTH (FEET)	SEGMENT VOLTAGE DROP AT FLA	TOTAL VOLTAGE DROP AT FLA
SOLAR SYSTEM AC DISCONNECT A	POINT OF INTERCONNECTION	480	2886.0	3608		CU #3/0 GEC	10	CU 500MCM	CU 500MCM	3800	4300	3913	0.91	1.00	50	0.15%	0.15%
SOLAR AC SWITCHBOARD A	SOLAR SYSTEM AC DISCONNECT A	480	2886.0	N/A (100% RATED)	3000 (100% RATED)	CU #3/0 GEC	8	CU 500MCM	CU 500MCM	3040	3440	3130	0.91	1.00	50	0.19%	0.34%
SOLAR AC SUBPANEL A1	SOLAR AC SWITCHBOARD A	480	721.5	N/A (100% RATED)	800 (100% RATED)	CU #1/0	3	AL 350MCM	AL #3/0	750	840	764	0.91	1.00	90	0.49%	0.83%
SOLAR AC SUBPANEL A2	SOLAR AC SWITCHBOARD A	480	721.5	N/A (100% RATED)	800 (100% RATED)	CU #1/0	3	AL 350MCM	AL #3/0	750	840	764	0.91	1.00	240	1.31%	1.65%
SOLAR AC SUBPANEL A3	SOLAR AC SWITCHBOARD A	480	721.5	N/A (100% RATED)	800 (100% RATED)	CU #1/0	3	AL 350MCM	AL #3/0	750	840	764	0.91	1.00	290	1.59%	1.93%
SOLAR AC SUBPANEL A4	SOLAR AC SWITCHBOARD A	480	721.5	N/A (100% RATED)	800 (100% RATED)	CU #3/0	3	AL 500MCM	AL 250MCM	930	1050	956	0.91	1.00	445	1.74%	2.08%
INVERTER A1	SOLAR AC SUBPANEL A1	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	5	0.03%	0.87%
INVERTER A2	SOLAR AC SUBPANEL A1	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	10	0.07%	0.90%
INVERTER A3	SOLAR AC SUBPANEL A1	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	15	0.10%	0.93%
INVERTER A4	SOLAR AC SUBPANEL A1	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	20	0.14%	0.97%
INVERTER A5	SOLAR AC SUBPANEL A1	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	25	0.17%	1.00%
INVERTER A6	SOLAR AC SUBPANEL A2	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	5	0.03%	1.69%
INVERTER A7	SOLAR AC SUBPANEL A2	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	10	0.07%	1.72%
INVERTER A8	SOLAR AC SUBPANEL A2	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	15	0.10%	1.75%
INVERTER A9	SOLAR AC SUBPANEL A2	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	20	0.14%	1.79%
INVERTER A10	SOLAR AC SUBPANEL A2	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	25	0.17%	1.82%
INVERTER A11	SOLAR AC SUBPANEL A3	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	5	0.03%	1.96%
INVERTER A12	SOLAR AC SUBPANEL A3	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	10	0.07%	1.99%
INVERTER A13	SOLAR AC SUBPANEL A3	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	15	0.10%	2.03%
INVERTER A14	SOLAR AC SUBPANEL A3	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	20	0.14%	2.06%
INVERTER A15	SOLAR AC SUBPANEL A3	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	25	0.17%	2.09%
INVERTER A16	SOLAR AC SUBPANEL A4	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	5	0.03%	2.11%
INVERTER A17	SOLAR AC SUBPANEL A4	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	10	0.07%	2.15%
INVERTER A18	SOLAR AC SUBPANEL A4	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	15	0.10%	2.18%
INVERTER A19	SOLAR AC SUBPANEL A4	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	20	0.14%	2.21%
INVERTER A20	SOLAR AC SUBPANEL A4	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	25	0.17%	2.25%

AVERAGE AC VOLTAGE DROP FROM POI TO INVERTERS: 1.72%

DC STRING WIRING CALCULATION - CONDUIT	
OPTIMIZER OUTPUT [A]	18.00
MAX CONTINUOUS FAULT CURRENT FROM PARALLEL SOURCES [AMPS]	18.00
1.25x MAX CONTINUOUS FAULT CURRENT [AMPS]	22.50
MAX # OF WIRES PER CONDUIT	9
DERATE FOR # OF CONDUCTORS IN A CONDUIT	0.7
MAX AMBIENT TEMPERATURE	36
TEMPERATURE DERATE	0.91
WIRE GAUGE	CU #10
75 DEG AMPACITY WITHOUT COU ADJUSTMENT [AMPS]	35
IS 75 DEG AMPACITY WITHOUT COU ADJUSTMENT >= 1.25x MAX CIRCUIT CURRENT?	YES. COMPLIES WITH 690.8(B)(1)
90DEG AMPACITY WITH COU ADJUSTMENT [AMPS]	25.48
IS 90DEG AMPACITY WITH COU ADJUSTMENT >= 1.0x MAX CIRCUIT CURRENT?	YES. COMPLIES WITH 690.8(B)(2)
DC OPTIMIZER OUTPUT CIRCUIT FUSE RATING [AMPS]	25
AVAILABLE FAULT CURRENT FROM ALL PARALLEL SOURCES [AMPS]	18
IS FUSE RATING >= 1.25x MAX CIRCUIT CURRENT?	YES. COMPLIES WITH 690.9(B)

MODULE SPECIFICATIONS @ 10% GAIN	
MAKE/MODEL	Q.PEAK DUO XL-G11S 585W
POWER [W]	585
ISC [A]	13.72
IMP [A]	13.07
VOC [V]	53.57
VMP [V]	44.75
β VOC [%/degC]	-0.270%
SITE CLIMATE CRITERIA	
ASHRAE HIGH [°C]	36
ASHRAE LOW [°C]	-1
STRING SPECIFICATIONS AT STC	
MODULES/STRING	2
POWER [W]	1170
STRING ISC [A]	13.72
STRING IMP [A]	13.07
STRING VMP [V]	89.50
STRING MAX VOLTAGE CALCULATION	
VOC TEMP ADJUSTMENT @ -1 °C	1.07
VOC @ -1 °C [V]	57.33
MAX STRING VOC [V]	114.7
STRING CALCULATIONS REFER TO THE PV SIDE OF DC OPTIMIZERS, NOT TO THE OPTIMIZER OUTPUT CIRCUIT	

SHEET NOTES:
1. DISTANCES ARE ESTIMATES GENERATED FOR ENGINEER'S CALCULATIONS, CONTRACTOR IS RESPONSIBLE FOR OWN MEASUREMENTS AND TAKEOFFS.

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111 RIVER STREET, HOBOKEN, NJ
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RICHARD A. IVINS
CA LICENSE No: 20357

DEVELOPER
powerflex
EDF Renewables
POWERFLEX
805 THIRD AVENUE 20TH FLOOR
NEW YORK, NY 10022
WWW.POWERFLEX.COM

PAGE SIZE: 36" x 24"
PROJECT #: 04862.01

DC SYSTEM SIZE: 7,139.925 kWDC
AC SYSTEM SIZE: 4,800.000 kWAC
MODULE TYPE: HANWHA Q.PEAK DUO XL 585W
MODULE QUANTITY: 12,205
ORIENTATION: 10° TILT, 239° AZIMUTH

PROJECT
SOLAR ROOFTOP SYSTEM AT
UNFI RIVERSIDE
14950 MERIDIAN PKWY
RIVERSIDE, CA 92518

DRAWING TITLE
SCHEDULES & CALCULATIONS SYSTEM A

DRAWING #
E310

RULER IN INCHES: 0 ½ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

PLOT DATE: 5/22/2023 4:19 PM

AC CIRCUIT CALCULATIONS - SYSTEM B																	
EQUIPMENT SUPPLIED	FED FROM	VOLTAGE	FULL LOAD AMPS 'FLA'	FLA x 1.25	OCPD SIZE [A]	GROUND SIZE	CONDUCTORS PER PHASE	PHASE CONDUCTOR SIZE	NEUTRAL CONDUCTOR SIZE	75° AMPACITY	90° AMPACITY	90° AMPACITY WITH C.O.U.	C.O.U DERATE AMBIENT TEMP	C.O.U. DERATE CONDUIT FILL	FEEDER LENGTH (FEET)	SEGMENT VOLTAGE DROP AT FLA	TOTAL VOLTAGE DROP AT FLA
SOLAR SYSTEM AC DISCONNECT B	POINT OF INTERCONNECTION	480	2886.0	3608		CU #3/0 GEC	10	CU 500MCM	CU 500MCM	3800	4300	3913	0.91	1.00	50	0.15%	0.15%
SOLAR AC SWITCHBOARD B	SOLAR SYSTEM AC DISCONNECT B	480	2886.0	N/A (100% RATED)	3000 (100% RATED)	CU 400MCM	10	AL 500MCM	AL 500MCM	3100	3500	3185	0.91	1.00	100	0.47%	0.62%
SOLAR AC SUBPANEL B1	SOLAR AC SWITCHBOARD B	480	721.5	N/A (100% RATED)	800 (100% RATED)	CU #1/0	3	AL 350MCM	AL #3/0	750	840	764	0.91	1.00	100	0.55%	1.17%
SOLAR AC SUBPANEL B2	SOLAR AC SWITCHBOARD B	480	721.5	N/A (100% RATED)	800 (100% RATED)	CU #1/0	3	AL 350MCM	AL #3/0	750	840	764	0.91	1.00	170	0.93%	1.55%
SOLAR AC SUBPANEL B3	SOLAR AC SWITCHBOARD B	480	721.5	N/A (100% RATED)	800 (100% RATED)	CU #1/0	3	AL 350MCM	AL #3/0	750	840	764	0.91	1.00	225	1.23%	1.85%
SOLAR AC SUBPANEL B4	SOLAR AC SWITCHBOARD B	480	721.5	N/A (100% RATED)	800 (100% RATED)	CU #3/0	3	AL 500MCM	AL 250MCM	930	1050	956	0.91	1.00	300	1.17%	1.79%
INVERTER B1	SOLAR AC SUBPANEL B1	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	5	0.03%	1.20%
INVERTER B2	SOLAR AC SUBPANEL B1	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	10	0.07%	1.23%
INVERTER B3	SOLAR AC SUBPANEL B1	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	15	0.10%	1.27%
INVERTER B4	SOLAR AC SUBPANEL B1	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	20	0.14%	1.30%
INVERTER B5	SOLAR AC SUBPANEL B1	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	25	0.17%	1.34%
INVERTER B6	SOLAR AC SUBPANEL B2	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	5	0.03%	1.58%
INVERTER B7	SOLAR AC SUBPANEL B2	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	10	0.07%	1.62%
INVERTER B8	SOLAR AC SUBPANEL B2	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	15	0.10%	1.65%
INVERTER B9	SOLAR AC SUBPANEL B2	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	20	0.14%	1.68%
INVERTER B10	SOLAR AC SUBPANEL B2	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	25	0.17%	1.72%
INVERTER B11	SOLAR AC SUBPANEL B3	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	5	0.03%	1.88%
INVERTER B12	SOLAR AC SUBPANEL B3	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	10	0.07%	1.92%
INVERTER B13	SOLAR AC SUBPANEL B3	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	15	0.10%	1.95%
INVERTER B14	SOLAR AC SUBPANEL B3	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	20	0.14%	1.99%
INVERTER B15	SOLAR AC SUBPANEL B3	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	25	0.17%	2.02%
INVERTER B16	SOLAR AC SUBPANEL B4	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	5	0.03%	1.83%
INVERTER B17	SOLAR AC SUBPANEL B4	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	10	0.07%	1.86%
INVERTER B18	SOLAR AC SUBPANEL B4	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	15	0.10%	1.89%
INVERTER B19	SOLAR AC SUBPANEL B4	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	20	0.14%	1.93%
INVERTER B20	SOLAR AC SUBPANEL B4	480	144.3	N/A (100% RATED)	150 (100% RATED)	CU #6	1	AL #3/0	NONE	155	175	159	0.91	1.00	25	0.17%	1.96%

AVERAGE AC VOLTAGE DROP FROM POI TO INVERTERS: 1.69%

DATE	REVISION DESCRIPTION	PM	ENG	CHK
05/19/2023	ISSUE FOR PERMIT	TL	AM	MD
05/05/2023	CONCEPTUAL DESIGN	TL	AM	TL
04/05/2023	IC DOCS – REV2	TL	KM	TL
10/18/2022	IC DOCS – REV1	BA	AM	MD

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MODULE QUANTITY: 12,205
ORIENTATION: 10° TILT, 239° AZIMUTH

PROJECT
SOLAR ROOFTOP SYSTEM AT
UNFI RIVERSIDE
14950 MERIDIAN PKWY
RIVERSIDE, CA 92518

DRAWING TITLE
SCHEDULES & CALCULATIONS
SYSTEM B

DRAWING #
E311

RULER IN INCHES: 0 ½ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

CABLE TRAY SECTION A - CABLE TRAY RISER TO PANELBOARD A1/B1
CALCULATIONS REPRESENT WORST CASE FILL IN SECTION

WIRE SPECIFICATIONS

CABLE TYPE	CABLE GAUGE	QUANTITY	CABLE OUTER DIAMETER [IN]	CROSS-SECTIONAL AREA PER CABLE [SQ.IN]	WEIGHT [LBS/FT]
AL	350MCM	27	0.777	0.474	10.827
AL	#3/0	9	0.568	0.253	1.8
AL	500MCM	9	0.902	0.639	5.004
AL	250MCM	3	0.678	0.361	0.888
(EGC) CU (AC)	#3/0	1	0.568	0.253	0.575

TRAY WIDTH

TRAY SECTION	TOTAL CROSS-SECTIONAL AREA OF CABLES [SQ.IN]	% ALLOWABLE FILL AREA	SUM OF DIAMETER OF CABLES [IN]	PARTIAL TRAY WIDTH [IN]
SINGLE CONDUCTORS (AC)	22.171	52.79%	36.811	40
COMMUNICATIONS	-	-	-	2
SPARE	-	-	-	0
			TOTAL WIDTH	42

TOTAL WEIGHT [LBS/FT]

TOTAL CABLE WEIGHT	TRAY WEIGHT	TOTAL
19.09	3.16	22.25

CABLE TRAY SECTION B - SOLAR AC PANELBOARD A1/B1 TO SOLAR AC PANELBOARD A2/B2
CALCULATIONS REPRESENT WORST CASE FILL IN SECTION

WIRE SPECIFICATIONS

CABLE TYPE	CABLE GAUGE	QUANTITY	CABLE OUTER DIAMETER [IN]	CROSS-SECTIONAL AREA PER CABLE [SQ.IN]	WEIGHT [LBS/FT]
AL	350MCM	18	0.777	0.474	7.218
AL	#3/0	6	0.568	0.253	1.2
AL	500MCM	9	0.902	0.639	5.004
AL	250MCM	3	0.678	0.361	0.888
(EGC) CU (AC)	#3/0	1	0.568	0.253	0.575

TRAY WIDTH

TRAY SECTION	TOTAL CROSS-SECTIONAL AREA OF CABLES [SQ.IN]	% ALLOWABLE FILL AREA	SUM OF DIAMETER OF CABLES [IN]	PARTIAL TRAY WIDTH [IN]
SINGLE CONDUCTORS (AC)	17.143	52.75%	28.114	30
COMMUNICATIONS	-	-	-	2
SPARE	-	-	-	4
			TOTAL WIDTH	36

TOTAL WEIGHT [LBS/FT]

TOTAL CABLE WEIGHT	TRAY WEIGHT	TOTAL
14.89	5.57	20.46

CABLE TRAY SECTION C - SOLAR AC PANELBOARD A2/B2 TO SOLAR AC PANELBOARD A3/B3
CALCULATIONS REPRESENT WORST CASE FILL IN SECTION

WIRE SPECIFICATIONS

CABLE TYPE	CABLE GAUGE	QUANTITY	CABLE OUTER DIAMETER [IN]	CROSS-SECTIONAL AREA PER CABLE [SQ.IN]	WEIGHT [LBS/FT]
AL	350MCM	9	0.777	0.474	3.609
AL	#3/0	3	0.568	0.253	0.6
AL	500MCM	9	0.902	0.639	5.004
AL	250MCM	3	0.678	0.361	0.888
(EGC) CU (AC)	#3/0	1	0.568	0.253	0.575

TRAY WIDTH

TRAY SECTION	TOTAL CROSS-SECTIONAL AREA OF CABLES [SQ.IN]	% ALLOWABLE FILL AREA	SUM OF DIAMETER OF CABLES [IN]	PARTIAL TRAY WIDTH [IN]
SINGLE CONDUCTORS (AC)	12.115	56.35%	19.417	20
COMMUNICATIONS	-	-	-	2
SPARE	-	-	-	2
			TOTAL WIDTH	24

TOTAL WEIGHT [LBS/FT]

TOTAL CABLE WEIGHT	TRAY WEIGHT	TOTAL
10.68	3.83	14.51

CABLE TRAY SECTION D - SOLAR AC PANELBOARD A3/B3 TO SOLAR AC PANELBOARD A4/B4
CALCULATIONS REPRESENT WORST CASE FILL IN SECTION

WIRE SPECIFICATIONS

CABLE TYPE	CABLE GAUGE	QUANTITY	CABLE OUTER DIAMETER [IN]	CROSS-SECTIONAL AREA PER CABLE [SQ.IN]	WEIGHT [LBS/FT]
AL	500MCM	9	0.902	0.639	5.004
AL	250MCM	3	0.678	0.361	0.888
(EGC) AL (AC)	#3/0	1	0.568	0.253	0.2

TRAY WIDTH

TRAY SECTION	TOTAL CROSS-SECTIONAL AREA OF CABLES [SQ.IN]	% ALLOWABLE FILL AREA	SUM OF DIAMETER OF CABLES [IN]	PARTIAL TRAY WIDTH [IN]
SINGLE CONDUCTORS (AC)	7.088	83.38%	-	8
COMMUNICATIONS	-	-	-	2
SPARE	-	-	-	2
			TOTAL WIDTH	12

TOTAL WEIGHT [LBS/FT]

TOTAL CABLE WEIGHT	TRAY WEIGHT	TOTAL
6.09	2.66	8.75

DATE	REVISION DESCRIPTION	PM	ENG CHK
05/19/2023	ISSUE FOR PERMIT	TL	AM MD
05/05/2023	CONCEPTUAL DESIGN	TL	AM TL
04/03/2023	IC DOCS – REV2	TL	KM TL
10/18/2022	IC DOCS – REV1	BA	AM MD

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DEVELOPER powerflex EDF Renewables

PAGE SIZE 36" x 24"
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AC SYSTEM SIZE: 4,800.000 kWAC
MODULE TYPE: HANWHA Q.PEAK DUO XL 585W
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ORIENTATION: 10° TILT, 239° AZIMUTH

PROJECT
SOLAR ROOFTOP SYSTEM AT
UNFI RIVERSIDE
14950 MERIDIAN PKWY
RIVERSIDE, CA 92518

DRAWING TITLE
CABLE TRAY CALCULATIONS

DRAWING #
E312

PLOT DATE: 5/22/2023 4:19 PM

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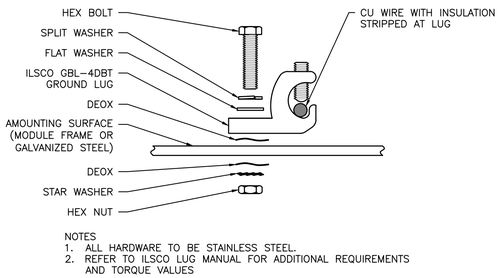
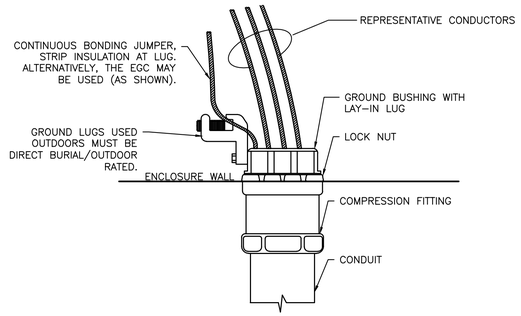


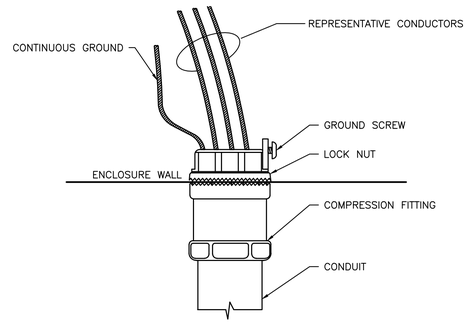
NOTES
1. ALL HARDWARE TO BE STAINLESS STEEL.
2. REFER TO ILSCO LUG MANUAL FOR ADDITIONAL REQUIREMENTS AND TORQUE VALUES

ILSCO

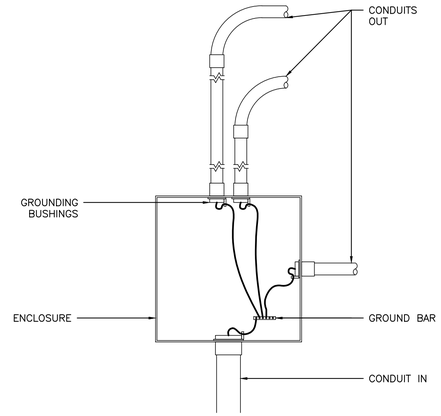
1 GROUND LUG
SCALE: NONE



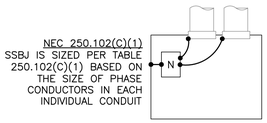
2 CONDUIT BUSHING GROUNDING
SCALE: NONE



3 MYERS HUB GROUNDING
SCALE: NONE

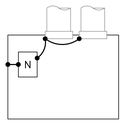


4 PULL BOX/TROUGH GROUNDING
SCALE: NONE



NEC 250.102(C)(1)
SSBJ IS SIZED PER TABLE 250.102(C)(1) BASED ON THE SIZE OF PHASE CONDUCTORS IN EACH INDIVIDUAL CONDUIT

INDIVIDUAL



NEC 250.102(C)(2)
SSBJ IS SIZED PER TABLE 250.102(C)(1) BASED ON THE COMBINED AREA OF PARALLEL PHASE CONDUCTORS

COMBINED

TABLE 250.102(C)(1)			
SIZE OF LARGEST UNGROUNDED CONDUCTOR OR EQUIVALENT AREA FOR PARALLEL CONDUCTORS (AWG/KCMIL)		SIZE OF GROUNDED CONDUCTOR OR BONDING JUMPER (AWG/KCMIL)	
COPPER	ALUMINUM OR COPPER-CLAD ALUMINUM	COPPER	ALUMINUM OR COPPER-CLAD ALUMINUM
2 OR SMALLER	1/0 OR SMALLER	8	6
1 OR 1/0	2/0 OR 3/0	6	4
2 OR 2/0	4/0 OR 250	4	2
OVER 3/0 THROUGH 350	OVER 250 THROUGH 500	2	1/0
OVER 350 THROUGH 600	OVER 500 THROUGH 900	1/0	3/0
OVER 600 THROUGH 1100	OVER 900 THROUGH 1750	2/0	4/0
OVER 1100	OVER 1750	REFER TO NOTES IN NEC TABLE 250.102(C)(1)	

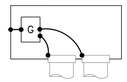
5 SUPPLY SIDE BONDING JUMPERS (SSBJ)
SCALE: NONE

A) FOR CONCENTRIC KNOCKOUTS, USE BONDING JUMPERS AS FOLLOWS:

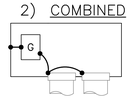
TABLE 250.122		
OVERCURRENT DEVICE CIRCUIT NOT EXCEEDING (AMPERES)	SIZE (AWG OR KCMIL)	
	COPPER	ALUMINUM
15	14	12
20	12	10
60	10	8
100	8	6
200	6	4
300	4	2
400	3	1
500	2	1/0
600	1	2/0
800	1/0	3/0
1000	2/0	4/0
1200	3/0	250
1600	4/0	350
2000	250	400
2500	350	600
3000	400	600
4000	500	750

FOR PARALLEL FEEDERS – NEC 250.102(D)
EQUIPMENT BONDING JUMPER IS SIZED PER TABLE 250.122, REGARDLESS IF COMBINED OR INDIVIDUAL BONDING JUMPERS ARE USED

1) INDIVIDUAL



2) COMBINED

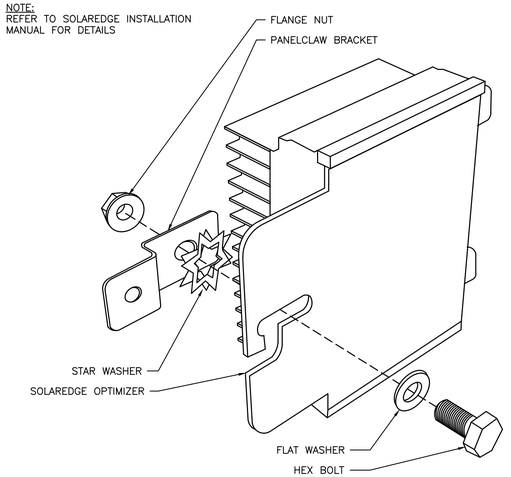


B) FOR NON-CONCENTRIC KNOCKOUTS, THE FOLLOWING METHODS SHALL BE PERMITTED (PER NEC 250.97)

1) THREADLESS COUPLINGS AND CONNECTORS FOR CABLES WITH METAL SHEATHS
2) TWO LOCKNUTS, ON RIGID METAL CONDUIT OR INTERMEDIATE METAL CONDUIT, ONE INSIDE AND ONE OUTSIDE OF BOXES AND CABINETS
3) FITTINGS WITH SHOULDERS THAT SEAT FIRMLY AGAINST THE BOX OR CABINET, SUCH AS ELECTRICAL METALLIC TUBING CONNECTORS, FLEXIBLE METAL CONDUIT CONNECTORS, AND CABLE CONNECTORS, WITH ON LOCKNUT ON THE INSIDE OF BOXES AND CABINETS
4) LISTED FITTINGS (SUCH AS MYERS HUB)

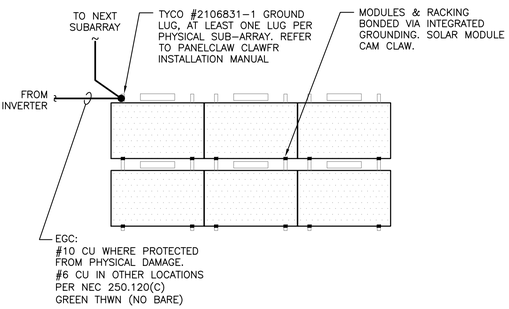
6 LOAD SIDE EQUIPMENT BONDING JUMPER
SCALE: NONE

NOTE:
REFER TO SOLAREDGE INSTALLATION MANUAL FOR DETAILS



7 SOLAREDGE OPTIMIZER GROUNDING
SCALE: NONE

NOTES:
1. EACH SUBARRAY CONNECTED TO AN INVERTER SHALL HAVE AN EGC RUN TO THAT INVERTER
2. PV MODULES AND RAILS GROUNDED PER NEC 690.43



PANELCLAW FR

8 ARRAY GROUNDING
SCALE: NONE

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DRAWING TITLE
GROUNDING DETAILS

DRAWING #
E410

PLOT DATE: 5/22/2023 4:20 PM

RULER IN INCHES: 0 ½ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

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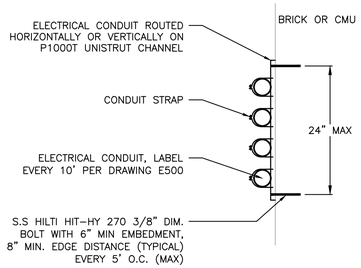
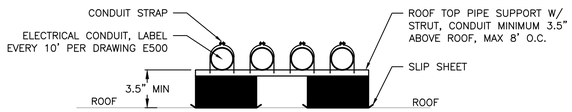
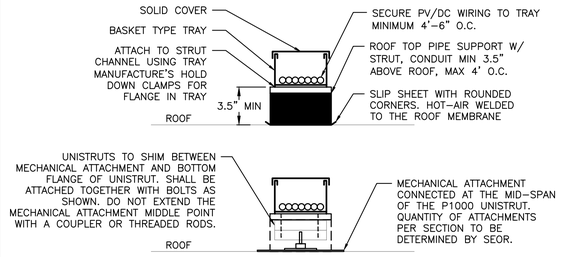


1 CONDUIT WALL ANCHORING
SCALE: NONE



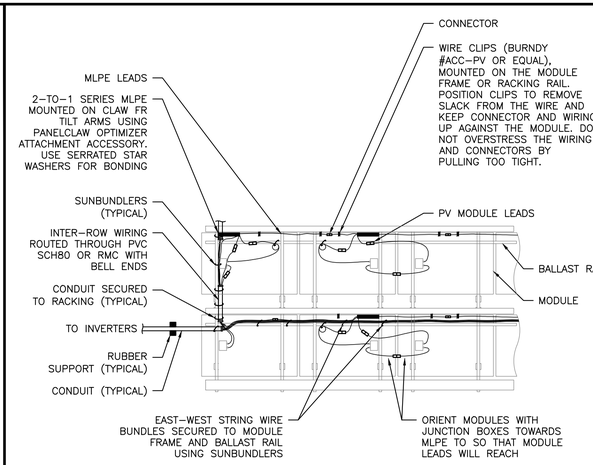
FLAT ROOF

2 ROOF CONDUIT SUPPORT
SCALE: NONE



BASKET TRAY (STRING WIRING ONLY)

3 CABLE TRAY FOR PV HOMERUNS
SCALE: NONE



2-TO-1 SERIES MLPE

4 STRING WIRING - PANELCLAW
SCALE: NONE

REVISION DESCRIPTION	DATE	PM	ENG CHK
ISSUE FOR PERMIT	05/19/2023	TL	AM MD
CONCEPTUAL DESIGN	05/30/2023	TL	AM TL
IC DOCS - REV2	04/20/2023	TL	KM TL
IC DOCS - REV1	10/18/2022	BA	AM MD

PUREPOWER ENGINEERING
111 WOOD AVENUE SOUTH, ISELIN, NJ
WWW.PUREPOWER.COM
RICHARD A. IVINS
CA LICENSE No: 20357

POWERFLEX
805 THIRD AVENUE 20TH FLOOR
NEW YORK, NY 10022
WWW.POWERFLEX.COM

DEVELOPER: powerflex EDF Renewables

PAGE SIZE: 36" x 24"
PROJECT #: 04862.01

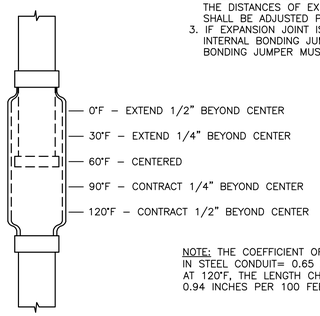
DC SYSTEM SIZE: 7,139.925 kWDC
AC SYSTEM SIZE: 4,800.000 kWAC
MODULE TYPE: HANWHA Q.PEAK DUO XL 585W
MODULE QUANTITY: 12,205
ORIENTATION: 10° TILT, 239° AZIMUTH

PROJECT: SOLAR ROOFTOP SYSTEM AT
UNFI RIVERSIDE
14950 MERIDIAN PKWY
RIVERSIDE, CA 92518

DRAWING TITLE: ELECTRICAL DETAILS

DRAWING #: E420

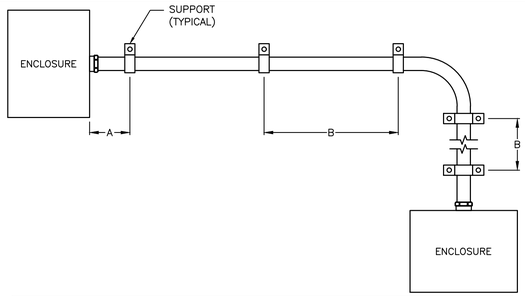
NOTES:
1. INSTALL EXPANSION COUPLING EVERY 100' OF STRAIGHT CONDUIT RUN.
2. IF EXPANSION COUPLINGS ARE INSTALLED AT LENGTHS GREATER OR LESS THAN 100', THE DISTANCES OF EXPANSION/CONTRACTION SHALL BE ADJUSTED PROPORTIONALLY.
3. IF EXPANSION JOINT IS NOT PROVIDED WITH INTERNAL BONDING JUMPER, AN EXTERNAL BONDING JUMPER MUST BE INSTALLED.



NOTE: THE COEFFICIENT OF THERMAL EXPANSION IN STEEL CONDUIT= 0.65 X 10^{-5}IN./IN./°F AT 120°F, THE LENGTH CHANGE IS 0.94 INCHES PER 100 FEET OF CONDUIT RUN.

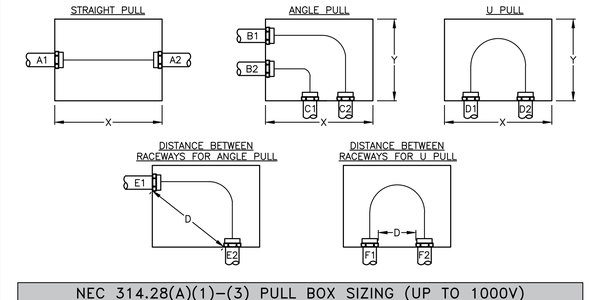
EMT/RMC/IMC

5 EXPANSION COUPLING
SCALE: NONE



MAXIMUM CONDUIT HARDWARE SPACING			
CONDUIT TYPE	ENCLOSURE TO SUPPORT (A)	SUPPORT TO SUPPORT (B)	NEC ARTICLE
ELECTRICAL METALLIC TUBING (EMT)	3'	10'	358
INTERMEDIATE METAL CONDUIT (IMC)	3'	10'	342
RIGID METAL CONDUIT (RMC)	3'	10'	344
LIQUIDTIGHT FLEXIBLE METAL CONDUIT (LFMC)	1'	4.5'	350
PVC (SCH40 & 80) [0.5" - 1"]	3'	3'	352
PVC (SCH40 & 80) [1.25" - 2"]	3'	5'	352
PVC (SCH40 & 80) [2.5" - 3"]	3'	6'	352
PVC (SCH40 & 80) [3.5" - 5"]	3'	7'	352
PVC (SCH40 & 80) [6"]	3'	8'	352

6 CONDUIT SUPPORT SPACING
SCALE: NONE

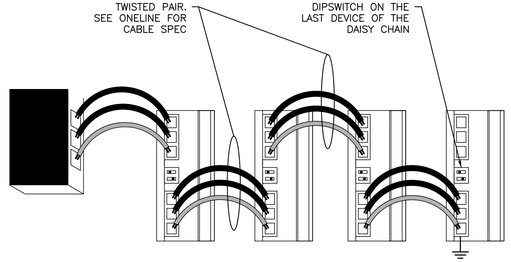


NEC 314.28(A)(1)-(3) PULL BOX SIZING (UP TO 1000V)			
BOX TYPE	LENGTH (X)	HEIGHT (Y)	DISTANCE (D)
STRAIGHT PULL	8 X LARGEST OF A1 & A2	AS NEEDED	N/A
ANGLE PULL	6 X (LARGEST OF B1 & B2) + SUM OF OTHER CONDUIT ENTERING THE SAME WALL	6 X (LARGEST OF C1 & C2) + SUM OF OTHER CONDUIT ENTERING THE SAME WALL	6 X LARGEST OF E1 & E2
U PULL	AS NEEDED	6 X (LARGEST OF D1 & D2) + SUM OF OTHER CONDUIT ENTERING THE SAME WALL	6 X LARGEST OF F1 & F2

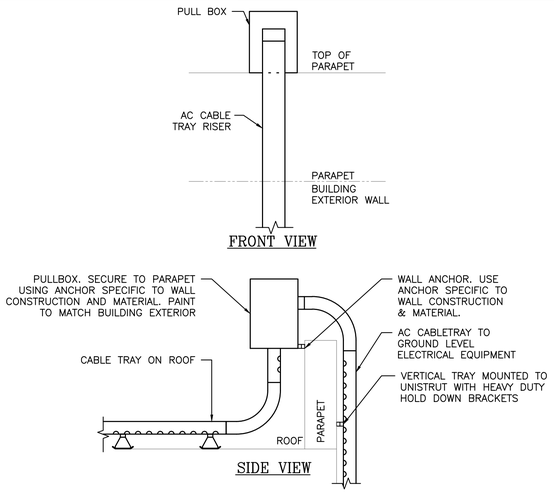
NOTES:
1. REFER TO NEC 314.28 FOR ADDITIONAL REQUIREMENTS.
2. ENSURE CONDUCTOR BEND RADIUS MINIMUMS ARE MET. REFER TO NEC 312.6 FOR ADDITIONAL REQUIREMENTS.

7 PULL BOX & JUNCTION BOX SIZING
SCALE: NONE

MONITORING NOTES:
1. REFER TO MONITORING SYSTEM INSTALLATION MANUAL FOR DETAILS ON TERMINAL BLOCKS, CABLE TERMINATIONS, AND SYSTEM CONFIGURATION.
2. WIRELESS TRANSCEIVERS MUST HAVE LINE-OF-SIGHT BETWEEN EACH OTHER.
3. PYRANOMETER MUST BE INSTALLED IN UNSHADED LOCATION.

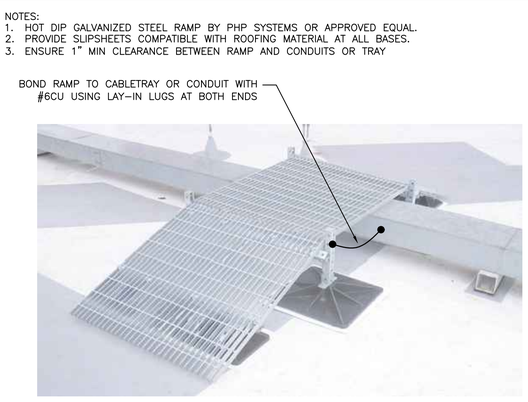


8 MODBUS COMMUNICATIONS
SCALE: NONE



9 TYPICAL CABLE TRAY RISER
SCALE: NONE

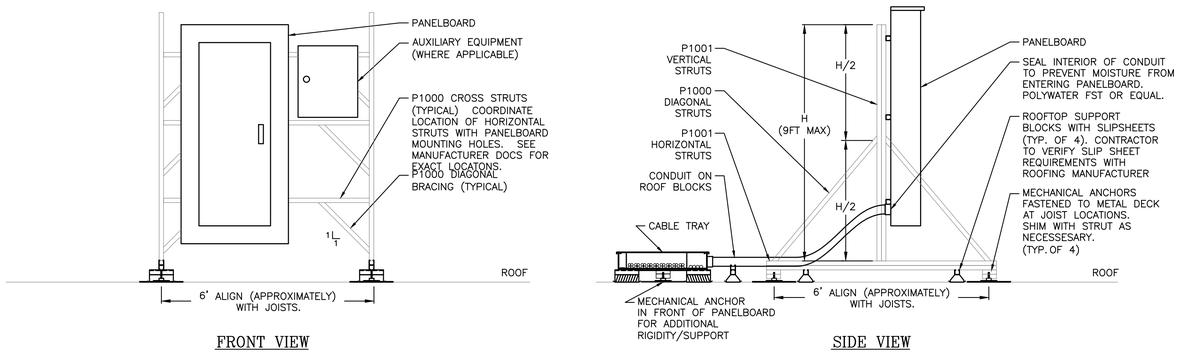
NOTES:
1. HOT DIP GALVANIZED STEEL RAMP BY PHP SYSTEMS OR APPROVED EQUAL.
2. PROVIDE SLIPSHEETS COMPATIBLE WITH ROOFING MATERIAL AT ALL BASES.
3. ENSURE 1" MIN CLEARANCE BETWEEN RAMP AND CONDUITS OR TRAY



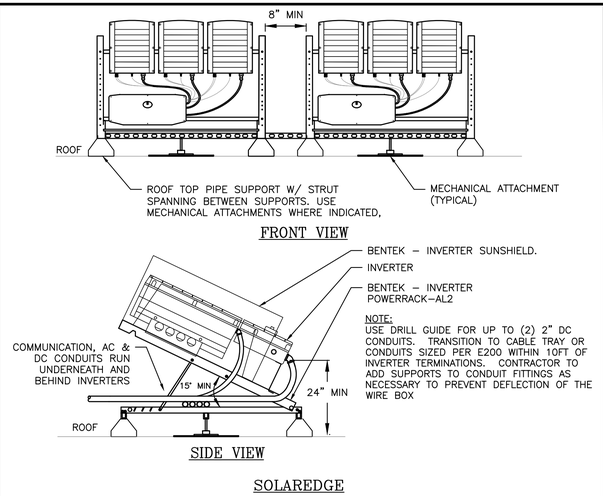
10 CROSSOVER RAMP
SCALE: NONE

RULER IN INCHES: 0 ½ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

NOTE:
DETAIL IS SHOWN FOR ELECTRICAL COORDINATION. STRUCTURAL ENGINEER SHALL REVIEW AND APPROVE DETAILED DESIGN



1 RACK-MOUNTED PANELBOARD
SCALE: NONE



NOTE:
USE DRILL GUIDE FOR UP TO (2) 2" DC CONDUITS. TRANSITION TO CABLE TRAY OR CONDUITS SIZED PER E200 WITHIN 10FT OF INVERTER TERMINATIONS. CONTRACTOR TO ADD SUPPORTS TO CONDUIT FITTINGS AS NECESSARY TO PREVENT DEFLECTION OF THE WIRE BOX

SOLAREDGE

2 TYPICAL INVERTER RACK – FLAT ROOF
SCALE: NONE

DATE	REVISION DESCRIPTION	PM	ENG	CHK
05/19/2023	ISSUE FOR PERMIT	TL	AM	MD
05/05/2023	CONCEPTUAL DESIGN	TL	AM	TL
04/03/2023	IC DOCS – REV2	TL	KM	TL
10/18/2022	IC DOCS – REV1	BA	AM	MD

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DEVELOPER
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NEW YORK, NY 10022
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PAGE SIZE 36" x 24"
PROJECT # 04862.01

DC SYSTEM SIZE: 7,139.925 kWDC
AC SYSTEM SIZE: 4,800.000 kWAC
MODULE TYPE: HANWHA Q.PEAK DUO XL 585W
MODULE QUANTITY: 12,205
ORIENTATION: 10° TILT, 239° AZIMUTH

PROJECT
SOLAR ROOFTOP SYSTEM AT
UNFI RIVERSIDE
14950 MERIDIAN PKWY
RIVERSIDE, CA 92518

DRAWING TITLE
EQUIPMENT DETAILS

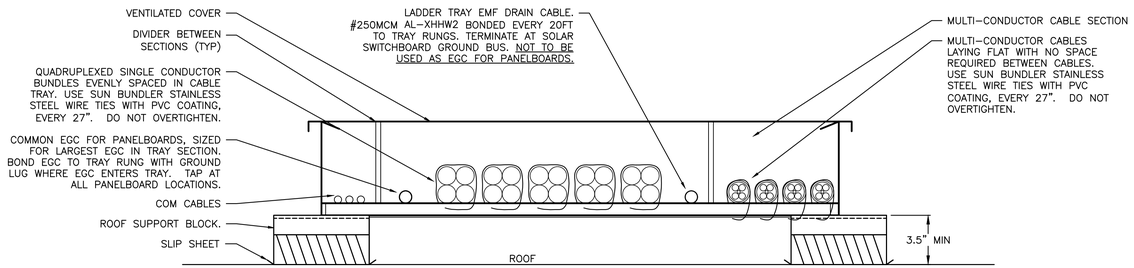
DRAWING #
E421

PLOT DATE: 5/22/2023 4:20 PM

RULER IN INCHES:

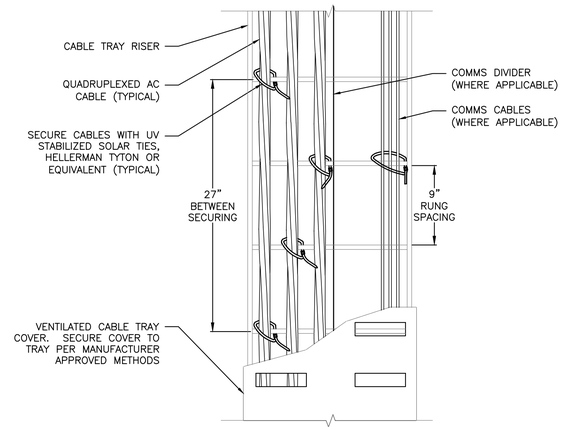
PLOT DATE: 5/22/2023 4:20 PM

SHEET NOTES:
1. DETAILS ARE SHOWN FOR ELECTRICAL COORDINATION. STRUCTURAL ENGINEER SHALL REVIEW AND APPROVE DETAILED DESIGN
2. TRAY SPECIFICATIONS:
   ALUMINUM
   2.2. LADDER–TYPE
   2.3. 9" RUNG SPACING
   2.4. 4" SIDE–WALL
   2.5. WITH VENTILATED COVER.
3. WHERE CONDUITS ENTER THROUGH SIDE OF TRAY, INSTALL A SECTION OF TRAY WITH DEEPER SIDE WALL AS NEEDED TO ACCOMMODATE CONDUIT TERMINATION.
4. DIVIDERS SHALL BE PLACED BETWEEN SECTIONS FOR: SINGLE CONDUCTORS FEEDERS, MULTI–CONDUCTOR INVERTER CIRCUITS, COMMUNICATIONS.
5. SINGLE CONDUCTORS MUST BE SECURELY BOUND IN CIRCUIT GROUPS OF NOT MORE THAN ONE CONDUCTOR PER PHASE TO PREVENT CURRENT IMBALANCE.
6. PROVIDE SPLICE PLATES WITH BONDING JUMPERS AT ALL CONNECTIONS BETWEEN TRAY SECTIONS.
7. CABLE TRAY SHALL NOT CROSS OVER THE SEISMIC JOINT SPECIFIED IN THE FINAL STRUCTURAL REPORT.



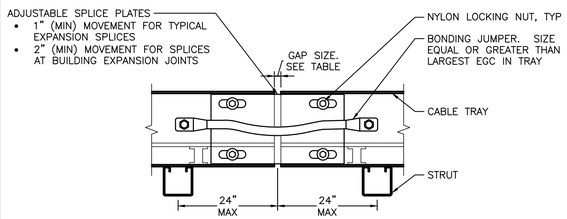
AC & COMMUNICATIONS

1 TYPICAL CABLE TRAY
SCALE: NONE



AC IN CABLE TRAY

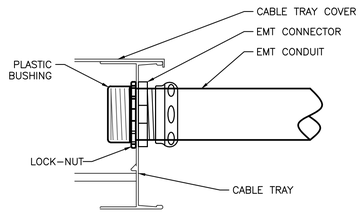
2 CABLE TRAY RISER
SCALE: NONE



TEMPERATURE AT TIME OF INSTALLATION	GAP SETTING	
	TYPICAL EXPANSION SPLICE	SPLICE AT BUILDING EXPANSION JOINT
0 °F	1"	2"
30 °F	3/4"	2"
60 °F	1/2"	2"
90 °F	1/4"	2"
120 °F	0"	2"

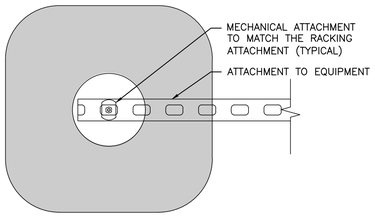
NOTES:
1. INSTALL EXPANSION SPLICE PLATES WITH BONDING JUMPER EVERY 36FT AND WHEN CROSSING OVER BUILDING EXPANSION JOINTS.
2. INTERPOLATE BETWEEN VALUES PROVIDED IN TABLE FOR INSTALLATION AT OTHER TEMPERATURES.

3 CABLE TRAY EXPANSION SPLICE
SCALE: NONE

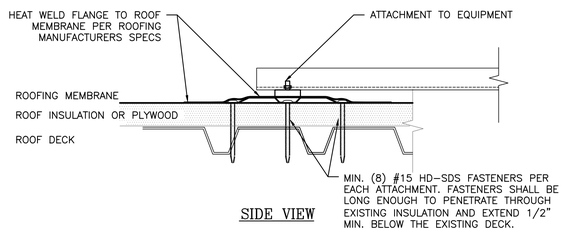


EMT

4 CONDUIT TO CABLE TRAY TRANSITION
SCALE: NONE

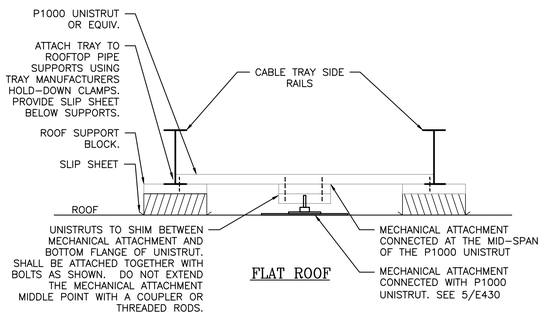


FRONT VIEW



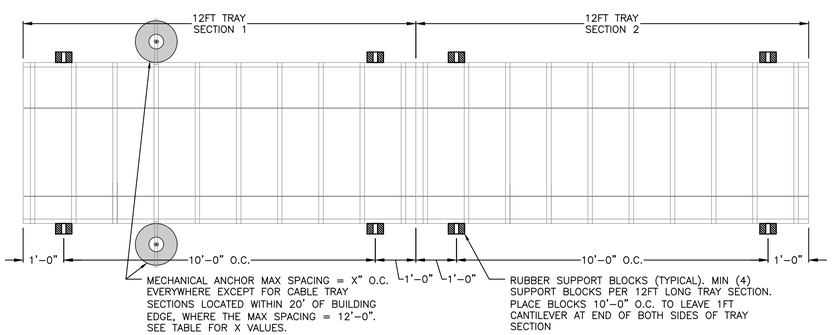
SIDE VIEW

5 ROOF ANCHOR ATTACHMENT
SCALE: NONE

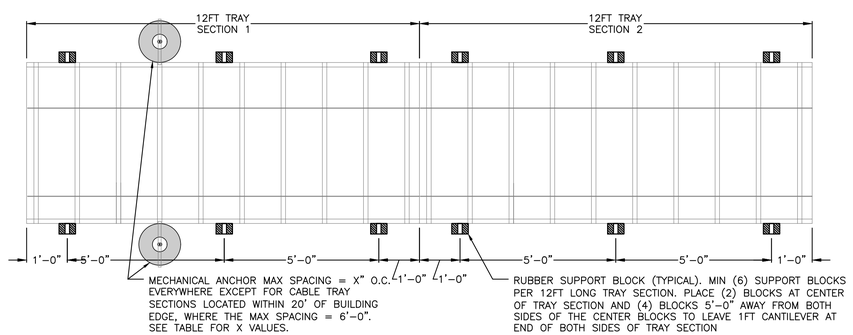


FLAT ROOF

6 CABLE TRAY SUPPORT & ATTACHMENT
SCALE: NONE



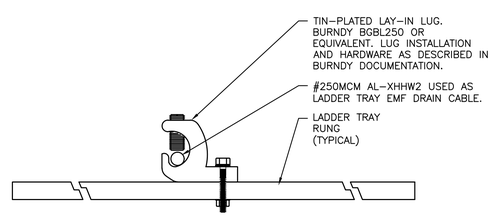
24" WIDE OR LESS TRAY SECTION



30" & 36" WIDE TRAY SECTION

CABLE TRAY WIDTH	WIND ZONE CLASSIFICATION	MAXIMUM ATTACHMENT SPACING (X)
12"	ZONE 1	TBD
	ZONE 2	TBD
	ZONE 3	TBD
24"	ZONE 1	TBD
	ZONE 2	TBD
	ZONE 3	TBD
36"	ZONE 1	TBD
	ZONE 2	TBD
	ZONE 3	TBD

7 CABLE TRAY ATTACHMENT & SUPPORT BLOCK SPACING
SCALE: NONE



8 EMF DRAIN CABLE LUG
SCALE: NONE

NO	REVISION DESCRIPTION	DATE	PM	ENG CHK
1	ISSUE FOR PERMIT	05/19/2023	TL	AM MD
2	CONCEPTUAL DESIGN	05/30/2023	TL	AM TL
3	IC DOCS – REV2	04/03/2023	TL	KM TL
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RICHARD A. IVINS
CA LICENSE No. 20357

PROFESSIONAL ENGINEER RICHARD A. IVINS LICENSE E 20357 5/19/23 CIVIL STATE OF CALIFORNIA

DEVELOPER: powerflex
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ORIENTATION: 10° TILT, 239° AZIMUTH

PROJECT: SOLAR ROOFTOP SYSTEM AT
UNFI RIVERSIDE
14950 MERIDIAN PKWY
RIVERSIDE, CA 92518

DRAWING TITLE: CABLE TRAY DETAILS

DRAWING #: E430

RULER IN INCHES: 0 ½ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

PLOT DATE: 5/22/2023 4:21 PM

GENERAL NOTES FOR LABELS:
1. LABEL SCALE 1:2 UNLESS NOTED
2. LETTERING ON SIGNS SHALL BE CAPITAL LETTERS
3. CLEARLY LABEL ALL CIRCUIT BREAKERS IN THE PANELBOARD(S). THE LABEL SHALL INDICATE THE NAME OF THE DEVICE IT SERVES.

LABEL FORMAT NOTES:
1. FORMAT 1: ENGRAVED MELAMINE, WHITE TEXT ON RED BACKGROUND. TEXT HEIGHT: TITLES 3/8", ALL OTHER TEXT 5/32".
2. FORMAT 2: ENGRAVED MELAMINE, BLACK TEXT ON WHITE BACKGROUND. TEXT HEIGHT: TITLES 3/8", ALL OTHER TEXT 5/32".
3. FORMAT 3: REFLECTIVE UV RATED LABEL. RED BACKGROUND WITH WHITE CAPITAL LETTERS AT LEAST 3/8" TALL. LABELS SHALL BE SUITABLE FOR THE ENVIRONMENT IN WHICH THEY ARE INSTALLED.
4. FORMAT 4: ENGRAVED MELAMINE, WHITE TEXT ON RED BACKGROUND. TEXT HEIGHT: TITLES 5/32", ALL OTHER TEXT 3/32".
5. FORMAT 5: VINYL FILM, BLACK TEXT ON WHITE BACKGROUND. TEXT HEIGHT: 3/8"

PER 2020 NEC 690.31(B)(1), PV SYSTEM CIRCUIT CONDUCTORS SHALL BE IDENTIFIED AT ALL ACCESSIBLE POINTS OF TERMINATION, CONNECTION, AND SPLICES.

1. STRING HOMERUNS AT ARRAY
2. DC INPUT TERMINALS OF COMBINER BOX
3. DC OUTPUT TERMINALS OF COMBINER BOX
4. DC INPUT TERMINALS OF INVERTER
5. AC OUTPUT TERMINALS OF INVERTER
6. AC INPUT & OUTPUT TERMINALS OF EACH SUCCESSIVE DEVICE (WHERE APPLICABLE)

CIRCUIT BREAKER AND SWITCH LABELS:
UNLESS LABELLED OTHERWISE, ALL CIRCUIT BREAKERS AND SWITCHES SHALL BE LABELLED WITH THE NAME OF THE EQUIPMENT SUPPLIED.

INVERTER 1
TYPICAL FOR INVERTER BRANCH CIRCUIT BREAKERS. FORMAT 5

SOLAR AC PANELBOARD
TYPICAL FOR FEEDER CIRCUIT BREAKERS. FORMAT 5

5 — 6" × 3/4" — WEATHER STATION — FORMAT 2

6 — 6" × 3/4" — SOLAR MONITORING — FORMAT 2

4" × 1"
PV SYSTEM INSTALLER INFORMATION
INSTALLATION COMPANY: INSTALLER NAME
EMERGENCY PHONE #: (XXX) XXX-XXXX
NFPA1 11.12.2.1.5, FORMAT 4. INSTALL ON MAIN PV SYSTEM DISCONNECT, FILL WITH SITE O&M PROVIDER'S CONTACT INFORMATION. CONFIRM INFO WITH PROJECT OWNER.

4" × 2"
⚠WARNING
ARC FLASH AND SHOCK HAZARD
Appropriate PPE and Tools Required when working on this equipment.
OUTDOOR RATED STICKER MOUNTED ON ALL EQUIPMENT

2 — 6 1/2" × 1" — RAPID SHUTDOWN SWITCH FOR SOLAR PV SYSTEM
NEC 2020 690.56(C)(3), HELLERMANNTYTON#: 596-00890 OR EQUAL, FORMAT 3. INSTALL ON RAPID SHUTDOWN INITIATION DEVICE.

6 1/2" × 1" — WARNING: PHOTOVOLTAIC POWER SOURCE
NEC 690.31(G)(3)(4), NFPA11.12.2.1.3.2, HELLERMANNTYTON #: 596-00206 OR EQUAL, FORMAT 3. SHALL BE PERMANENTLY AFFIXED ON ALL DC EXPOSED RACEWAYS, CABLE TRAYS, PULL BOXES, AND JUNCTION BOXES. LABELS SHALL BE SPACED NO GREATER THAN 10 FEET APART.

3 — 6" × 6" — PV RAPID SHUTDOWN
PHOTOVOLTAIC SYSTEM EQUIPPED WITH RAPID SHUTDOWN
TO START RAPID SHUTDOWN, TURN SWITCH TO OFF POSITION.
WHEN RAPID SHUTDOWN IS INITIATED, EMERGENCY RESPONDERS MAY MOVE AROUND THE ROOF UNDERSTANDING PV SYSTEM CONDUCTORS:
1. INSIDE AN ARRAY MAY BE ENERGIZED TO NOT MORE THAN 80 VOLTS– DO NOT TOUCH!
2. OUTSIDE AN ARRAY ARE NOT ENERGIZED AND ARE SAFE TO CONTACT (IF NECESSARY)
NEC 2020 SUPPLEMENT, FORMAT 1

4 — 6" × 4" — SOLAR PV SYSTEM EQUIPPED WITH RAPID SHUTDOWN
TURN RAPID SHUTDOWN SWITCH TO THE "OFF" POSITION TO SHUTDOWN PV SYSTEM AND REDUCE SHOCK HAZARD IN ARRAY
NEC 2020 690.56(C)(1)(a), HELLERMANNTYTON #: 596-00885 OR EQUAL, INSTALL ON OR WITHIN 3' OF RAPID SHUTDOWN INITIATION DEVICE AND SERVICE DISCONNECTING MEANS. FOR USE ON PV SYSTEMS THAT SHUTDOWN THE ARRAY AND CONDUCTORS LEAVING ARRAY. TITLE TEXT SHALL BE 3/8" BLACK TEXT ON YELLOW BACKGROUND. ALL OTHER TEXT SHALL BE 3/16" BLACK TEXT ON WHITE BACKGROUND.

TYPICAL FOR ALL PANELBOARD(S)

7 — 6" × 3" — SOLAR SYSTEM AC DISCONNECT A
WARNING: PHOTOVOLTAIC POWER SOURCE.
OPERATING CURRENT: 2886.0A
NOMINAL VOLTAGE: 480V
NEC 690.54, NFPA 11.12.2.1.1, FORMAT 1

8 — 5" × 3 1/4" — SOLAR AC SWITCHBOARD A
WARNING: SUPPLIED BY UTILITY & PV SOURCES.
OPERATING CURRENT: 2886.0A
OPERATING VOLTAGE: 480V
DO NOT CONNECT NON-SOLAR LOADS TO THIS PANEL
FORMAT 1

9 — 5" × 3 1/4" — SOLAR AC PANELBOARD AX
WARNING: SUPPLIED BY UTILITY & PV SOURCES.
OPERATING CURRENT: 721.5A
OPERATING VOLTAGE: 480V
DO NOT CONNECT NON-SOLAR LOADS TO THIS PANEL
FORMAT 1

TYPICAL FOR ALL INVERTERS

10 — 8" × 3 1/4" — INVERTER AX
DC DISCONNECT — MAXIMUM VOLTAGE: 1000V
AC DISCONNECT — MAXIMUM AC OPERATING CURRENT: 144.3A; NOMINAL AC OPERATING VOLTAGE: 480V
NEC 2020 690.53, 690.54, NFPA 11.12.2.1.1 FORMAT 1

TYPICAL FOR ALL PANELBOARD(S)

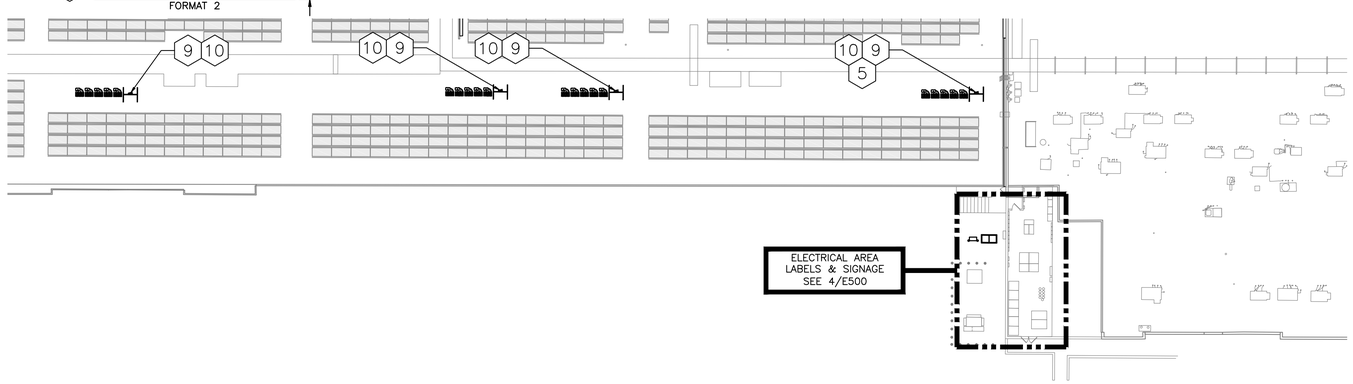
11 — 6" × 3" — SOLAR SYSTEM AC DISCONNECT B
WARNING: PHOTOVOLTAIC POWER SOURCE.
OPERATING CURRENT: 2886.0A
NOMINAL VOLTAGE: 480V
NEC 690.54, NFPA 11.12.2.1.1, FORMAT 1

12 — 5" × 3 1/4" — SOLAR AC SWITCHBOARD B
WARNING: SUPPLIED BY UTILITY & PV SOURCES.
OPERATING CURRENT: 2886.0A
OPERATING VOLTAGE: 480V
DO NOT CONNECT NON-SOLAR LOADS TO THIS PANEL
FORMAT 1

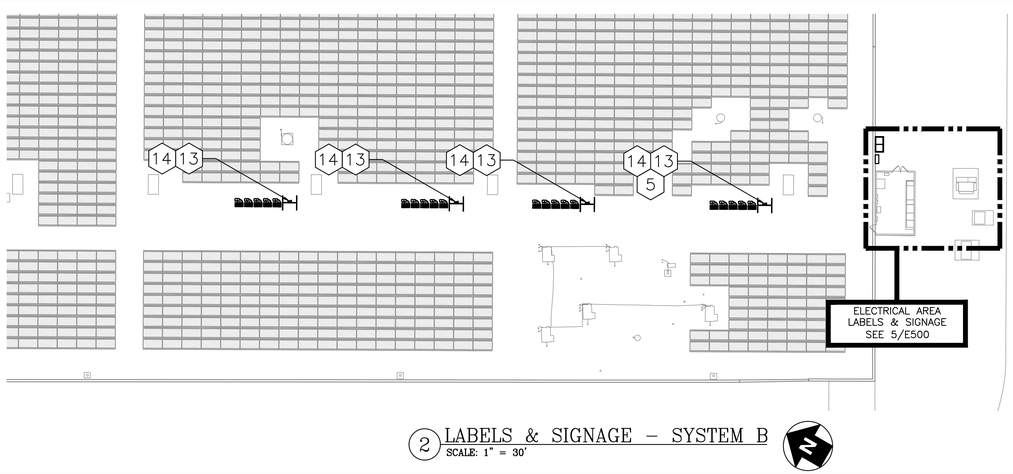
13 — 5" × 3 1/4" — SOLAR AC PANELBOARD BX
WARNING: SUPPLIED BY UTILITY & PV SOURCES.
OPERATING CURRENT: 721.5A
OPERATING VOLTAGE: 480V
DO NOT CONNECT NON-SOLAR LOADS TO THIS PANEL
FORMAT 1

TYPICAL FOR ALL INVERTERS

14 — 8" × 3 1/4" — INVERTER BX
DC DISCONNECT — MAXIMUM VOLTAGE: 1000V
AC DISCONNECT — MAXIMUM AC OPERATING CURRENT: 144.3A; NOMINAL AC OPERATING VOLTAGE: 480V
NEC 2020 690.53, 690.54, NFPA 11.12.2.1.1 FORMAT 1

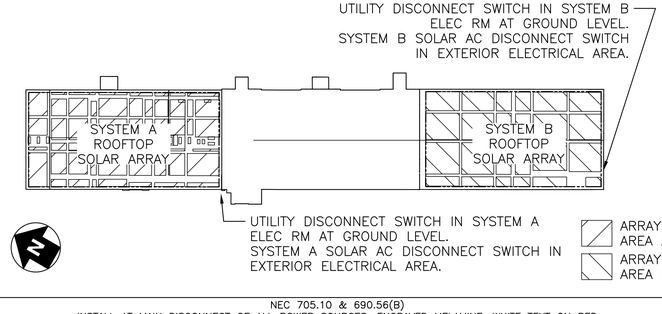


1 LABELS & SIGNAGE – SYSTEM A
SCALE: ########



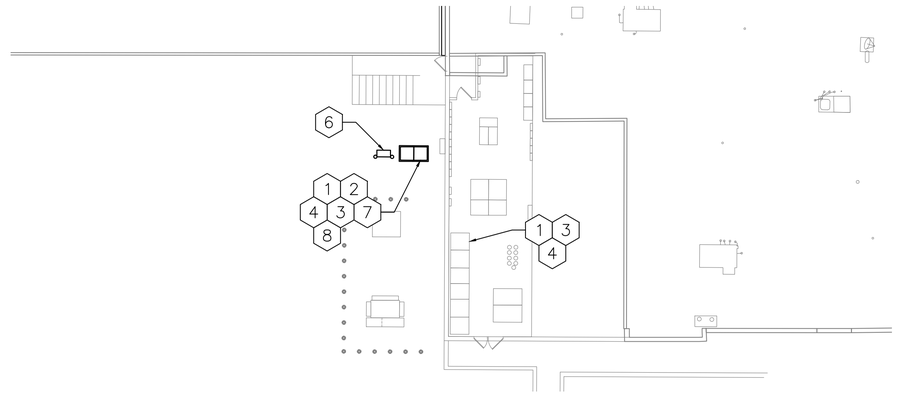
2 LABELS & SIGNAGE – SYSTEM B
SCALE: 1" = 30'

1 — 10" × 6" — CAUTION:
MULTIPLE POWER SOURCES ARE CONNECTED TO THIS SERVICE WITH DISCONNECTS AS SHOWN:

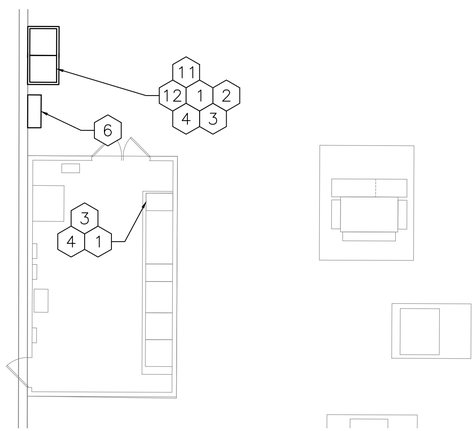


NEC 705.10 & 690.56(B)
INSTALL AT MAIN DISCONNECT OF ALL POWER SOURCES. ENGRAVED MELAMINE, WHITE TEXT ON RED BACKGROUND, TITLE MIN. 1/2", DESCRIPTION 5/16", ALL OTHER TEXT 1/8"

3 DIRECTORY LABEL
SCALE: 1:1



4 ELECTRICAL ROOM – SYSTEM A LABELS & SIGNAGE
SCALE: 1/16" = 1'-0"



5 ELECTRICAL ROOM – SYSTEM B LABELS & SIGNAGE
SCALE: 1/8" = 1'-0"

DATE	REVISION DESCRIPTION	ENG	CHK
05/19/2023	ISSUE FOR PERMIT	TL	AM MD
05/30/2023	CONCEPTUAL DESIGN	TL	AM TL
04/07/2023	IC DOCS – REV2	TL	KM TL
10/19/2022	IC DOCS – REV1	BA	JM MD

PUREPOWER ENGINEERING
111 RIVER STREET, HOBOKEN, NJ
WWW.PUREPOWER.COM
RICHARD A. IVINS
CA LICENSE No: 20357

POWERFLEX
805 THIRD AVENUE 20TH FLOOR
NEW YORK, NY 10022
WWW.POWERFLEX.COM

DEVELOPER: powerflex — EDF Renewables

PAGE SIZE: 36" x 24"
PROJECT #: 04862.01

DC SYSTEM SIZE: 7,139.925 kWDC
AC SYSTEM SIZE: 4,800.000 kWAC
MODULE TYPE: HANWHA Q.PEAK DUO XL 585W
MODULE QUANTITY: 12,205
ORIENTATION: 10° TILT, 239° AZIMUTH

PROJECT: SOLAR ROOFTOP SYSTEM AT UNFI RIVERSIDE
14950 MERIDIAN PKWY
RIVERSIDE, CA 92518

DRAWING TITLE: LABELS & SIGNAGE

DRAWING #: E500

RULER IN INCHES: 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 ½ 0

Power Optimizer

For North America

P1101

POWER OPTIMIZER

PV power optimization at the module level

The most cost-effective solution for commercial and large field installations

- Specifically designed to work with SolarEdge inverters
- High efficiency with module-level MPPT, for maximized system energy production and revenue, and fast project ROI
- Superior efficiency (99.5%)
- Balance of System cost reduction; 50% less cables, fuses, and combiner boxes; over 2x longer string lengths possible
- Fast installation with a single bolt
- Advanced maintenance with module-level monitoring
- Module-level voltage shutdown for installer and firefighter safety
- Meets NEC requirements for arc fault protection (AFCI) and Photovoltaic Rapid Shutdown System (PVRSS)

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Three Phase Inverter with Synergy Technology

For the 277/480V Grid for North America

SE80KUS / SE100KUS / SE110KUS / SE120KUS

INVERTER

Powered by unique pre-commissioning process for rapid system installation

- Pre-commissioning feature for automated validation of system components and wiring during the site installation process and prior to grid connection
- Easy 2-person installation with lightweight, modular design (each inverter consists of 2 or 3 Synergy units and 1 Synergy Manager)
- Independent operation of each Synergy unit enables higher uptime and easy serviceability
- Built-in thermal sensors detect faulty wiring, ensuring enhanced protection and safety
- Built-in arc fault protection and rapid shutdown
- Built-in PID mitigation for maximized system performance
- Monitored* and field-replaceable surge protection devices, to better withstand surges caused by lightning or other events
- Built-in module-level monitoring with Ethernet or cellular communication for full system visibility

*Applicable only for DC and AC SPDs

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/ Three Phase Inverter with Synergy Technology

For the 277/480V Grid for North America

SE80KUS / SE100KUS / SE110KUS / SE120KUS

MODEL NUMBER	SE80KUS	SE100KUS	SE110KUS	SE120KUS	
APPLICABLE TO INVERTERS WITH PART NUMBER	SExxK-USx8Ixxxx				UNITS
INSTALLATION SPECIFICATIONS					
Number of Synergy Units per Inverter	2	3			
Ac Max Conduit Size	2 ½"				in
Max AWG Line / PE	4/0 / 1/0				
DC Max Conduit Size	1 x 3"; 2 x 2"				in
DC Input Inverter/ Synergy Unit	8 / 4 pairs; 6-12 AWG	12 / 4 pairs; 6-12 AWG			
	2 pairs / 1 pair, Max 2 AWG; copper or aluminum	3 pairs / 1 pair, Max 2 AWG; copper or aluminum			
Dimensions (H x W x D)	Synergy Unit: 22 x 12.9 x 10.75 / 558 x 328 x 273 Synergy Manager: 14.17 x 22.4 x 11.6 / 360 x 560 x 295				in / mm
Weight	Synergy Unit: 70.4 / 32 Synergy Manager: 39.6 / 18				lb / kg
Operating Temperature Range	-40 to +140 / -40 to +60(4)				°F / °C
Cooling	Fan (user replaceable)				
Noise	< 67				dBA
Protection Rating	NEMA 3R				
Mounting	Brackets provided				

(4) For power de-rating information refer to the Temperature De-rating - Technical Note (North America).

Q.PEAK DUO XL-G11S SERIES

qcells

580-595 Wp | 156 Cells
21.3 % Maximum Module Efficiency

MODEL Q.PEAK DUO XL-G11S.3 / BFG

Bifacial energy yield gain of up to 21%
Bifacial Q.ANTUM solar cells make efficient use of light shining on the module rear-side for radically improved LCOE.

Low electricity generation costs
Q.ANTUM DUO technology with optimized module layout to boost module power and improve LCOE.

A reliable investment
Double glass module design enables extended lifetime with 12-year product warranty and improved 30-year performance warranty[1].

Enduring high performance
Long-term yield security with Anti LID and Anti PID Technology[2], Hot-Spot Protect.

Frame for versatile mounting options
High-tech aluminum alloy frame protects from damage, enables use of a wide range of mounting structures and is certified regarding IEC for high snow (5400 Pa) and wind loads (2400 Pa).

Innovative all-weather technology
Optimal yields, whatever the weather with excellent low-light and temperature behavior.

[1] See data sheet on rear for further information.
[2] APT test conditions according to IEC/TS 62804-1:2015 method B (-1500V, 168h) including post treatment according to IEC 61215-1-1 Ed. 2.0 (CD)

The ideal solution for:
Ground-mounted solar power plants

/ Power Optimizer

For North America

P1101

Power Optimizer Model (Typical Module Compatibility)		P1101 (for up to 2 x high power or bi-facial modules)	Units
INPUT			
Rated Input DC Power(1)		1100	W
Connection Method		Single input for series connected modules	
Absolute Maximum Input Voltage (Voc at lowest temperature)		125	Vdc
MPPT Operating Range		12.5 – 105	Vdc
Maximum Short Circuit Current (Isc)		14.1	Adc
Maximum Short Circuit Current per Input (Isc)		-	Adc
Maximum Efficiency		99.5	%
Weighted Efficiency		98.6	%
Overvoltage Category		II	
OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREDGE INVERTER)			
Maximum Output Current		18	Adc
Maximum Output Voltage		80	Vdc
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREDGE INVERTER OR SOLAREDGE INVERTER OFF)			
Safety Output Voltage per Power Optimizer		1 ± 0.1	Vdc
STANDARD COMPLIANCE			
Photovoltaic Rapid Shutdown System		Compliant with NEC 2014, 2017, 2020	
EMC		FCC Part 15 Class A, IEC61000-6-2, IEC61000-6-3	
Safety		IEC62109-1 (class II safety), UL1741, UL3741, CSA C22.2#107.1	
Material		UL94 V-0, UV resistant	
RoHS		Yes	
INSTALLATION SPECIFICATIONS			
Compatible SolarEdge Inverters		All commercial three phase inverters	
Maximum Allowed System Voltage		1000	Vdc
Dimensions (W x L x H)		129 x 162 x 59 / 5.1 x 6.4 x 2.32	mm / in
Weight		1064 / 2.34	gr / lb
Input Connector		MC4(2)	
Input Wire Length Options	1	1.6 / 5.2	m / ft
	2		
	3		
Output Wire Type / Connector		Double insulated; MC4	
Output Wire Length		2.4 / 7.8	m / ft
Operating Temperature Range(3)		-40 to +85 / -40 to +185	°C / °F
Protection Rating		IP68 / NEMA6P	
Relative Humidity		0 – 100	%

(1) Rated power of the module at STC will not exceed the Power Optimizer "Rated Input DC Power". Modules with up to +5% power tolerance are allowed.
(2) For other connector types please refer to the Power Optimizer Input Connector Compatibility Technical Note.
(3) For ambient temperatures above +70°C / +158°F power de-rating is applied. Refer to Power Optimizers De-Rating Application Note for more details.

PV System Design Using a SolarEdge Inverter(4)(5)		208V Grid SE10K	208V Grid SE17.3K*	277/480V Grid SE30K	277/480V Grid SE40K*	
Compatible Power Optimizers		P1101				
Minimum String Length	Power Optimizers	8	10	14	14	
	PV Modules	15	19	27	27	
Maximum String Length	Power Optimizers	30	30	30	30	
	PV Modules	60	60	60	60	
Maximum Continuous Power per String		7200	8820	15300	15300	W
Maximum Allowed Connected Power per String(6)		1 string – 8400	1 string – 10020	1 string – 17550	2 strings or less – 17550	W
		2 strings or more – 9800	2 strings or more – 12020	2 strings or more – 20300	3 strings or more – 20300	
Parallel Strings of Different Lengths or Orientations		Yes				
Maximum Difference in Number of Power Optimizers Allowed Between the Shortest and Longest String Connected to the Same Inverter Unit		5 Power Optimizers				

* The same rules apply for Synergy units of equivalent power ratings, that are part of the modular Synergy Technology inverter.
(4) For each string, a Power Optimizer may be connected to a single PV module if 1) each Power Optimizer is connected to a single PV module or 2) it is the only Power Optimizer connected to a single PV module in the string.
(5) Design with three phase 208V inverters is limited. Use the SolarEdge Designer for verification.
(6) To connect more STC power per string, design your project using SolarEdge Designer.

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RoHS Intertek

/ Three Phase Inverter with Synergy Technology

For the 277/480V Grid for North America

SE80KUS / SE100KUS / SE110KUS / SE120KUS

MODEL NUMBER	SE80KUS	SE100KUS	SE110KUS	SE120KUS	
APPLICABLE TO INVERTERS WITH PART NUMBER	SExxK-USx8Ixxxx				UNITS
OUTPUT					
Rated AC Active Output Power	80000	100000	110000	120000	W
Maximum AC Apparent Output Power	80000	100000	120000	120000	VA
AC Output Line Connections	3W + PE, 4W + PE				
Supported Grids	WYE: TN-C, TN-S, TN-C-S, TT, IT; Delta: IT				
AC Output Voltage Minimum-Nominal-Maximum(1) (L-N)	244 – 277 – 305				Vac
AC Output Voltage Minimum-Nominal-Maximum(1) (L-L)	422.5 – 480 – 529				Vac
AC Frequency Min-Nom-Max(1)	59.5 – 60 – 60.5				Hz
Maximum Continuous Output Current (per Phase, PF=1)	96.5	120	144.3		Aac
GFDI Threshold	1				A
Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds	Yes				
Total Harmonic Distortion	≤ 3				%
Power Factor Range	+/-0.2 to 1				
INPUT					
Maximum DC Power (Module STC) Inverter / Synergy Unit	140000 / 70000	175000 / 58300	210000 / 70000		W
Transformer-less, Ungrounded	Yes				
Maximum Input Voltage DC+ to DC-	1000				Vdc
Operating Voltage Range	850 – 1000				Vdc
Maximum Input Current	2 x 48.25	3 x 40	3 x 48.25		Adc
Reverse-Polarity Protection	Yes				
Ground-Fault Isolation Detection	167kΩ sensitivity per Synergy Unit(2)				
CEC Weighted Efficiency	98.5				%
Nighttime Power Consumption	< 8	< 12			W
ADDITIONAL FEATURES					
Supported Communication Interfaces(3)	2 x RS485, Ethernet, Wi-Fi (optional), Cellular (optional)				
Smart Energy Management	Export Limitation				
Inverter Commissioning	With the SetApp mobile application using built-in Wi-Fi access point for local connection				
Arc Fault Protection	Built-in, User Configurable (According to UL1699B)				
Photovoltaic Rapid Shutdown System	EC 2014, 2017 and 2020, Built-in				
PID Rectifier	Nighttime, built-in				
RS485 Surge Protection (ports 1+2)	Type II, field replaceable, integrated				
AC, DC Surge Protection	Type II, field replaceable, integrated				
DC Fuses (Single Pole)	25A, integrated				
DC SAFETY SWITCH					
DC Disconnect	Built-in				
STANDARD COMPLIANCE					
Safety	UL1699B, UL1741, UL1741 SA, UL1741 SB, UL1998, CSA C22.2#107.1, Canadian AFCI according to T.I.L. M-07				
Grid Connection Standards	IEEE 1547-2018, Rule 21, Rule 14 (HI)				
Emissions	FCC part 15 class A				

(1) For other regional settings please contact SolarEdge support.
(2) Where permitted by local regulations.
(3) For specifications of the optional communication options, visit the Communication product page or the Resource Library to download the relevant product datasheet.

SolarEdge is a global leader in smart energy technology. By leveraging world-class engineering capabilities and with a relentless focus on innovation, SolarEdge creates smart energy solutions that power our lives and drive future progress.

SolarEdge developed an intelligent inverter solution that changed the way power is harvested and managed in photovoltaic (PV) systems. The SolarEdge DC optimized inverter maximizes power generation while lowering the cost of energy produced by the PV system.

Continuing to advance smart energy, SolarEdge addresses a broad range of energy market segments through its PV, storage, EV charging, UPS, and grid services solutions.

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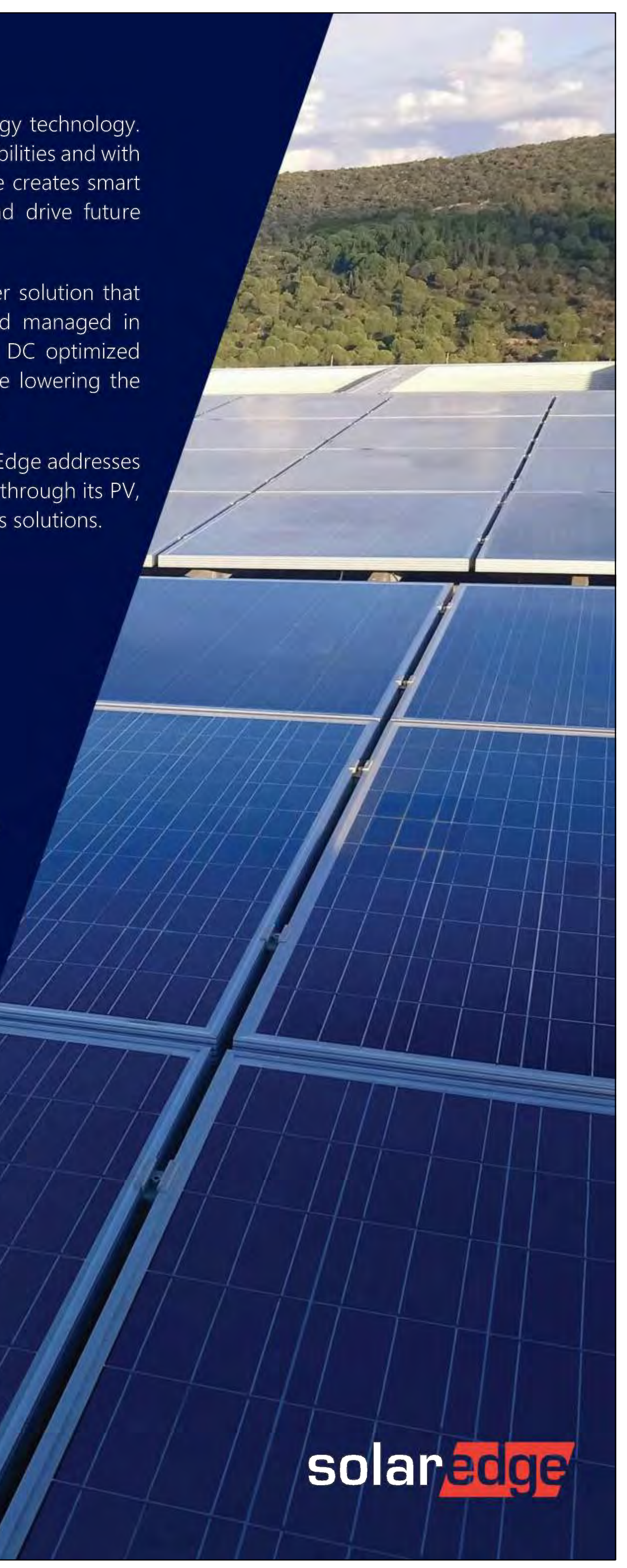
Cautionary Note Regarding Market Data and Industry Forecasts: This brochure may contain market data and industry forecasts from certain third-party sources. This information is based on industry surveys and the preparer's expertise in the industry and there can be no assurance that any such market data is accurate or that any such industry forecasts will be achieved. Although we have not independently verified the accuracy of such market data and industry forecasts, we believe that the market data is reliable and that the industry forecasts are reasonable.

CE

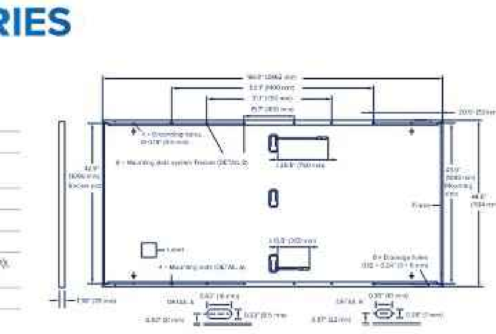


solaredge

Q.PEAK DUO XL-G11S SERIES

Mechanical Specification

Format	96.9 in × 44.6 in × 1.38 in (including frame) (2462 mm × 1134 mm × 35 mm)
Weight	76.9 lbs (34.9 kg)
Front Cover	0.08 in (2.0 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	0.08 in (2.0 mm) semi-tempered glass
Frame	Anodised aluminium
Cell	6 × 26 monocrystalline Q.ANTUM solar half cells
Junction box	2.09-3.98 × 1.26-2.36 × 0.59-0.71 in (53-101 mm × 32-60 mm × 15-18 mm), Protection class IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥ 29.5 in (750 mm), (-) ≥ 13.8 in (350 mm)
Connector	Stäubli MC4; Stäubli MC4-Evo2; - IP68



Electrical Characteristics

POWER CLASS			580		585		590		595	
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC[1] (POWER TOLERANCE +5 W / -0 W)				BSTC*		BSTC*		BSTC*		BSTC*
Power at MPP[1]	P_{MPP}	[W]	580	634.4	585	639.9	590	645.4	595	650.8
Short Circuit Current[1]	I_{SC}	[A]	13.69	14.99	13.72	15.01	13.74	15.04	13.77	15.07
Open Circuit Voltage[1]	V_{OC}	[V]	53.55	53.74	53.57	53.76	53.60	53.79	53.63	53.82
Current at MPP	I_{MPP}	[A]	13.03	14.25	13.07	14.30	13.12	14.36	13.17	14.41
Voltage at MPP	V_{MPP}	[V]	44.53	44.52	44.75	44.74	44.96	44.95	45.18	45.17
Efficiency[1]	η	[%]	≥20.8		≥21.0		≥21.1		≥21.3	

Bifaciality of P_{MPP} and I_{SC} 70% ± 5% • Bifaciality given for rear side irradiation on top of STC (front side) • According to IEC 60904-1-2
[1] Measurement tolerances P_{MPP} ± 3%; I_{SC}, V_{OC} ± 5% at STC: 1000 W/m²; *at BSTC: 1000 W/m² + φ × 135 W/m², φ = 70% ± 5%, 25 ± 2 °C, AM 1.5 according to IEC 60904-3

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT[2]			580	585	590	595
Power at MPP	P_{MPP}	[W]	436.7	440.5	444.2	448.0
Short Circuit Current	I_{SC}	[A]	11.03	11.05	11.07	11.09
Open Circuit Voltage	V_{OC}	[V]	50.64	50.67	50.69	50.72
Current at MPP	I_{MPP}	[A]	10.25	10.30	10.34	10.38
Voltage at MPP	V_{MPP}	[V]	42.60	42.79	42.97	43.15

[1] Measurement tolerances P_{MPP} ± 3%; I_{SC}, V_{OC} ± 5% at STC: 1000 W/m², 25 ± 2 °C, AM 1.5 according to IEC 60904-3 • [2] 800 W/m², NMOT, spectrum AM 1.5

Qcells PERFORMANCE WARRANTY

At least 98% of nominal power during first year. Thereafter max. 0.45% degradation per year. At least 93.95% of nominal power up to 10 years. At least 84.95% of nominal power up to 30 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Qcells sales organisation of your respective country.

*Standard terms of guarantee for the 5 PV companies with the highest production capacity in 2021 (February 2021)

PERFORMANCE AT LOW IRRADIANCE

Typical module performance under low irradiance conditions in comparison to STC conditions (25 °C, 1000 W/m²).

TEMPERATURE COEFFICIENTS							
Temperature Coefficient of I_{SC}	α	[%/K]	+0.04	Temperature Coefficient of V_{OC}	β	[%/K]	-0.27
Temperature Coefficient of P_{MPP}	γ	[%/K]	-0.34	Nominal Module Operating Temperature	NMOT	[°F]	108 ± 5.4 (42 ± 3 °C)

Properties for System Design

Maximum System Voltage V_{SYS}	[V]	1500	PV module classification		Class II
Maximum Series Fuse Rating	[A DC]	25	Fire Rating based on ANSI / UL 61730		TYPE 29[1]
Max. Design Load, Push / Pull[3]	[lbs/ft²]	75 (3600 Pa) / 33 (1600 Pa)	Permitted Module Temperature on Continuous Duty		-40 °F up to +185 °F (-40 °C up to +85 °C)
Max. Test Load, Push / Pull[3]	[lbs/ft²]	113 (5400 Pa) / 50 (2400 Pa)			

[3] See Installation Manual
[1] New Type is similar to Type 3 but with metallic frame

Qualifications and Certificates

UL 61730, CE-compliant, IEC 61215:2016, IEC 61730:2016, U.S. Patent No. 9,893,215 (solar cells)

Qcells pursues minimizing paper output in consideration of the global environment.

Note: Installation instructions must be followed. Contact our technical service for further information on approved installation of this product.
Hanwha Q CELLS America Inc. 400 Spectrum Center Drive, Suite 1400, Irvine, CA 92618, USA | TEL +1 949 748 59 96 | EMAIL hqc-inquiry@qcells.com | WEB www.qcells.com

qcells

DATE	REVISION DESCRIPTION	PM	ENG	CHK
05/19/2023	ISSUE FOR PERMIT	TL	AM	MD
05/05/2023	CONCEPTUAL DESIGN	TL	AM	TL
04/03/2023	IC DOCS – REV2	TL	KM	TL
10/18/2022	IC DOCS – REV1	BA	AM	MD

PUREPOWER ENGINEERING
111 RIVER STREET, HOBOKEN, NJ
WWW.PUREPOWER.COM
RICHARD A. IVINS
CA LICENSE No. 20357

ENGINEER

DEVELOPER
powerflex EDF Renewables
POWERFLEX
805 THIRD AVENUE 20TH FLOOR
NEW YORK, NY 10022
WWW.POWERFLEX.COM

PAGE SIZE 36" x 24"
PROJECT # 04862.01

DC SYSTEM SIZE: 7,139.925 kWDC
AC SYSTEM SIZE: 4,800.000 kWAC
MODULE TYPE: HANWHA Q.PEAK DUO XL 585W
MODULE QUANTITY: 12,205
ORIENTATION: 10° TILT, 239° AZIMUTH

PROJECT
SOLAR ROOFTOP SYSTEM AT
UNFI RIVERSIDE
14950 MERIDIAN PKWY
RIVERSIDE, CA 92518

DRAWING TITLE
EQUIPMENT DATA SHEETS

DRAWING #
E600

RULER IN INCHES:

Solar Glare Hazard Analysis & Report

Property Representative/Client: United Natural Foods, Inc.

Applicant/Solar Developer: PowerFlex Systems, LLC

Project Location: 14900 Meridian Parkway, Riverside, CA 92058

Project #: **ZAP1575MA23**

Date: June 12, 2023

Results

The Solar Glare Hazard Analysis of the proposed project **passes** the FAA's recommended solar glare parameters and **passes** the additional parameters required by the March ARB and RC ALUC, as detailed in Exhibit 1.

Introduction

PowerFlex Systems, LLC is proposing a rooftop solar project at a United Natural Foods Inc (UNFI) distribution center located at 14900 Meridian Parkway, Riverside, CA 92058 (Figure 1). The proposed solar PV system is northwest of I-215 and approximately 1.5 miles northwest of March Air Reserve Base (March ARB). PowerFlex has prepared this solar glare analysis report to address potential solar glare hazard that may occur due to the proposed rooftop solar project. This report evaluates the solar glare potential due to the project's proximity to March ARB and Highway US I-215. This report is intended for review and acceptance by the City, Riverside County Airport Land Use Commission (RC ALUC) and March ARB.

Figure 1 – Project Location

powerflex
EDF Renewables

Project Description

PowerFlex Systems, LLC is proposing a rooftop solar project at the Project Location indicated in Figure 1. The total UNFI distribution center roof area is approximately 1.2 million square feet. The proposed solar PV installation is split between a North Subarray and South Subarray (Figure 2) and covers approximately 720,250 square feet of the UNFI distribution center roof area.

FIGURE 2 – NORTH AND SOUTH SUBARRAY LOCATION

Analysis

This analysis considers the Federal Aviation Administration's (FAA) 2013 Interim Policy and 2021 Final Policy. This analysis is completed using ForgeSolar's Glare Analysis tool, which is a licensed Solar Glare Hazard Assessment Tool (SGHAT). This analysis follows the FAA standards for runway final approach paths and air traffic control towers (ATCT) as well as the March ARB and RC ALUC's air traffic patterns for the two runways located at the March Air Reserve Base. Glare Study reports are provided in Exhibit 1 for each of the required studies by the March ARB and RC ALUC:

- FAA 2013 Policy for ATCT and final approach flight paths (Exhibit 1.A)
- FAA 2021 Policy for ATCT and final approach flight paths (Exhibit 1.B)
- RWY 12/30 GA Traffic Pattern (Exhibit 1.C)
- RWY 14/32 GA Traffic Pattern (Exhibit 1.D)
- RWY 14/32 C-17 & KC-135 Traffic Pattern (Exhibit 1.E)
- RWY 14/32 Overhead Traffic Pattern (Exhibit 1.F)

EXHIBIT 1.A

FORGESOLAR GLARE ANALYSIS

Project: **UNFI - Riverside CA**
Rooftop Only- 7MWdc/ 5WWac

Site configuration: **UNFI - Riverside CA Final Approaches**
Analysis conducted by Peter Liang (peter.liang@powerflex.com) at 20:04 on 02 Jun, 2023.

U.S. FAA 2013 Policy Adherence

The following table summarizes the policy adherence of the glare analysis based on the 2013 U.S. Federal Aviation Administration Interim Policy 78 FR 63276. This policy requires the following criteria be met for solar energy systems on airport property:

- No "yellow" glare (potential for after-image) for any flight path from threshold to 2 miles
- No glare of any kind for Air Traffic Control Tower(s) ("ATCT") at cab height.
- Default analysis and observer characteristics (see list below)

ForgeSolar does not represent or speak officially for the FAA and cannot approve or deny projects. Results are informational only.

COMPONENT	STATUS	DESCRIPTION
Analysis parameters	PASS	Analysis time interval and eye characteristics used are acceptable
2-mile flight path(s)	PASS	Flight path receptor(s) do not receive yellow glare
ATCT(s)	PASS	Receptor(s) marked as ATCT do not receive glare

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

FAA Policy 78 FR 63276 can be read at https://www.federalregister.gov/d/2013-24729

SITE CONFIGURATION

Analysis Parameters

DNI: peaks at 1,000.0 W/m^2
Time interval: 1 min
Ocular transmission coefficient: 0.5
Pupil diameter: 0.002 m
Eye focal length: 0.017 m
Sun subtended angle: 9.3 mrad
Site Config ID: 92053.15434
Methodology: V2

PV Array(s)

Name: PV - North Subarray
Axis tracking: Fixed (no rotation)
Tilt: 10.0°
Orientation: 239.5°
Rated power: 3439.4 kW
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.901889	-117.282761	1571.28	40.00	1611.28
2	33.902493	-117.281537	1571.50	40.00	1611.50
3	33.902248	-117.281364	1567.92	40.00	1607.92
4	33.902248	-117.281364	1567.92	40.00	1607.92
5	33.902248	-117.281364	1567.92	40.00	1607.92
6	33.902248	-117.281364	1567.92	40.00	1607.92
7	33.902248	-117.281364	1567.92	40.00	1607.92
8	33.902248	-117.281364	1567.92	40.00	1607.92
9	33.902248	-117.281364	1567.92	40.00	1607.92
10	33.902198	-117.281464	1568.11	40.00	1608.11
11	33.902198	-117.281464	1568.11	40.00	1608.11
12	33.902198	-117.281464	1568.11	40.00	1608.11
13	33.902198	-117.281464	1568.11	40.00	1608.11
14	33.902198	-117.281464	1568.11	40.00	1608.11
15	33.902198	-117.281464	1568.11	40.00	1608.11
16	33.902198	-117.281464	1568.11	40.00	1608.11
17	33.900439	-117.280205	1566.01	40.00	1606.01
18	33.899880	-117.281331	1564.49	40.00	1604.49

Name: PV - South Subarray
Axis tracking: Fixed (no rotation)
Tilt: 10.0°
Orientation: 239.5°
Rated power: 3556.9 kW
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.897846	-117.279884	1563.89	40.00	1603.89
2	33.898454	-117.278648	1560.86	40.00	1600.86
3	33.896573	-117.277311	1559.14	40.00	1599.14
4	33.895956	-117.278536	1555.09	40.00	1595.09

Flight Path Receptor(s)

Name: RWY 12 Final
Description: None
Threshold height: 50 ft
Direction: 135.0°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°

Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.890258	-117.260681	1500.00	50.00	1550.00
Two-mile	33.898508	-117.270608	1500.00	1300.00	2800.00

Name: RWY 14 Final
Description: None
Threshold height: 50 ft
Direction: 149.5°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°

Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.896431	-117.270636	1500.00	50.00	1550.00
Two-mile	33.906486	-117.277783	1500.00	1500.00	3000.00

Name: RWY 30 Final
Description: None
Threshold height: 50 ft
Direction: 315.0°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°

Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.884319	-117.253536	1500.00	50.00	1550.00
Two-mile	33.876069	-117.243611	1500.00	1300.00	2800.00

Name: RWY 32 Final
Description: None
Threshold height: 50 ft
Direction: 329.5°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°

Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.864994	-117.248281	1500.00	50.00	1550.00
Two-mile	33.854942	-117.241136	1500.00	1500.00	3000.00

Discrete Observation Receptors

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
1-ATCT	1	33.891572	-117.251203	1511.00	118.00

Map image of 1-ATCT

GLARE ANALYSIS RESULTS

Summary of Glare

PV Array Name	Tilt (°)	Orient (°)	"Green" Glare min	"Yellow" Glare min	Energy kWh
PV - North Subarray	10.0	239.5	0	0	7,364,000.0
PV - South Subarray	10.0	239.5	0	0	7,615,000.0

Total annual glare received by each receptor

Receptor	Annual Green Glare (min)	Annual Yellow Glare (min)
RWY 12 Final	0	0
RWY 14 Final	0	0
RWY 30 Final	0	0
RWY 32 Final	0	0
1-ATCT	0	0

Results for: PV - North Subarray

Receptor	Green Glare (min)	Yellow Glare (min)
RWY 12 Final	0	0
RWY 14 Final	0	0
RWY 30 Final	0	0
RWY 32 Final	0	0
1-ATCT	0	0

Flight Path: RWY 12 Final

0 minutes of yellow glare
0 minutes of green glare

Flight Path: RWY 14 Final

0 minutes of yellow glare
0 minutes of green glare

Flight Path: RWY 30 Final

0 minutes of yellow glare
0 minutes of green glare

Flight Path: RWY 32 Final

0 minutes of yellow glare
0 minutes of green glare

Point Receptor: 1-ATCT

0 minutes of yellow glare
0 minutes of green glare

Results for: PV - South Subarray

Receptor	Green Glare (min)	Yellow Glare (min)
RWY 12 Final	0	0
RWY 14 Final	0	0
RWY 30 Final	0	0
RWY 32 Final	0	0
1-ATCT	0	0

Flight Path: RWY 12 Final

0 minutes of yellow glare
0 minutes of green glare

Flight Path: RWY 14 Final

0 minutes of yellow glare
0 minutes of green glare

Flight Path: RWY 30 Final

0 minutes of yellow glare
0 minutes of green glare

Flight Path: RWY 32 Final

0 minutes of yellow glare
0 minutes of green glare

Point Receptor: 1-ATCT

0 minutes of yellow glare
0 minutes of green glare

Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions.
Several calculations utilize the PV array centroid, rather than the actual glare spot location, due to V1 algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual results and glare occurrence may differ.
Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
Refer to the Help page at **www.forgesolar.com/help/** for assumptions and limitations not listed here.

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EXHIBIT 1.B

FORGESOLAR GLARE ANALYSIS

Project: **UNFI - Riverside CA**
Rooftop Only- 7MWdc/ 5WWac

Site configuration: **UNFI - Riverside CA Final Approaches**

Created 02 Jun, 2023
Updated 02 Jun, 2023
Time-step 1 minute
Timezone offset UTC-7
Minimum sun altitude 0.0 deg
DNI peaks at 1,000.0 W/m^2
Site ID 92053.15434

Ocular transmission coefficient 0.5
Pupil diameter 0.002 m
Eye focal length 0.017 m
Sun subtended angle 9.3 mrad
PV analysis methodology V2

Glare Policy Adherence

The following table estimates the policy adherence of this glare analysis according to the **2021** U.S. Federal Aviation Administration Policy:

Review of Solar Energy System Projects on Federally-Obligated Airports

This policy may require the following criteria be met for solar energy systems on airport property:

- No glare of any kind for Air Traffic Control Tower(s) ("ATCT") at cab height.
- Default analysis and observer characteristics, including 1-minute time step.

ForgeSolar is not affiliated with the U.S. FAA and does not represent or speak officially for the U.S. FAA. ForgeSolar cannot approve or deny projects - results are informational only. Contact the relevant airport and FAA district office for information on policy and requirements.

COMPONENT	STATUS	DESCRIPTION
Analysis parameters	PASS	Analysis time interval and eye characteristics used are acceptable
ATCT(s)	PASS	Receptor(s) marked as ATCT do not receive glare

The referenced policy can be read at https://www.federalregister.gov/d/2021-09862

Component Data

This report includes results for PV arrays and Observation Point ("OP") receptors marked as ATCTs. Components that are not pertinent to the policy, such as routes, flight paths, and vertical surfaces, are excluded.

PV Arrays

Name: PV - North Subarray
Axis tracking: Fixed (no rotation)
Tilt: 10.0°
Orientation: 239.5°
Rated power: 3439.4 kW
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.901889	-117.282761	1571.28	40.00	1611.28
2	33.902493	-117.281537	1571.50	40.00	1611.50
3	33.902248	-117.281364	1567.92	40.00	1607.92
4	33.902248	-117.281364	1567.92	40.00	1607.92
5	33.902248	-117.281364	1567.92	40.00	1607.92
6	33.902248	-117.281364	1567.92	40.00	1607.92
7	33.902248	-117.281364	1567.92	40.00	1607.92
8	33.902248	-117.281364	1567.92	40.00	1607.92
9	33.902248	-117.281364	1567.92	40.00	1607.92
10	33.902198	-117.281464	1568.11	40.00	1608.11
11	33.902198	-117.281464	1568.11	40.00	1608.11
12	33.902198	-117.281464	1568.11	40.00	1608.11
13	33.902198	-117.281464	1568.11	40.00	1608.11
14	33.902198	-117.281464	1568.11	40.00	1608.11
15	33.902198	-117.281464	1568.11	40.00	1608.11
16	33.902198	-117.281464	1568.11	40.00	1608.11
17	33.900439	-117.280205	1566.01	40.00	1606.01
18	33.899880	-117.281331	1564.49	40.00	1604.49

Name: PV - South Subarray
Axis tracking: Fixed (no rotation)
Tilt: 10.0°
Orientation: 239.5°
Rated power: 3556.9 kW
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.897846	-117.279884	1563.89	40.00	1603.89
2	33.898454	-117.278648	1560.86	40.00	1600.86
3	33.896573	-117.277311	1559.14	40.00	1599.14
4	33.895956	-117.278536	1555.09	40.00	1595.09

Observation Point ATCT Receptors

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
1-ATCT	1	33.891572	-117.251203	1511.00	118.00

Map image of 1-ATCT

Glare Analysis Results

Summary of Results No glare predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
PV - North Subarray	10.0	239.5	0	0.0	0	0.0	7,364,000.0
PV - South Subarray	10.0	239.5	0	0.0	0	0.0	7,615,000.0

Total annual glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
1-ATCT	0	0.0	0	0.0

PV: PV - North Subarray

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
1-ATCT	0	0.0	0	0.0

PV - North Subarray and 1-ATCT

Receptor type: ATCT Observation Point
No glare found

PV: PV - South Subarray

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
1-ATCT	0	0.0	0	0.0

PV - South Subarray and 1-ATCT

Receptor type: ATCT Observation Point
No glare found

Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
The algorithm does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results. However, we have validated our models against several systems, including a PV array causing glare to the air-traffic control tower at Manchester-Boston Regional Airport and several sites in Albuquerque, and the tool accurately predicted the occurrence and intensity of glare at different times and days of the year.
Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare. This primarily affects V1 analyses of path receptors.
Random number computations are utilized by various steps of the annual hazard analysis algorithm. Predicted minutes of glare can vary between runs as a result. This limitation primarily affects analyses of Observation Point receptors, including ATCTs. Note that the SGHAT/ ForgeSolar methodology has always relied on an analytical, qualitative approach to accurately determine the overall hazard (i.e. green vs. yellow) of expected glare on an annual basis.
The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.
The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
The variable direct normal irradiance (DNI) feature (if selected) scales the user-prescribed peak DNI using a typical clear-day irradiance profile. This profile has a lower DNI in the mornings and evenings and a maximum at solar noon. The scaling uses a clear-day irradiance profile based on a normalized time relative to sunrise, solar noon, and sunset, which are prescribed by a sun-position algorithm and the latitude and longitude obtained from Google maps. The actual DNI on any given day can be affected by cloud cover, atmospheric attenuation, and other environmental factors.
The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.
The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
Refer to the Help page at **www.forgesolar.com/help/** for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

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EXHIBIT 1.C

FORGESOLAR GLARE ANALYSIS

Project: **UNFI - Riverside CA**
Rooftop Only- 7MWdc/ 5WWac

Site configuration: **UNFI - Riverside CA Runway 12-30 GA Analysis**

Created 02 Jun, 2023
Updated 02 Jun, 2023
Time-step 1 minute
Timezone offset UTC-7
Minimum sun altitude 0.0 deg
DNI peaks at 1,000.0 W/m^2
Category 5 MW to 10 MW
Site ID 92065.15434

Ocular transmission coefficient 0.5
Pupil diameter 0.002 m
Eye focal length 0.017 m
Sun subtended angle 9.3 mrad
PV analysis methodology V2

Summary of Results

Glare with low potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
PV - North Subarray	10.0	239.5	8,521	142.0	0	0.0	7,364,000.0
PV - South Subarray	10.0	239.5	4,306	71.8	0	0.0	7,615,000.0

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 12 GA Pattern Route	1,425	23.8	0	0.0
RWY 30 GA Pattern Route	11,402	190.0	0	0.0
RWY 12 Final	0	0.0	0	0.0
RWY 30 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

Component Data

PV Arrays

Name: PV - North Subarray
Axis tracking: Fixed (no rotation)
Tilt: 10.0°
Orientation: 239.5°
Rated power: 3439.4 kW
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.901889	-117.282761	1571.28	40.00	1611.28
2	33.902493	-117.281537	1571.50	40.00	1611.50
3	33.902248	-117.281364	1567.92	40.00	1607.92
4	33.902248	-117.281364	1567.92	40.00	1607.92
5	33.902248	-117.281364	1567.92	40.00	1607.92
6	33.902248	-117.281364	1567.92	40.00	1607.92
7	33.902248	-117.281364	1567.92	40.00	1607.92
8	33.902248	-117.281364	1567.92	40.00	1607.92
9	33.902248	-117.281364	1567.92	40.00	1607.92
10	33.902198	-117.281464	1568.11	40.00	1608.11
11	33.902198	-117.281464	1568.11	40.00	1608.11
12	33.902198	-117.281464	1568.11	40.00	1608.11
13	33.902198	-117.281464	1568.11	40.00	1608.11
14	33.902198	-117.281464	1568.11	40.00	1608.11
15	33.902198	-117.281464	1568.11	40.00	1608.11
16	33.902198	-117.281464	1568.11	40.00	1608.11
17	33.900439	-117.280205	1566.01	40.00	1606.01
18	33.899880	-117.281331	1564.49	40.00	1604.49

Name: PV - South Subarray
Axis tracking: Fixed (no rotation)
Tilt: 10.0°
Orientation: 239.5°
Rated power: 3556.9 kW
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.897846	-117.279884	1563.89	40.00	1603.89
2	33.898454	-117.278648	1560.86	40.00	1600.86
3	33.896573	-117.277311	1559.14	40.00	1599.14
4	33.895956	-117.278536	1555.09	40.00	1595.09

Route Receptors

Name: RWY 12 GA Pattern Route
Path type: One-way (toward increasing index)
Observer view angle: 50.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.884319	-117.253536	1500.00	50.00	1550.00
2	33.876069	-117.243611	1500.00	1300.00	2800.00
3	33.876081	-117.235119	1500.00	1300.00	2800.00
4	33.880814	-117.229467	1500.00	1300.00	2800.00
5	33.887897	-117.229483	1500.00	1300.00	2800.00
6	33.910333	-117.256469	1500.00	1300.00	2800.00
7	33.910322	-117.264967	1500.00	1300.00	2800.00
8	33.905592	-117.270622	1500.00	1300.00	2800.00
9	33.898508	-117.270608	1500.00	1300.00	2800.00
10	33.890258	-117.260681	1500.00	50.00	1550.00

Name: RWY 30 GA Pattern Route
Path type: One-way (toward increasing index)
Observer view angle: 50.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.890258	-117.260681	1500.00	50.00	1550.00
2	33.898508	-117.270608	1500.00	1300.00	2800.00
3	33.905592	-117.270622	1500.00	1300.00	2800.00
4	33.910322	-117.264967	1500.00	1300.00	2800.00
5	33.910333	-117.256469	1500.00	1300.00	2800.00
6	33.887897	-117.229483	1500.00	1300.00	2800.00
7	33.880814	-117.229467	1500.00	1300.00	2800.00
8	33.876081	-117.235119	1500.00	1300.00	2800.00
9	33.876069	-117.243611	1500.00	1300.00	2800.00
10	33.884319	-117.253536	1500.00	50.00	1550.00

Flight Path Receptors

Name: RWY 12 Final
Description: None
Threshold height: 50 ft
Direction: 135.0°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°

Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.890258	-117.260681	1500.00	50.00	1550.00
Two-mile	33.898508	-117.270608	1500.00	1300.00	2800.00

Name: RWY 30 Final
Description: None
Threshold height: 50 ft
Direction: 315.0°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°

Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.884319	-117.253536	1500.00	50.00	1550.00
Two-mile	33.876069	-117.243611	1500.00	1300.00	2800.00

Discrete Observation Point Receptors

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
1-ATCT	1	33.891572	-117.251203	1511.00	118.00

Map image of 1-ATCT

Glare Analysis Results

Summary of Results

Glare with low potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
PV - North Subarray	10.0	239.5	8,521	142.0	0	0.0	7,364,000.0
PV - South Subarray	10.0	239.5	4,306	71.8	0	0.0	7,615,000.0

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 12 GA Pattern Route	1,425	23.8	0	0.0
RWY 30 GA Pattern Route	11,402	190.0	0	0.0
RWY 12 Final	0	0.0	0	0.0
RWY 30 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

PV: PV - North Subarray

low potential for temporary after-image

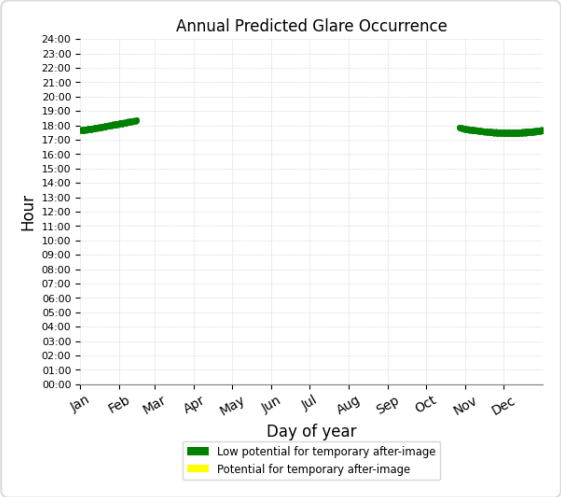
Receptor results ordered by category of glare

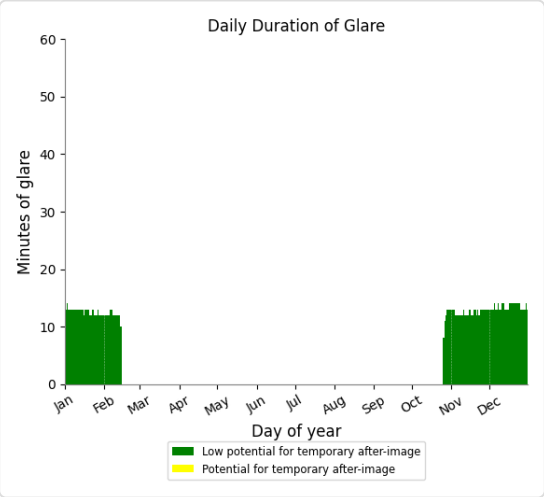
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 12 GA Pattern Route	1,425	23.8	0	0.0
RWY 30 GA Pattern Route	7,096	118.3	0	0.0
RWY 12 Final	0	0.0	0	0.0
RWY 30 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

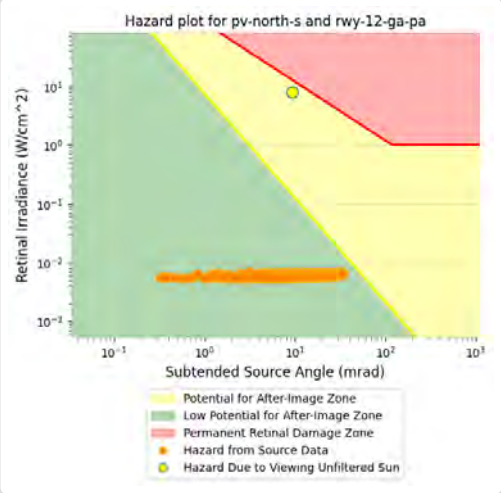
PV - North Subarray and Route: RWY 12 GA Pattern Route

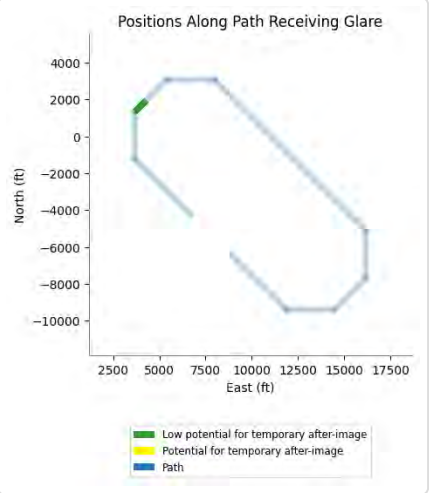
Yellow glare: none

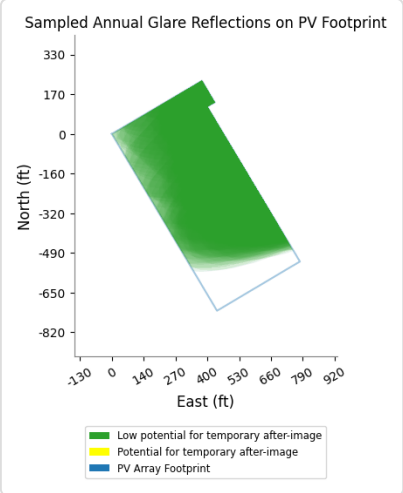
Green glare: 1,425 min.







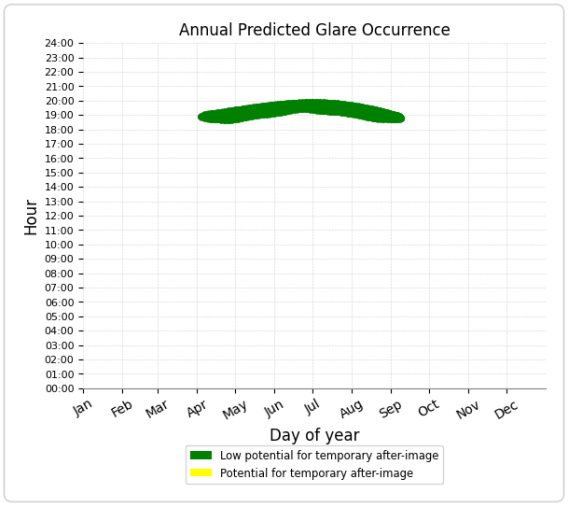


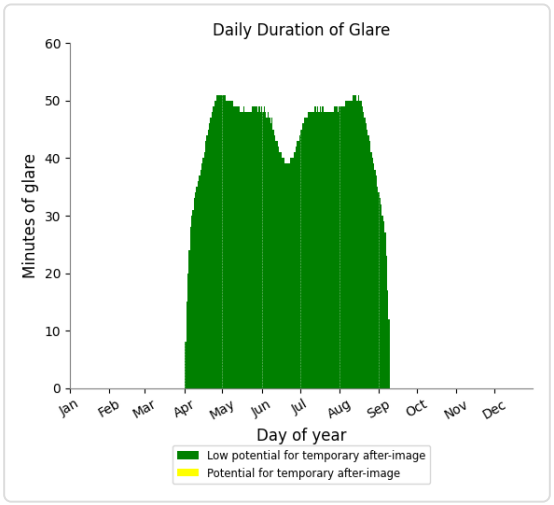


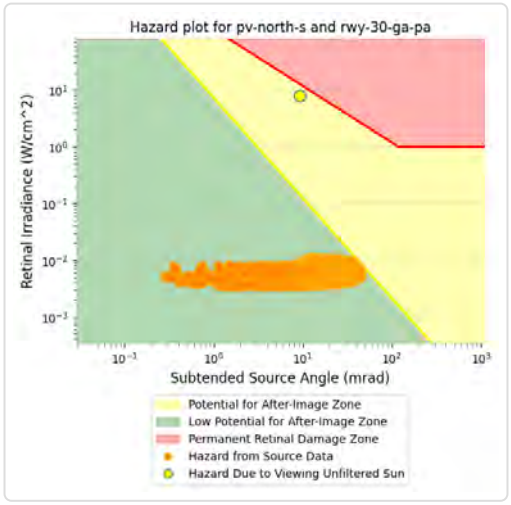
PV - North Subarray and Route: RWY 30 GA Pattern Route

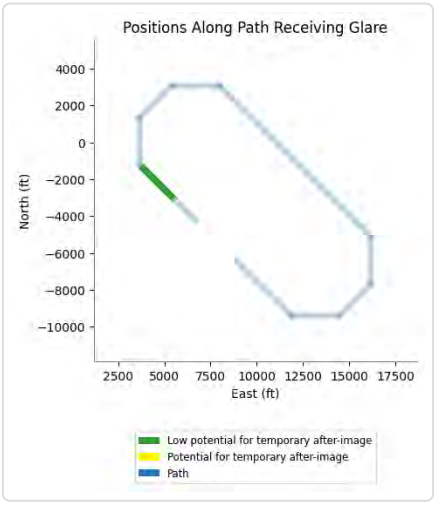
Yellow glare: none

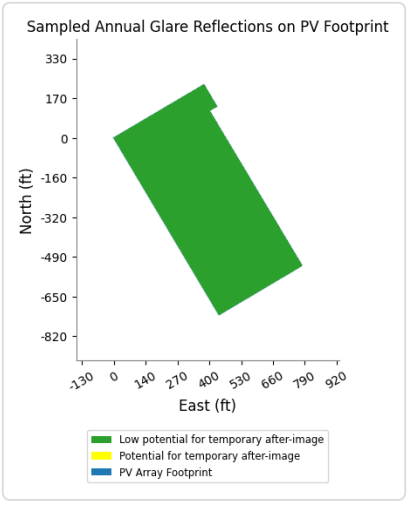
Green glare: 7,096 min.











PV - North Subarray and FP: RWY 12 Final

No glare found

PV - North Subarray and FP: RWY 30 Final

No glare found

PV - North Subarray and 1-ATCT

No glare found

PV: PV - South Subarray low potential for temporary after-image

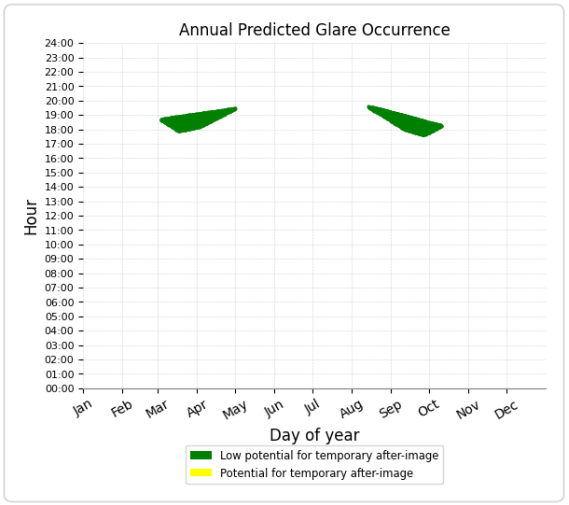
Receptor results ordered by category of glare

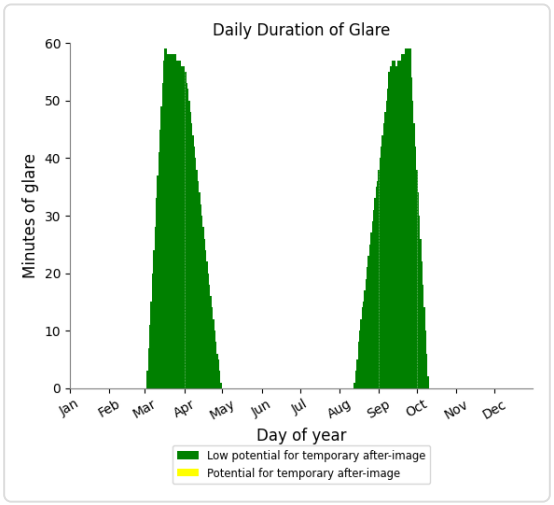
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 30 GA Pattern Route	4,306	71.8	0	0.0
RWY 12 GA Pattern Route	0	0.0	0	0.0
RWY 12 Final	0	0.0	0	0.0
RWY 30 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

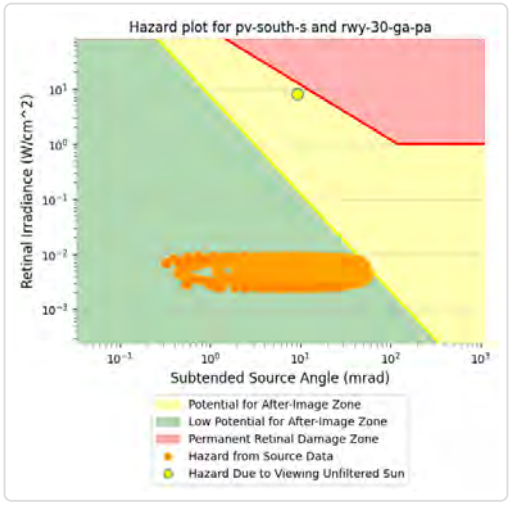
PV - South Subarray and Route: RWY 30 GA Pattern Route

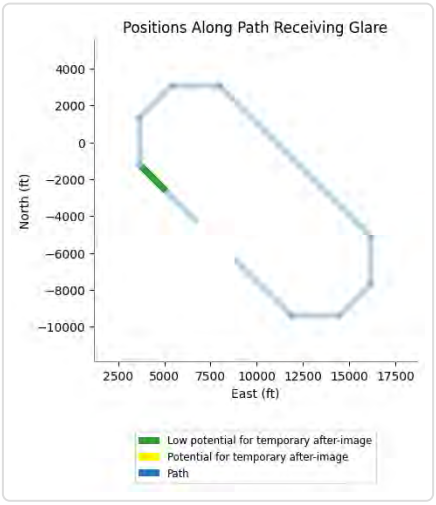
Yellow glare: none

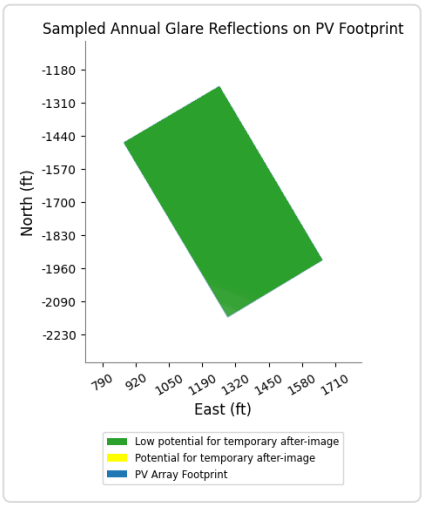
Green glare: 4,306 min.











PV - South Subarray and Route: RWY 12 GA Pattern Route

No glare found

PV - South Subarray and FP: RWY 12 Final

No glare found

PV - South Subarray and FP: RWY 30 Final

No glare found

PV - South Subarray and 1-ATCT

No glare found

Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
The algorithm does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results. However, we have validated our models against several systems, including a PV array causing glare to the air-traffic control tower at Manchester-Boston Regional Airport and several sites in Albuquerque, and the tool accurately predicted the occurrence and intensity of glare at different times and days of the year.
Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare. This primarily affects V1 analyses of path receptors.
Random number computations are utilized by various steps of the annual hazard analysis algorithm. Predicted minutes of glare can vary between runs as a result. This limitation primarily affects analyses of Observation Point receptors, including ATCTs. Note that the SGHAT/ ForgeSolar methodology has always relied on an analytical, qualitative approach to accurately determine the overall hazard (i.e. green vs. yellow) of expected glare on an annual basis.
The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.
The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
The variable direct normal irradiance (DNI) feature (if selected) scales the user-prescribed peak DNI using a typical clear-day irradiance profile. This profile has a lower DNI in the mornings and evenings and a maximum at solar noon. The scaling uses a clear-day irradiance profile based on a normalized time relative to sunrise, solar noon, and sunset, which are prescribed by a sun-position algorithm and the latitude and longitude obtained from Google maps. The actual DNI on any given day can be affected by cloud cover, atmospheric attenuation, and other environmental factors.
The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.
The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
Refer to the Help page at **www.forgesolar.com/help/** for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

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EXHIBIT 1.D

FORGESOLAR GLARE ANALYSIS

Project: **UNFI - Riverside CA**
Rooftop Only- 7MWdc/ 5WWac

Site configuration: **UNFI - Riverside CA Runway 14-32 GA Analysis**

Created 02 Jun, 2023
Updated 02 Jun, 2023
Time-step 1 minute
Timezone offset UTC-7
Minimum sun altitude 0.0 deg
DNI peaks at 1,000.0 W/m^2
Category 5 MW to 10 MW
Site ID 92066.15434

Ocular transmission coefficient 0.5
Pupil diameter 0.002 m
Eye focal length 0.017 m
Sun subtended angle 9.3 mrad
PV analysis methodology V2

Summary of Results

Glare with low potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
PV - North Subarray	10.0	239.5	4,612	76.9	0	0.0	7,364,000.0
PV - South Subarray	10.0	239.5	633	10.6	0	0.0	7,615,000.0

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 14 GA Pattern Route	3,641	60.7	0	0.0
RWY 32 GA Pattern Route	1,604	26.7	0	0.0
RWY 14 Final	0	0.0	0	0.0
RWY 32 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

Component Data

PV Arrays

Name: PV - North Subarray
Axis tracking: Fixed (no rotation)
Tilt: 10.0°
Orientation: 239.5°
Rated power: 3439.4 kW
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.901889	-117.282761	1571.28	40.00	1611.28
2	33.902493	-117.281537	1571.50	40.00	1611.50
3	33.902248	-117.281364	1567.92	40.00	1607.92
4	33.902248	-117.281364	1567.92	40.00	1607.92
5	33.902248	-117.281364	1567.92	40.00	1607.92
6	33.902248	-117.281364	1567.92	40.00	1607.92
7	33.902248	-117.281364	1567.92	40.00	1607.92
8	33.902248	-117.281364	1567.92	40.00	1607.92
9	33.902248	-117.281364	1567.92	40.00	1607.92
10	33.902198	-117.281464	1568.11	40.00	1608.11
11	33.902198	-117.281464	1568.11	40.00	1608.11
12	33.902198	-117.281464	1568.11	40.00	1608.11
13	33.902198	-117.281464	1568.11	40.00	1608.11
14	33.902198	-117.281464	1568.11	40.00	1608.11
15	33.902198	-117.281464	1568.11	40.00	1608.11
16	33.902198	-117.281464	1568.11	40.00	1608.11
17	33.900439	-117.280205	1566.01	40.00	1606.01
18	33.899880	-117.281331	1564.49	40.00	1604.49

Name: PV - South Subarray
Axis tracking: Fixed (no rotation)
Tilt: 10.0°
Orientation: 239.5°
Rated power: 3556.9 kW
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.897846	-117.279884	1563.89	40.00	1603.89
2	33.898454	-117.278648	1560.86	40.00	1600.86
3	33.896573	-117.277311	1559.14	40.00	1599.14
4	33.895956	-117.278536	1555.09	40.00	1595.09

Route Receptors

Name: RWY 14 GA Pattern Route
Path type: One-way (toward increasing index)
Observer view angle: 50.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.864994	-117.248281	1500.00	50.00	1550.00
2	33.854942	-117.241136	1500.00	1500.00	3000.00
3	33.848078	-117.243236	1500.00	1500.00	3000.00
4	33.844669	-117.250119	1500.00	1500.00	3000.00
5	33.846422	-117.258344	1500.00	1500.00	3000.00
6	33.897972	-117.295011	1500.00	1500.00	3000.00
7	33.904833	-117.292903	1500.00	1500.00	3000.00
8	33.908242	-117.286017	1500.00	1500.00	3000.00
9	33.906486	-117.277783	1500.00	1500.00	3000.00
10	33.896431	-117.270636	1500.00	50.00	1550.00

Name: RWY 32 GA Pattern Route
Path type: One-way (toward increasing index)
Observer view angle: 50.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.896431	-117.270636	1500.00	50.00	1550.00
2	33.906486	-117.277783	1500.00	1500.00	3000.00
3	33.908242	-117.286017	1500.00	1500.00	3000.00
4	33.904833	-117.292903	1500.00	1500.00	3000.00
5	33.897972	-117.295011	1500.00	1500.00	3000.00
6	33.846422	-117.258344	1500.00	1500.00	3000.00
7	33.844669	-117.250119	1500.00	1500.00	3000.00
8	33.848078	-117.243236	1500.00	1500.00	3000.00
9	33.854942	-117.241136	1500.00	1500.00	3000.00
10	33.864994	-117.248281	1500.00	50.00	1550.00

Flight Path Receptors

Name: RWY 14 Final
Description: None
Threshold height: 50 ft
Direction: 149.5°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°

Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.896431	-117.270636	1500.00	50.00	1550.00
Two-mile	33.906486	-117.277783	1500.00	1500.00	3000.00

Name: RWY 32 Final
Description: None
Threshold height: 50 ft
Direction: 329.5°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°

Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.864994	-117.248281	1500.00	50.00	1550.00
Two-mile	33.854942	-117.241136	1500.00	1500.00	3000.00

Discrete Observation Point Receptors

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
1-ATCT	1	33.891572	-117.251203	1511.00	118.00

Map image of 1-ATCT

Glare Analysis Results

Summary of Results Glare with low potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
PV - North Subarray	10.0	239.5	4,612	76.9	0	0.0	7,364,000.0
PV - South Subarray	10.0	239.5	633	10.6	0	0.0	7,615,000.0

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 14 GA Pattern Route	3,641	60.7	0	0.0
RWY 32 GA Pattern Route	1,604	26.7	0	0.0
RWY 14 Final	0	0.0	0	0.0
RWY 32 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

PV: PV - North Subarray low potential for temporary after-image

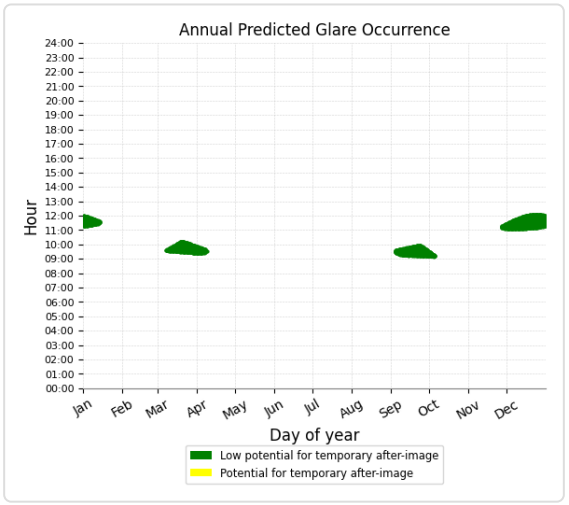
Receptor results ordered by category of glare

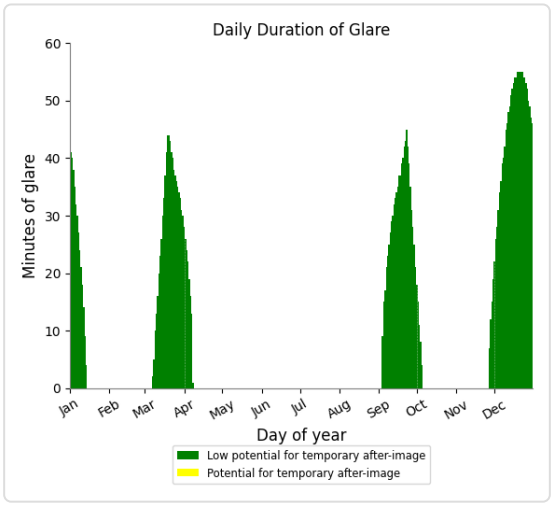
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 14 GA Pattern Route	3,641	60.7	0	0.0
RWY 32 GA Pattern Route	971	16.2	0	0.0
RWY 14 Final	0	0.0	0	0.0
RWY 32 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

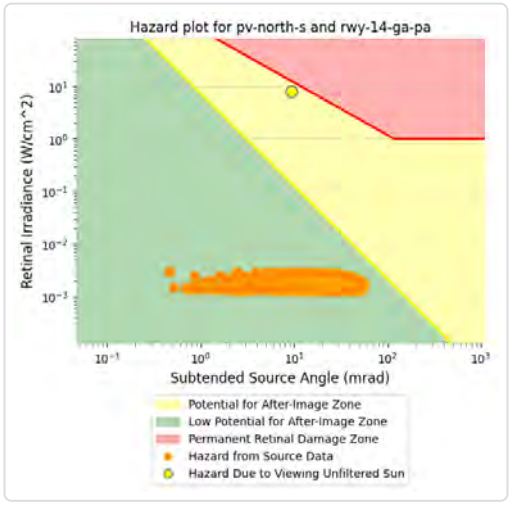
PV - North Subarray and Route: RWY 14 GA Pattern Route

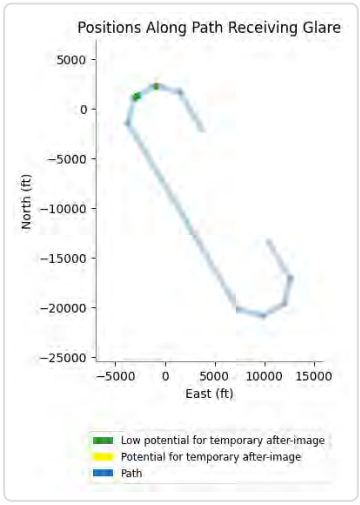
Yellow glare: none

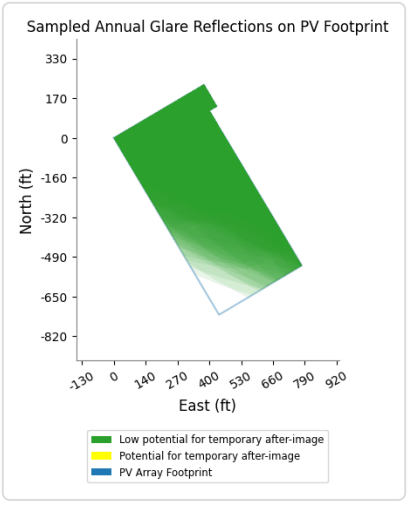
Green glare: 3,641 min.







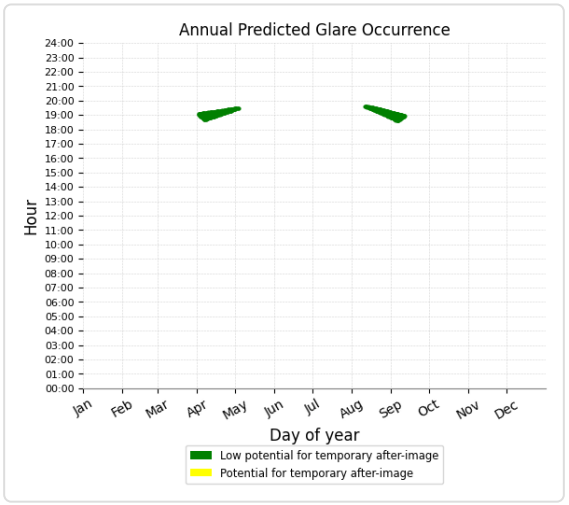


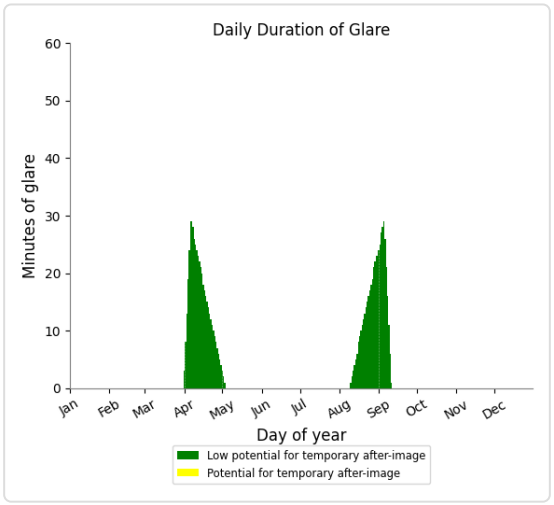


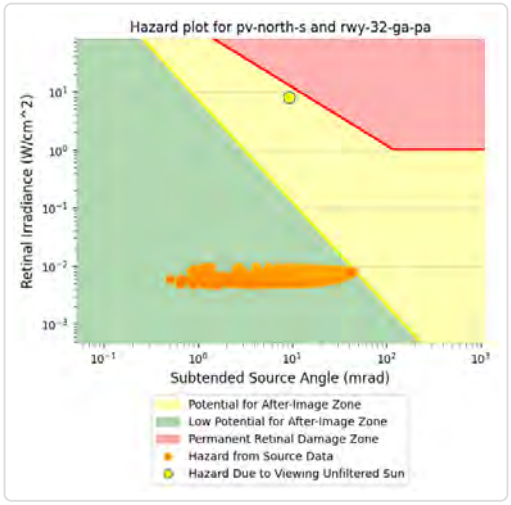
PV - North Subarray and Route: RWY 32 GA Pattern Route

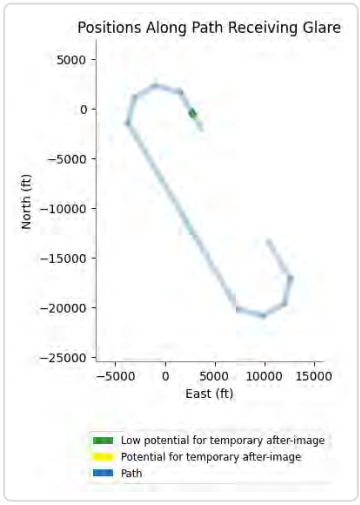
Yellow glare: none

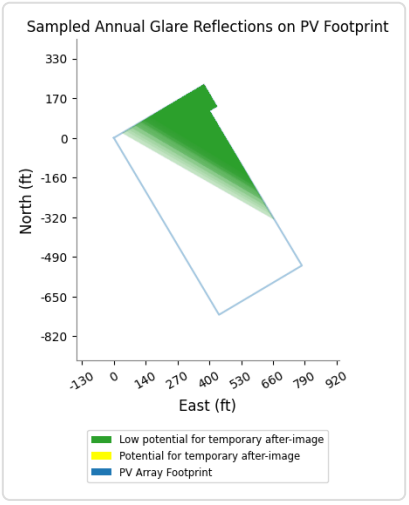
Green glare: 971 min.











PV - North Subarray and FP: RWY 14 Final

No glare found

PV - North Subarray and FP: RWY 32 Final

No glare found

PV - North Subarray and 1-ATCT

No glare found

PV: PV - South Subarray low potential for temporary after-image

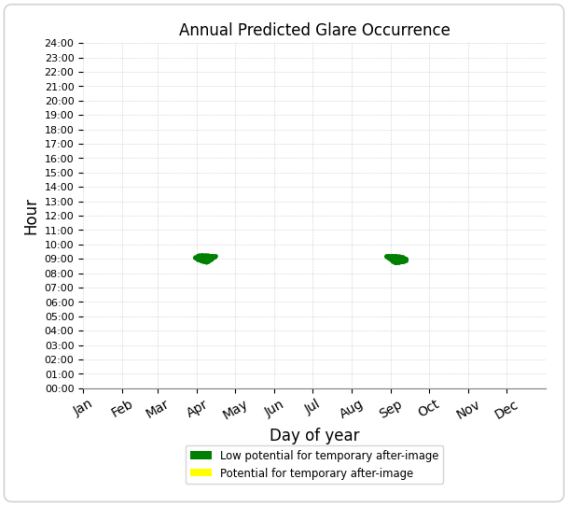
Receptor results ordered by category of glare

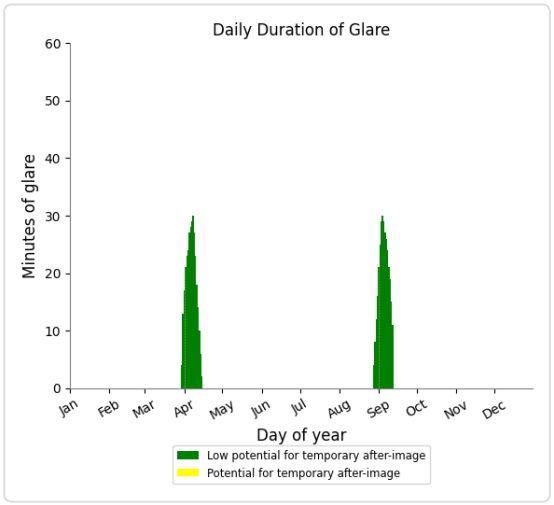
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 32 GA Pattern Route	633	10.6	0	0.0
RWY 14 GA Pattern Route	0	0.0	0	0.0
RWY 14 Final	0	0.0	0	0.0
RWY 32 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

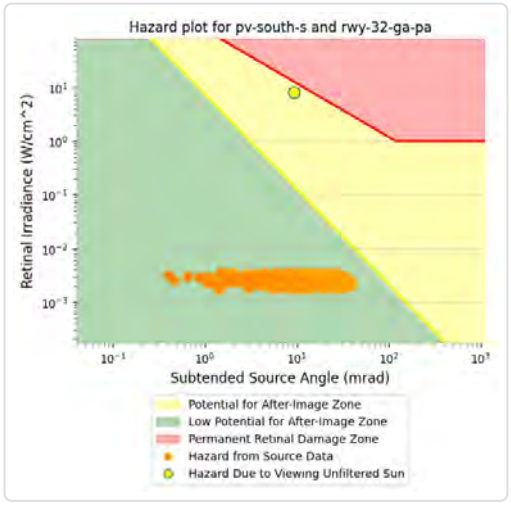
PV - South Subarray and Route: RWY 32 GA Pattern Route

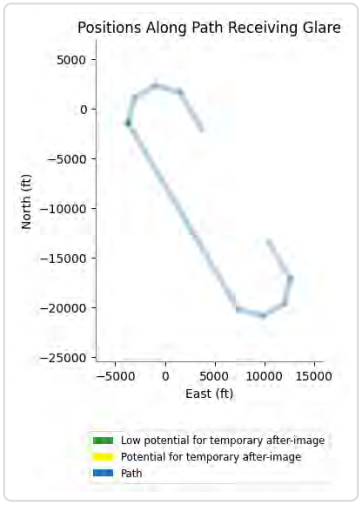
Yellow glare: none

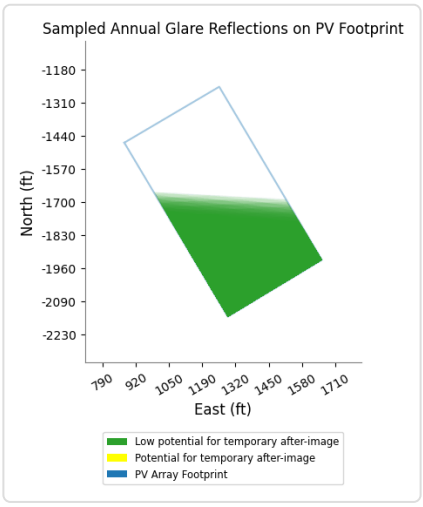
Green glare: 633 min.











PV - South Subarray and Route: RWY 14 GA Pattern Route

No glare found

PV - South Subarray and FP: RWY 14 Final

No glare found

PV - South Subarray and FP: RWY 32 Final

No glare found

PV - South Subarray and 1-ATCT

No glare found

Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
The algorithm does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results. However, we have validated our models against several systems, including a PV array causing glare to the air-traffic control tower at Manchester-Boston Regional Airport and several sites in Albuquerque, and the tool accurately predicted the occurrence and intensity of glare at different times and days of the year.
Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare. This primarily affects V1 analyses of path receptors.
Random number computations are utilized by various steps of the annual hazard analysis algorithm. Predicted minutes of glare can vary between runs as a result. This limitation primarily affects analyses of Observation Point receptors, including ATCTs. Note that the SGHAT/ ForgeSolar methodology has always relied on an analytical, qualitative approach to accurately determine the overall hazard (i.e. green vs. yellow) of expected glare on an annual basis.
The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.
The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
The variable direct normal irradiance (DNI) feature (if selected) scales the user-prescribed peak DNI using a typical clear-day irradiance profile. This profile has a lower DNI in the mornings and evenings and a maximum at solar noon. The scaling uses a clear-day irradiance profile based on a normalized time relative to sunrise, solar noon, and sunset, which are prescribed by a sun-position algorithm and the latitude and longitude obtained from Google maps. The actual DNI on any given day can be affected by cloud cover, atmospheric attenuation, and other environmental factors.
The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.
The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
Refer to the Help page at **www.forgesolar.com/help/** for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

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EXHIBIT 1.E

FORGESOLAR GLARE ANALYSIS

Project: **UNFI - Riverside CA**
Rooftop Only- 7MWdc/ 5WWac

Site configuration: **UNFI - Riverside CA Runway 14-32 C17 KC-135 Analys**

Created 02 Jun, 2023
Updated 02 Jun, 2023
Time-step 1 minute
Timezone offset UTC-7
Minimum sun altitude 0.0 deg
DNI peaks at 1,000.0 W/m^2
Category 5 MW to 10 MW
Site ID 92068.15434

Ocular transmission coefficient 0.5
Pupil diameter 0.002 m
Eye focal length 0.017 m
Sun subtended angle 9.3 mrad
PV analysis methodology V2

Summary of Results

Glare with low potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
PV - North Subarray	10.0	239.5	1,151	19.2	0	0.0	7,364,000.0
PV - South Subarray	10.0	239.5	1,778	29.6	0	0.0	7,615,000.0

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 14 C17 KC-135 Pattern Route	0	0.0	0	0.0
RWY 32 C17 KC-135 Pattern Route	2,929	48.8	0	0.0
RWY 14 Final	0	0.0	0	0.0
RWY 32 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

Component Data

PV Arrays

Name: PV - North Subarray
Axis tracking: Fixed (no rotation)
Tilt: 10.0°
Orientation: 239.5°
Rated power: 3439.4 kW
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.901889	-117.282761	1571.28	40.00	1611.28
2	33.902493	-117.281537	1571.50	40.00	1611.50
3	33.902248	-117.281364	1567.92	40.00	1607.92
4	33.902248	-117.281364	1567.92	40.00	1607.92
5	33.902248	-117.281364	1567.92	40.00	1607.92
6	33.902248	-117.281364	1567.92	40.00	1607.92
7	33.902248	-117.281364	1567.92	40.00	1607.92
8	33.902248	-117.281364	1567.92	40.00	1607.92
9	33.902248	-117.281364	1567.92	40.00	1607.92
10	33.902198	-117.281464	1568.11	40.00	1608.11
11	33.902198	-117.281464	1568.11	40.00	1608.11
12	33.902198	-117.281464	1568.11	40.00	1608.11
13	33.902198	-117.281464	1568.11	40.00	1608.11
14	33.902198	-117.281464	1568.11	40.00	1608.11
15	33.902198	-117.281464	1568.11	40.00	1608.11
16	33.902198	-117.281464	1568.11	40.00	1608.11
17	33.900439	-117.280205	1566.01	40.00	1606.01
18	33.899880	-117.281331	1564.49	40.00	1604.49

Name: PV - South Subarray
Axis tracking: Fixed (no rotation)
Tilt: 10.0°
Orientation: 239.5°
Rated power: 3556.9 kW
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.897846	-117.279884	1563.89	40.00	1603.89
2	33.898454	-117.278648	1560.86	40.00	1600.86
3	33.896573	-117.277311	1559.14	40.00	1599.14
4	33.895956	-117.278536	1555.09	40.00	1595.09

Route Receptors

Name: RWY 14 C17 KC-135 Pattern Route
Path type: One-way (toward increasing index)
Observer view angle: 50.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.864994	-117.248281	1500.00	50.00	1550.00
2	33.836269	-117.227869	1500.00	1500.00	3000.00
3	33.821961	-117.228367	1500.00	1500.00	3000.00
4	33.813147	-117.244350	1500.00	1500.00	3000.00
5	33.819225	-117.262269	1500.00	1500.00	3000.00
6	33.908131	-117.325528	1500.00	1500.00	3000.00
7	33.922394	-117.325047	1500.00	1500.00	3000.00
8	33.931244	-117.309014	1500.00	1500.00	3000.00
9	33.925156	-117.291061	1500.00	1500.00	3000.00
10	33.896431	-117.270636	1500.00	50.00	1550.00

Name: RWY 32 C17 KC-135 Pattern Route
Path type: One-way (toward increasing index)
Observer view angle: 50.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.896431	-117.270636	1500.00	50.00	1550.00
2	33.925156	-117.291061	1500.00	1500.00	3000.00
3	33.931244	-117.309014	1500.00	1500.00	3000.00
4	33.922394	-117.325047	1500.00	1500.00	3000.00
5	33.908131	-117.325528	1500.00	1500.00	3000.00
6	33.819225	-117.262269	1500.00	1500.00	3000.00
7	33.813147	-117.244350	1500.00	1500.00	3000.00
8	33.821961	-117.228367	1500.00	1500.00	3000.00
9	33.836269	-117.227869	1500.00	1500.00	3000.00
10	33.864994	-117.248281	1500.00	50.00	1550.00

Flight Path Receptors

Name: RWY 14 Final
Description: None
Threshold height: 50 ft
Direction: 149.5°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°

Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.896431	-117.270636	1500.00	50.00	1550.00
Two-mile	33.906486	-117.277783	1500.00	1500.00	3000.00

Name: RWY 32 Final
Description: None
Threshold height: 50 ft
Direction: 329.5°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°

Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.864994	-117.248281	1500.00	50.00	1550.00
Two-mile	33.854942	-117.241136	1500.00	1500.00	3000.00

Discrete Observation Point Receptors

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
1-ATCT	1	33.891572	-117.251203	1511.00	118.00

Map image of 1-ATCT

Glare Analysis Results

Summary of Results

Glare with low potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
PV - North Subarray	10.0	239.5	1,151	19.2	0	0.0	7,364,000.0
PV - South Subarray	10.0	239.5	1,778	29.6	0	0.0	7,615,000.0

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 14 C17 KC-135 Pattern Route	0	0.0	0	0.0
RWY 32 C17 KC-135 Pattern Route	2,929	48.8	0	0.0
RWY 14 Final	0	0.0	0	0.0
RWY 32 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

PV: PV - North Subarray

low potential for temporary after-image

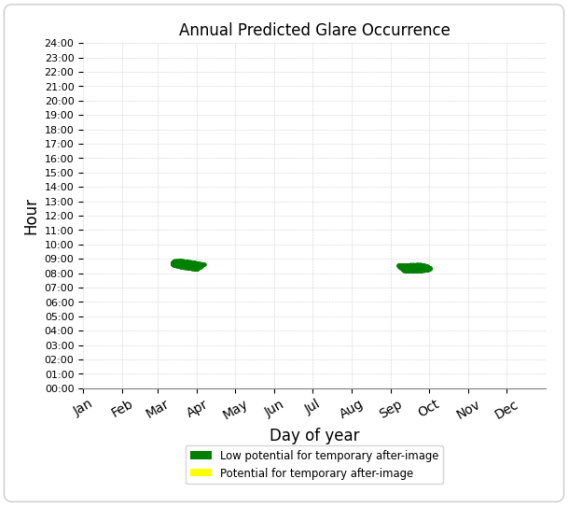
Receptor results ordered by category of glare

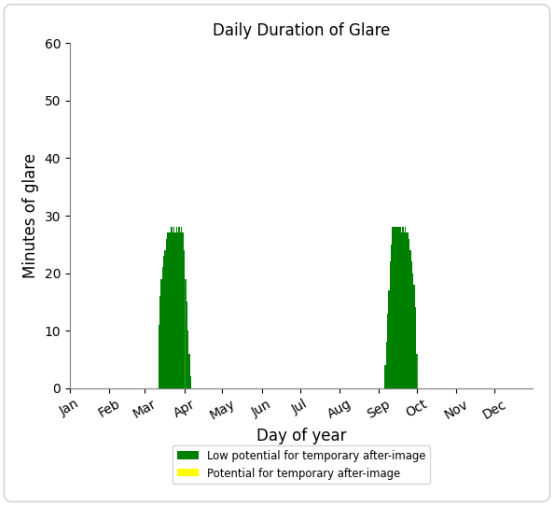
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 32 C17 KC-135 Pattern Route	1,151	19.2	0	0.0
RWY 14 C17 KC-135 Pattern Route	0	0.0	0	0.0
RWY 14 Final	0	0.0	0	0.0
RWY 32 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

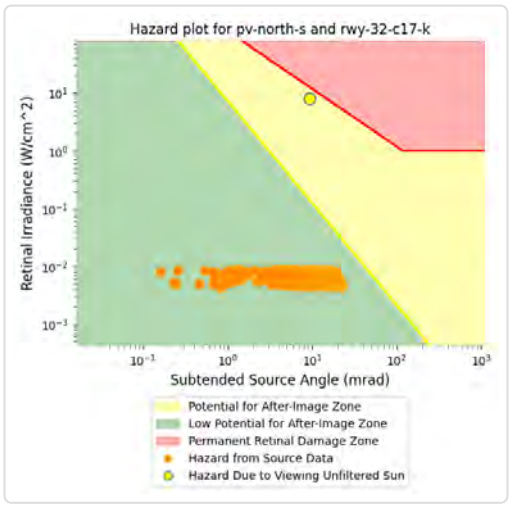
PV - North Subarray and Route: RWY 32 C17 KC-135 Pattern Route

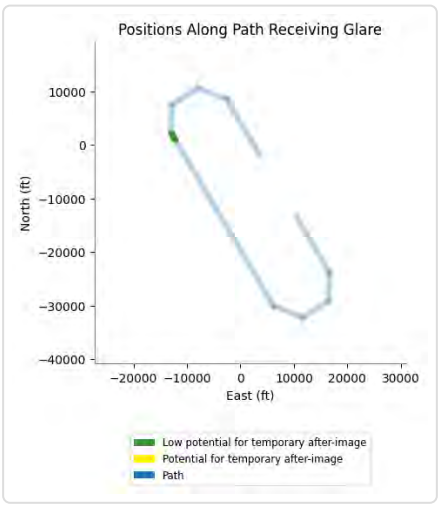
Yellow glare: none

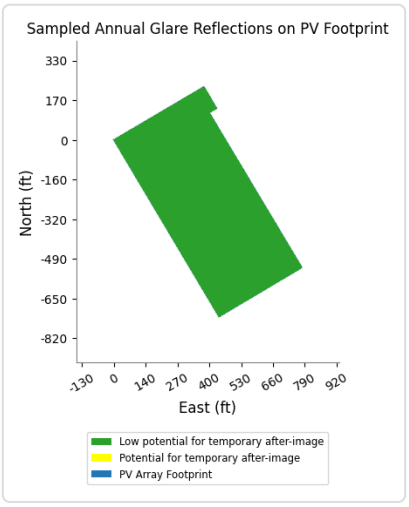
Green glare: 1,151 min.











PV - North Subarray and Route: RWY 14 C17 KC-135 Pattern Route

No glare found

PV - North Subarray and FP: RWY 14 Final

No glare found

PV - North Subarray and FP: RWY 32 Final

No glare found

PV - North Subarray and 1-ATCT

No glare found

PV: PV - South Subarray low potential for temporary after-image

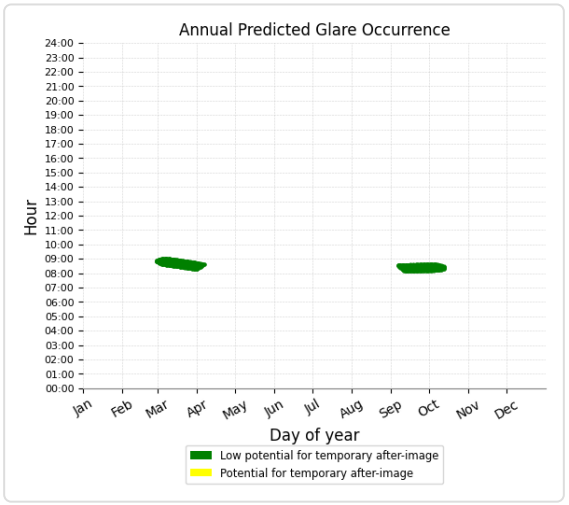
Receptor results ordered by category of glare

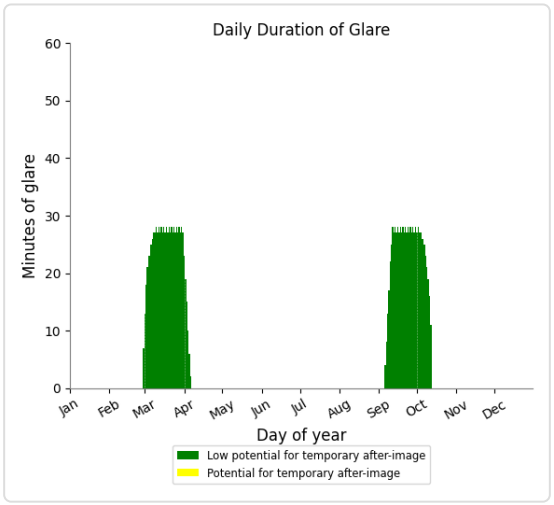
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 32 C17 KC-135 Pattern Route	1,778	29.6	0	0.0
RWY 14 C17 KC-135 Pattern Route	0	0.0	0	0.0
RWY 14 Final	0	0.0	0	0.0
RWY 32 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

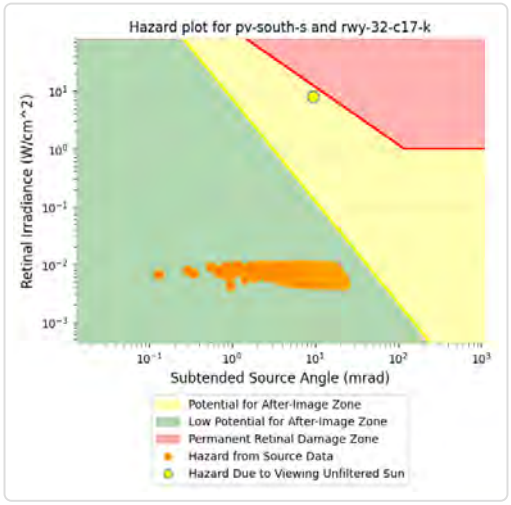
PV - South Subarray and Route: RWY 32 C17 KC-135 Pattern Route

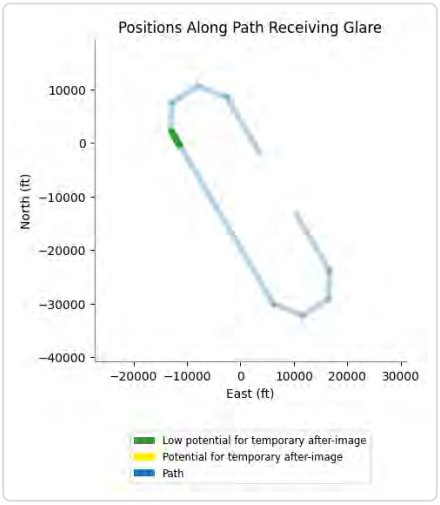
Yellow glare: none

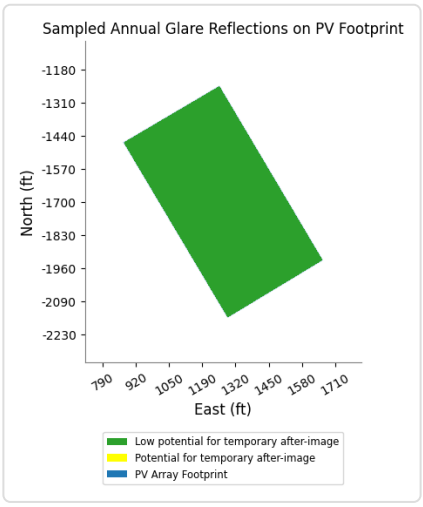
Green glare: 1,778 min.











PV - South Subarray and Route: RWY 14 C17 KC-135 Pattern Route

No glare found

PV - South Subarray and FP: RWY 14 Final

No glare found

PV - South Subarray and FP: RWY 32 Final

No glare found

PV - South Subarray and 1-ATCT

No glare found

Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
The algorithm does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results. However, we have validated our models against several systems, including a PV array causing glare to the air-traffic control tower at Manchester-Boston Regional Airport and several sites in Albuquerque, and the tool accurately predicted the occurrence and intensity of glare at different times and days of the year.
Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare. This primarily affects V1 analyses of path receptors.
Random number computations are utilized by various steps of the annual hazard analysis algorithm. Predicted minutes of glare can vary between runs as a result. This limitation primarily affects analyses of Observation Point receptors, including ATCTs. Note that the SGHAT/ ForgeSolar methodology has always relied on an analytical, qualitative approach to accurately determine the overall hazard (i.e. green vs. yellow) of expected glare on an annual basis.
The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.
The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
The variable direct normal irradiance (DNI) feature (if selected) scales the user-prescribed peak DNI using a typical clear-day irradiance profile. This profile has a lower DNI in the mornings and evenings and a maximum at solar noon. The scaling uses a clear-day irradiance profile based on a normalized time relative to sunrise, solar noon, and sunset, which are prescribed by a sun-position algorithm and the latitude and longitude obtained from Google maps. The actual DNI on any given day can be affected by cloud cover, atmospheric attenuation, and other environmental factors.
The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.
The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
Refer to the Help page at **www.forgesolar.com/help/** for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

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EXHIBIT 1.F

FORGESOLAR GLARE ANALYSIS

Project: **UNFI - Riverside CA**
Rooftop Only- 7MWdc/ 5WWac

Site configuration: **UNFI - Riverside CA Runway 14-32 Overhead Analysis**

Created 03 Jun, 2023
Updated 03 Jun, 2023
Time-step 1 minute
Timezone offset UTC-7
Minimum sun altitude 0.0 deg
DNI peaks at 1,000.0 W/m^2
Category 5 MW to 10 MW
Site ID 92069.15434

Ocular transmission coefficient 0.5
Pupil diameter 0.002 m
Eye focal length 0.017 m
Sun subtended angle 9.3 mrad
PV analysis methodology V2

Summary of Results

Glare with low potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
PV - North Subarray	10.0	239.5	2,843	47.4	0	0.0	7,364,000.0
PV - South Subarray	10.0	239.5	2,103	35.0	0	0.0	7,615,000.0

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 14 Overhead Pattern Route	4,946	82.4	0	0.0
RWY 32 Overhead Pattern Route	0	0.0	0	0.0
RWY 14 Final	0	0.0	0	0.0
RWY 32 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

Component Data

PV Arrays

Name: PV - North Subarray
Axis tracking: Fixed (no rotation)
Tilt: 10.0°
Orientation: 239.5°
Rated power: 3439.4 kW
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.901889	-117.282761	1571.28	40.00	1611.28
2	33.902493	-117.281537	1571.50	40.00	1611.50
3	33.902248	-117.281364	1567.92	40.00	1607.92
4	33.902248	-117.281364	1567.92	40.00	1607.92
5	33.902248	-117.281364	1567.92	40.00	1607.92
6	33.902248	-117.281364	1567.92	40.00	1607.92
7	33.902248	-117.281364	1567.92	40.00	1607.92
8	33.902248	-117.281364	1567.92	40.00	1607.92
9	33.902248	-117.281364	1567.92	40.00	1607.92
10	33.902198	-117.281464	1568.11	40.00	1608.11
11	33.902198	-117.281464	1568.11	40.00	1608.11
12	33.902198	-117.281464	1568.11	40.00	1608.11
13	33.902198	-117.281464	1568.11	40.00	1608.11
14	33.902198	-117.281464	1568.11	40.00	1608.11
15	33.902198	-117.281464	1568.11	40.00	1608.11
16	33.902198	-117.281464	1568.11	40.00	1608.11
17	33.900439	-117.280205	1566.01	40.00	1606.01
18	33.899880	-117.281331	1564.49	40.00	1604.49

Name: PV - South Subarray
Axis tracking: Fixed (no rotation)
Tilt: 10.0°
Orientation: 239.5°
Rated power: 3556.9 kW
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.897846	-117.279884	1563.89	40.00	1603.89
2	33.898454	-117.278648	1560.86	40.00	1600.86
3	33.896573	-117.277311	1559.14	40.00	1599.14
4	33.895956	-117.278536	1555.09	40.00	1595.09

Route Receptors

Name: RWY 14 Overhead Pattern Route
Path type: One-way (toward increasing index)
Observer view angle: 50.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.968036	-117.322128	1500.00	2000.00	3500.00
2	33.880706	-117.259453	1500.00	2000.00	3500.00
3	33.863564	-117.293808	1500.00	2000.00	3500.00
4	33.908131	-117.325528	1500.00	2000.00	3500.00
5	33.925156	-117.291061	1500.00	2000.00	3500.00
6	33.896431	-117.270636	1500.00	50.00	1550.00

Name: RWY 32 Overhead Pattern Route
Path type: One-way (toward increasing index)
Observer view angle: 50.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.793375	-117.196878	1500.00	2000.00	3500.00
2	33.880706	-117.259453	1500.00	2000.00	3500.00
3	33.863564	-117.293808	1500.00	2000.00	3500.00
4	33.819225	-117.262269	1500.00	2000.00	3500.00
5	33.836269	-117.227869	1500.00	2000.00	3500.00
6	33.864994	-117.248281	1500.00	50.00	1550.00

Flight Path Receptors

Name: RWY 14 Final
Description: None
Threshold height: 50 ft
Direction: 149.5°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°

Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.896431	-117.270636	1500.00	50.00	1550.00
Two-mile	33.906486	-117.277783	1500.00	1500.00	3000.00

Name: RWY 32 Final
Description: None
Threshold height: 50 ft
Direction: 329.5°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°

Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.864994	-117.248281	1500.00	50.00	1550.00
Two-mile	33.854942	-117.241136	1500.00	1500.00	3000.00

Discrete Observation Point Receptors

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
1-ATCT	1	33.891572	-117.251203	1511.00	118.00

Map image of 1-ATCT

Glare Analysis Results

Summary of Results

Glare with low potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
PV - North Subarray	10.0	239.5	2,843	47.4	0	0.0	7,364,000.0
PV - South Subarray	10.0	239.5	2,103	35.0	0	0.0	7,615,000.0

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 14 Overhead Pattern Route	4,946	82.4	0	0.0
RWY 32 Overhead Pattern Route	0	0.0	0	0.0
RWY 14 Final	0	0.0	0	0.0
RWY 32 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

PV: PV - North Subarray

low potential for temporary after-image

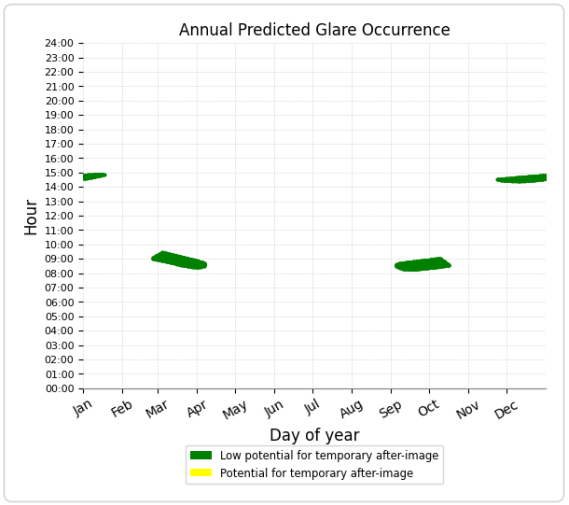
Receptor results ordered by category of glare

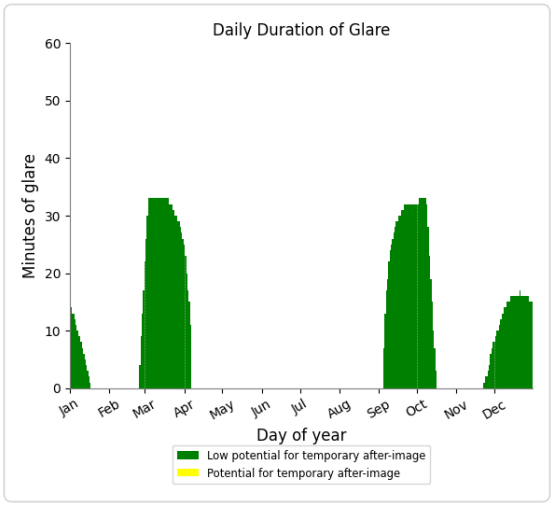
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 14 Overhead Pattern Route	2,843	47.4	0	0.0
RWY 32 Overhead Pattern Route	0	0.0	0	0.0
RWY 14 Final	0	0.0	0	0.0
RWY 32 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

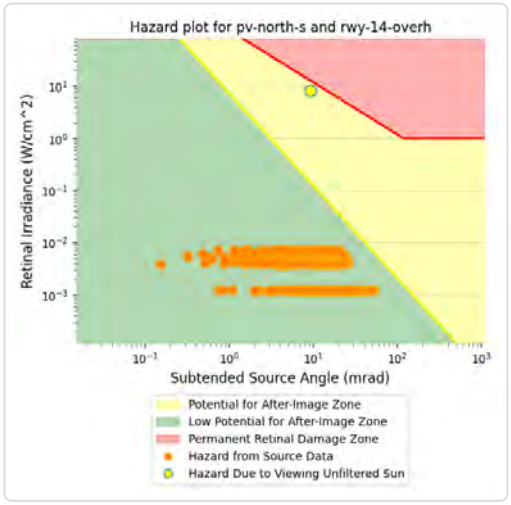
PV - North Subarray and Route: RWY 14 Overhead Pattern Route

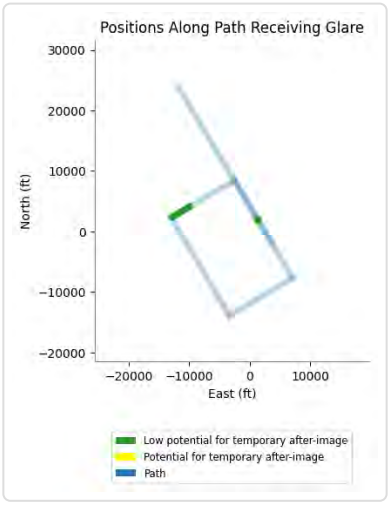
Yellow glare: none

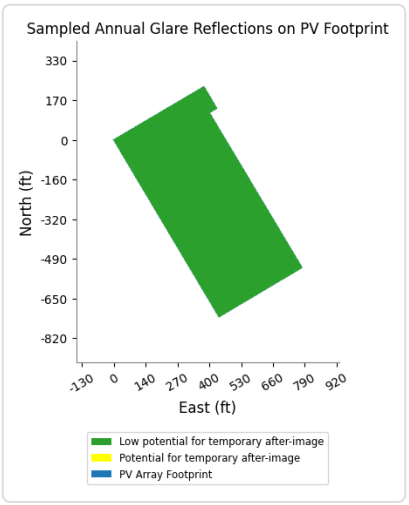
Green glare: 2,843 min.











PV - North Subarray and Route: RWY 32 Overhead Pattern Route

No glare found

PV - North Subarray and FP: RWY 14 Final

No glare found

PV - North Subarray and FP: RWY 32 Final

No glare found

PV - North Subarray and 1-ATCT

No glare found

PV: PV - South Subarray low potential for temporary after-image

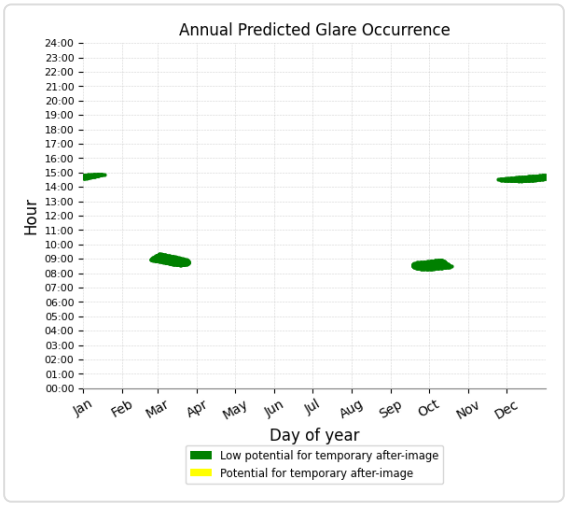
Receptor results ordered by category of glare

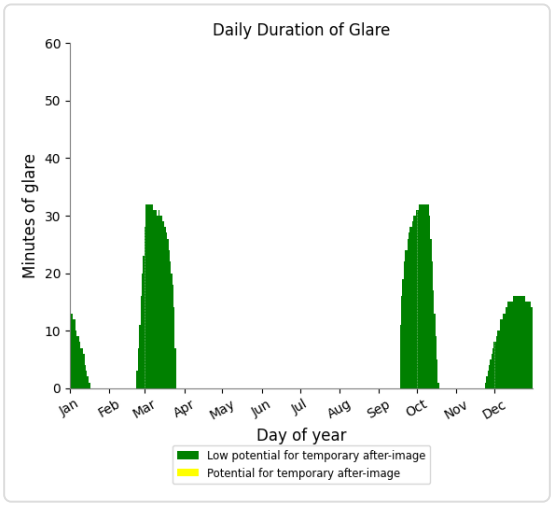
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
RWY 14 Overhead Pattern Route	2,103	35.0	0	0.0
RWY 32 Overhead Pattern Route	0	0.0	0	0.0
RWY 14 Final	0	0.0	0	0.0
RWY 32 Final	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

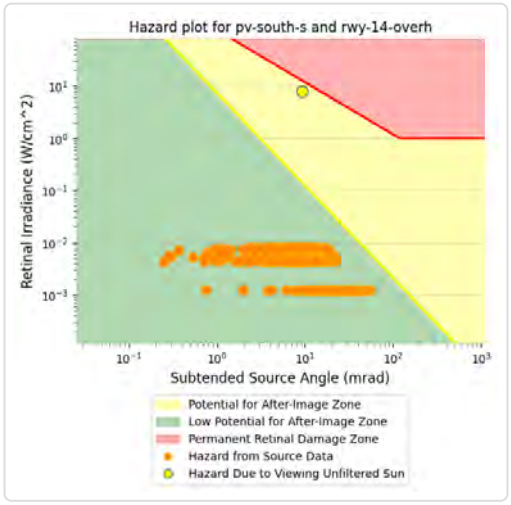
PV - South Subarray and Route: RWY 14 Overhead Pattern Route

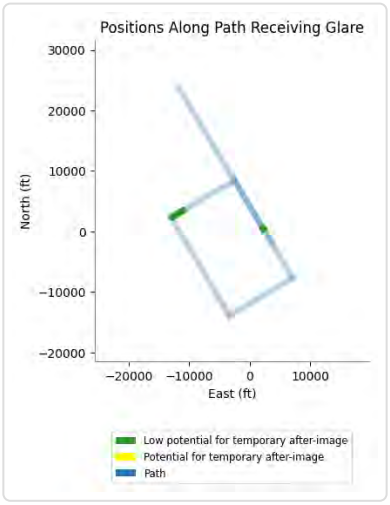
Yellow glare: none

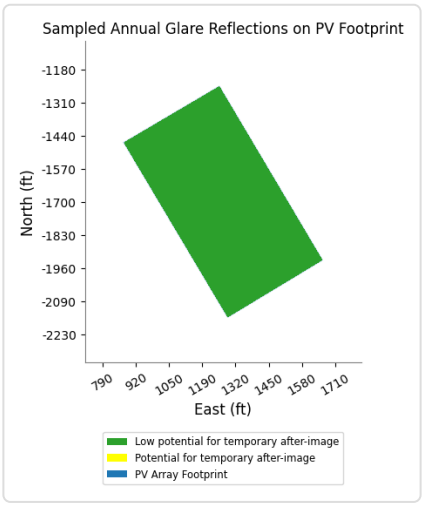
Green glare: 2,103 min.











PV - South Subarray and Route: RWY 32 Overhead Pattern Route

No glare found

PV - South Subarray and FP: RWY 14 Final

No glare found

PV - South Subarray and FP: RWY 32 Final

No glare found

PV - South Subarray and 1-ATCT

No glare found

Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
The algorithm does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results. However, we have validated our models against several systems, including a PV array causing glare to the air-traffic control tower at Manchester-Boston Regional Airport and several sites in Albuquerque, and the tool accurately predicted the occurrence and intensity of glare at different times and days of the year.
Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare. This primarily affects V1 analyses of path receptors.
Random number computations are utilized by various steps of the annual hazard analysis algorithm. Predicted minutes of glare can vary between runs as a result. This limitation primarily affects analyses of Observation Point receptors, including ATCTs. Note that the SGHAT/ ForgeSolar methodology has always relied on an analytical, qualitative approach to accurately determine the overall hazard (i.e. green vs. yellow) of expected glare on an annual basis.
The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.
The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
The variable direct normal irradiance (DNI) feature (if selected) scales the user-prescribed peak DNI using a typical clear-day irradiance profile. This profile has a lower DNI in the mornings and evenings and a maximum at solar noon. The scaling uses a clear-day irradiance profile based on a normalized time relative to sunrise, solar noon, and sunset, which are prescribed by a sun-position algorithm and the latitude and longitude obtained from Google maps. The actual DNI on any given day can be affected by cloud cover, atmospheric attenuation, and other environmental factors.
The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.
The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
Refer to the Help page at **www.forgesolar.com/help/** for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

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NOTICE OF PUBLIC HEARING

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

www.rcaluc.org

A PUBLIC HEARING has been scheduled before the Riverside County Airport Land Use Commission (ALUC) to consider the applications described below.

Any person may submit written comments to the ALUC before the hearing or may appear and be heard in support of or opposition to the project at the time of hearing. **Information on how to participate in the hearing will be available on the ALUC website at www.rcaluc.org.** The ALUC holds hearings for local discretionary permits within the Airport Influence Area, reviewing for aeronautical safety, noise and obstructions. ALUC reviews a proposed plan or project solely to determine whether it is consistent with the applicable Airport Land Use Compatibility Plan. For more information please contact **ALUC Planner Jackie Vega at (951) 955-0982**.

The March Joint Powers Authority Planning Department should be contacted on non-ALUC issues. For more information, please contact March Joint Powers Authority Planner Roxanne Corona at 951-656-7000.

The proposed project application may be viewed by a prescheduled appointment and on the ALUC website www.rcaluc.org. Written comments may be submitted at the Riverside County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, California 92501, Monday through Friday from 8:00 a.m. to 3:30 p.m., or by e-mail to javega@rivco.org. Individuals with disabilities requiring reasonable modifications or accommodations, please contact Barbara Santos at (951) 955-5132.

PLACE OF HEARING: **Riverside County Administration Center**
4080 Lemon Street, 1st Floor Board Chambers
Riverside California

DATE OF HEARING: **July 13, 2023**

TIME OF HEARING: **9:30 A.M.**

CASE DESCRIPTION:

ZAP1575MA23 – PowerFlex Systems, LLC (Representative: United Natural Foods, Inc.) – March Joint Powers Authority Case No. COM-Solar 23-006 (Building Permit). A proposal to construct a 720,250 square foot rooftop solar panel system on an existing industrial building on 59.45 acres, located at 14900 Meridian Parkway, southerly of Innovation Drive and easterly of Meridian Parkway (Airport Compatibility Zone B2 of the March Air Reserve Base/Inland Port Airport Influence Area).

RIVERSIDE COUNTY
AIRPORT LAND USE COMMISSION

APPLICATION FOR MAJOR LAND USE ACTION REVIEW

ALUC STAFF ONLY

ALUC Case Number: ZAP1091BD23 Date Submitted: 4/18/23

AIA: Bermuda Dunes Zone: E Public Hearing ☐ Staff Review ☑

Applicant

Applicant Full Name: Omar Hussein

Applicant Address: 69-930 Hwy 111, Ste 203 Rancho Mirage, CA 92270

Phone: (214) 923-3246 **Email:** omar@beaconrealtyadvisors.com

Representative/ Property Owner Contact Information

Representative: Luis Gomez (goUrban Development) **Email:** lagomez@gourbandev.com

Phone: (562) 895-3392

Address: 1 World Trade Center, 8th Floor, Long Beach CA 90831

Property Owner: AABC Beacon Jefferson Square, LLC, a North Carolina limited liability company **Email:** omar@beaconrealtyadvisors.com

Phone: (214) 923-3246

Address: 69-930 Hwy 111, Ste 203 Rancho Mirage, CA 92270

Local Jurisdiction Agency

Agency Name: City of La Quinta Phone: (760) 341-4800

Staff Contact: Nicole Criste **Email:** consultingplanner@laquintaca.gov

Address: 78495 Calle Tampico, La Quinta, CA 92253

Local Agency Case No.: Master Project # 2023-0001, SP2022-0004,TTM2022-0003,SDP22022-0015

Project Location

Street Address: N/A Gross Parcel Size.: 5.1 Acres

Assessor's Parcel No.: 604-521-013, 604-521-014

Solar

Is the project proposing solar Panels? Yes ☑ No ☐ If yes, please provide solar glare study. (only if in Zone C or higher)

Data

Site Elevation:(above mean sea level): 59 ft

Height of Building or structures: 45' 4"

What type of drainage basins are being proposed and the square footage: 2 above-ground retention basins (8,100 SF + 14,400 SF) and 1 underground retention basin (4,800 SF)

Notice

A. NOTICE: Failure of an applicant to submit complete or adequate information pursuant to Sections 65940 to 65948 inclusive of the California Government Code, MAY constitute grounds for disapproval of actions, regulations, or permits.

B. REVIEW TIME: Estimated time for "staff level review" is approximately 30 days from date of submittal. Estimated time for "commission level review" is approximately 45 days from date of a complete application submittal to the next available commission hearing meeting.

C. SUBMISSION PACKAGE:

Please submit all application items DIGITALLY via USB or CD:

- Completed ALUC Application Form
- Plans Package: site plans, floor plans, building elevations, grading plans, subdivision maps
- Exhibits of change of zone, general plan amendment, specific plan amendment
- Project description of existing and proposed use

Additionally, please provide:

- ALUC fee payment (Checks made out to Riverside County ALUC)
- Gummed address labels of all surrounding property owners within a 300-foot radius of project site. (Only required if the project is scheduled for a public hearing).

Riverside County Airport Land Use Commission, County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, CA 92501, Phone: 951-955-5132 Fax: 951-955-5177 Website: www.rcaluc.org

RIVERSIDE COUNTY
AIRPORT LAND USE COMMISSION

STAFF REPORT

AGENDA ITEM:	3.8
HEARING DATE:	July 13, 2023
CASE NUMBER:	ZAP1572MA23 – David M. Bertino Manufacturing (Representative: Adkan Engineers)
APPROVING JURISDICTION:	County of Riverside
JURISDICTION CASE NO:	CZ2200040 (Change of Zone)
LAND USE PLAN:	2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan
Airport Influence Area:	March Air Reserve Base/Inland Port Airport
Land Use Policy:	Compatibility Zone D
Noise Levels:	Below 60 CNEL from aircraft
MAJOR ISSUES:	None

RECOMMENDATION: Staff recommends that the Commission find the Change of Zone CONSISTENT with the 2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, subject to the conditions included herein.

PROJECT DESCRIPTION: A proposal to change the sites zoning from Light Agriculture (A-1-10) to One Family Dwellings (R-1) on 2.28 acres.

PROJECT LOCATION: The site is located on the southwest corner of Gentian Avenue and Cecil Avenue, approximately 23,166 feet northwesterly of the northerly end of Runway 14-32 at March Air Reserve Base.

BACKGROUND:

Residential Density: Pursuant to the Airport Land Use Compatibility Plan for the March Air Reserve Base/Inland Port Airport, the site is located within Compatibility Zone D, which does not restrict residential density.

Prohibited and Discouraged Uses: The applicant does not propose any uses prohibited or discouraged in Compatibility Zone D.

Noise: The March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan depicts the site as being outside the 60 CNEL range from aircraft noise. Therefore, no special measures are

required to mitigate aircraft-generated noise.

Part 77: The elevation of Runway 14-32 at its northerly terminus is 1,535 feet above mean sea level. At a distance of approximately 23,166 feet from the runway to the site, Federal Aviation Administration (FAA) review would be required for any structures with top of roof elevation exceeding 1,767 feet AMSL. The site's finished floor elevation is 1,533 feet AMSL and the proposed building height is 25 feet, for a top point elevation of 1,558 feet AMSL. Therefore, review by the FAA Obstruction Evaluation Service (FAA OES) was not required.

Open Area: None of the Compatibility Zones for the March Air Reserve Base/Inland Port ALUCP require open area specifically.

Hazards to Flight: Land use practices that attract or sustain hazardous wildlife populations on or near airports significantly increase the potential of Bird Aircraft Strike Hazards (BASH). The FAA strongly recommends that storm water management systems located within 5,000 or 10,000 feet of the Airport Operations Area, depending on the type of aircraft, be designed and operated so as not to create above-ground standing water. To facilitate the control of hazardous wildlife, the FAA recommends the use of steep-sided, rip-rap lined, narrow, linearly shaped water detention basins. All vegetation in and around detention basins that provide food or cover for hazardous wildlife should be eliminated. (FAA Advisory Circular 5200-33C). The project is located 23,166 feet from the runway, and therefore would not be subject to the above requirement.

Change of Zone: The applicant also proposes to change the sites zoning from Light Agriculture (A-1-10) to One Family Dwellings (R-1) on 2.28. The proposed amendments would be as, or more, consistent with the Compatibility Plan as the underlying compatibility zone does not restrict residential density.

X:\AIRPORT CASE FILES\March\ZAP1572MA23\ZAP1572MA23sr.doc

NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances [can vary from person to person. You may wish to consider what airport annoyances], if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. Business & Professions Code Section 11010 (b)(13)(A)

NOTICE

THERE IS AN AIRPORT NEARBY.

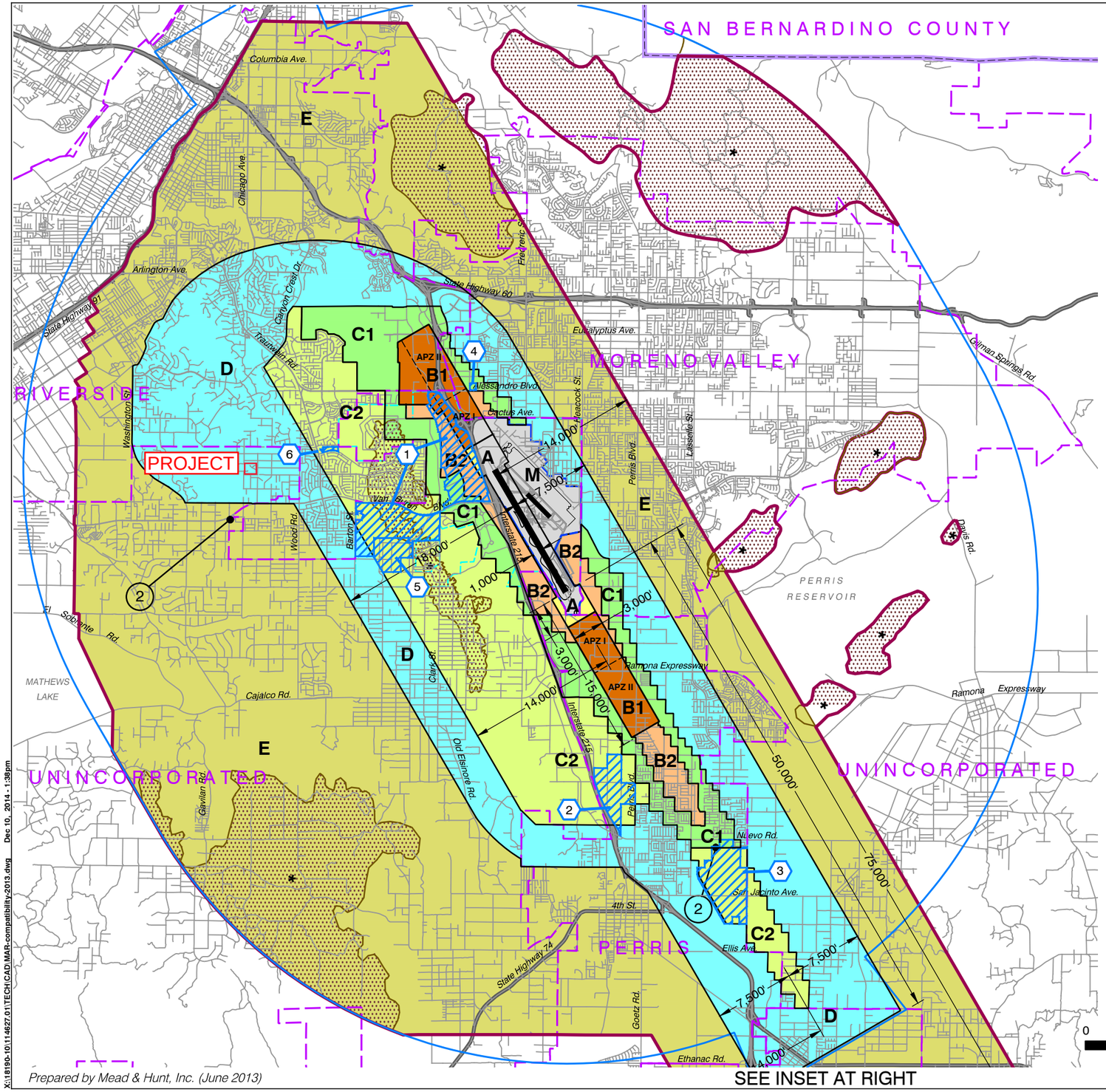
THIS STORM WATER BASIN IS DESIGNED TO HOLD STORM WATER FOR ONLY 48 HOURS AND NOT TO ATTRACT BIRDS

PROPER MAINTENANCE IS NECESSARY TO AVOID BIRD STRIKES

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION ALUC

IF THIS BASIN IS OVERGROWN, PLEASE CONTACT:

Name: _____ Phone: _____



LEGEND

Compatibility Zones

- Airport Influence Area Boundary
- Zone A
- Zone B1
- Zone B2
- Zone C1
- Zone C2
- Zone D
- Zone E
- Zone M
- High Terrain Zone
- FAR Part 77 Military Outer Horizontal Surface Limits
- FAR Part 77 Notification Area

Boundary Lines

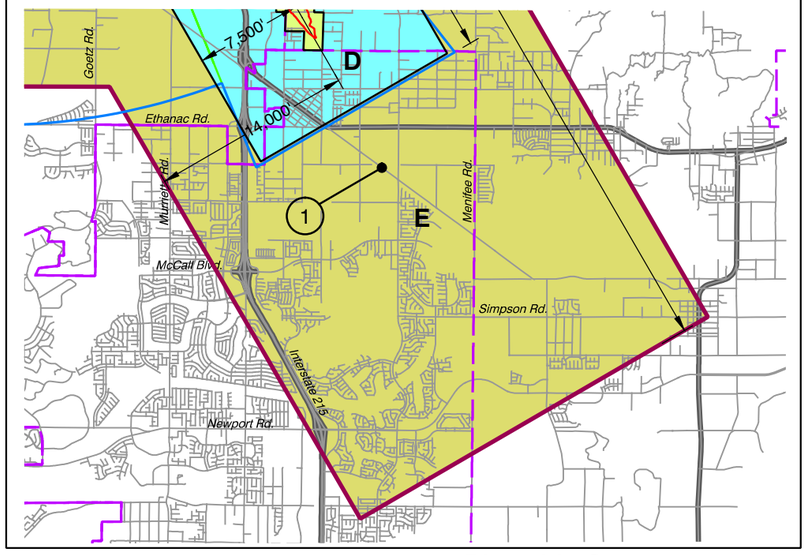
- March Air Reserve Base / Air Force Property
- March Joint Powers Authority Property Line
- County Boundary
- City Limits
- Site-Specific Exceptions (existing local agency commitments to development projects)

1. March JPA: March Business Center/Meridian
2. Perris: Harvest Landing
3. Perris: Park West
4. Moreno Valley: Affordable Housing
5. March JPA: Ben Clark Training Center
6. Riverside: Ridge Crest Subdivision

(1) Point at which aircraft on Runway 32 ILS approach descend below 3,000 feet above runway end. Airport Elevation is 1,535 feet MSL.

(2) Point at which departing aircraft typically reach 3,000 feet above runway end.

INSET



Note:
All dimensions are measured from runway ends and centerlines.

N

0 2 4 MILES

Base map source: County of Riverside 2013

Riverside County
Airport Land Use Commission

March Air Reserve Base / Inland Port Airport
Land Use Compatibility Plan

(Adopted November 13, 2014)

Map MA-1

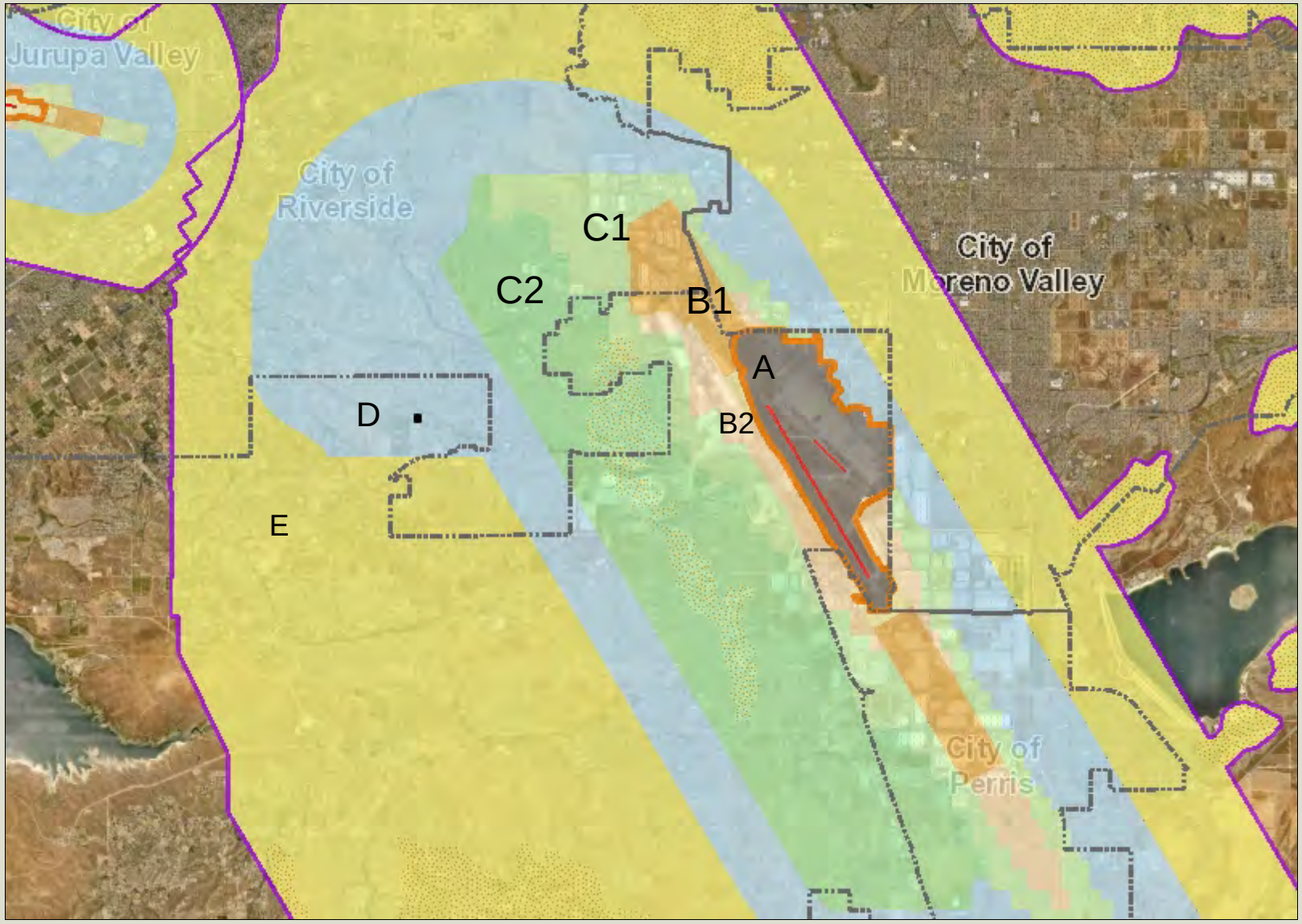
Compatibility Map

March Air Reserve Base / Inland Port Airport

Prepared by Mead & Hunt, Inc. (June 2013)

X:\18190-10\114627.01\TECH\CAD\MAR-compatibility2013.dwg Dec 10, 2014 - 1:38pm

Map My County Map



Legend

- Runways
- Airports
- Airport Influence Areas
- Airport Compatibility Zones
  - OTHER COMPATIBILITY ZONE
  - A
  - A-EXC1
  - B1
  - B1-APZ I
  - B1-APZ I-EXC1
  - B1-APZ II
  - B1-APZ II-EXC1
  - B1-EXC1
  - B2
  - B2-EXC1
  - C
  - C1
  - C1-EXC1
  - C1-EXC3
  - C1-EXC4
  - C1-HIGHT
  - C2
  - C2-EXC1
  - C2-EXC2
  - C2-EXC3
  - C2-EXC5
  - C2-EXC6

RCIT

0 12,314 24,629 Feet

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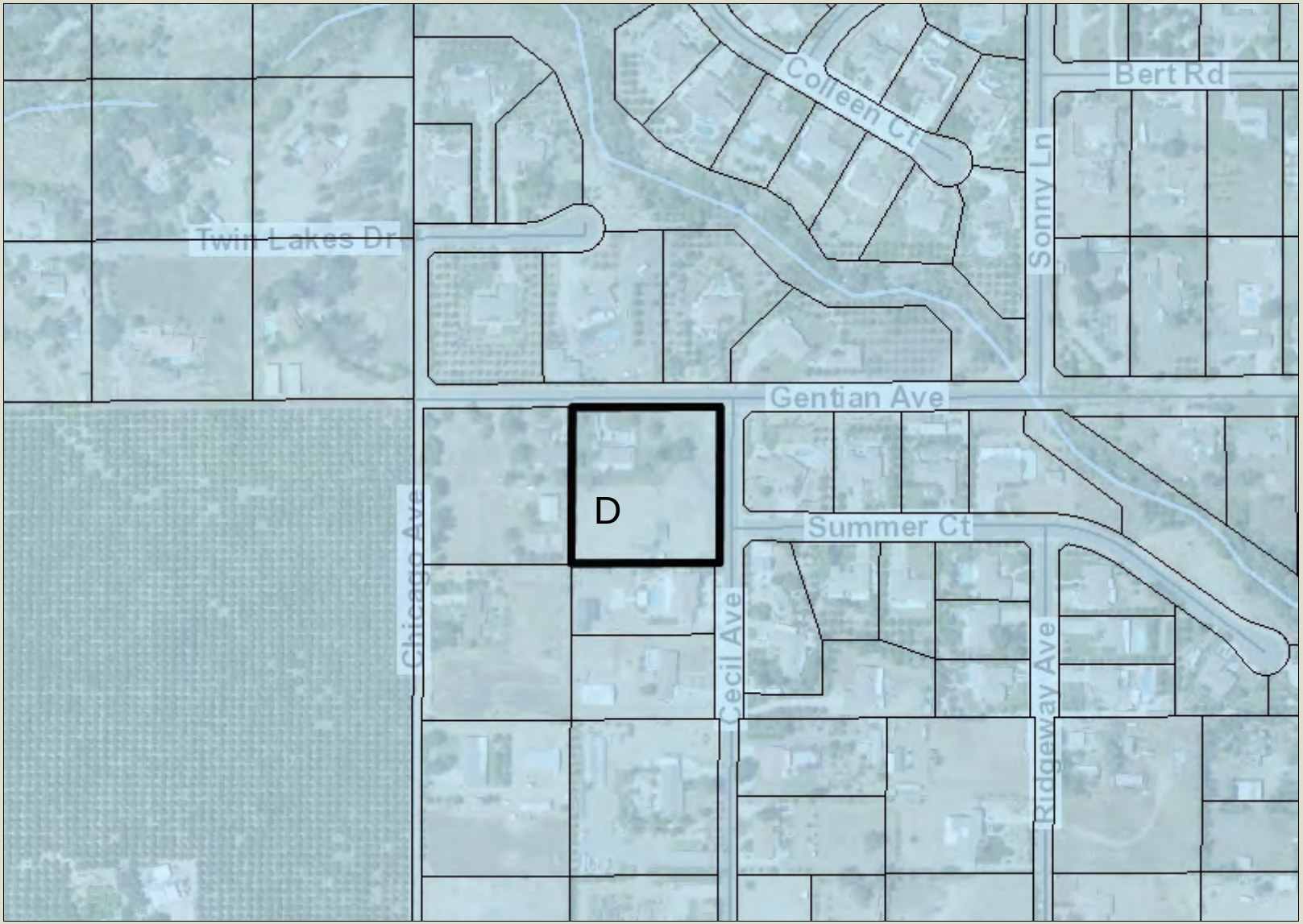
Notes

Map My County Map



Legend

- Parcels
- Runways
- Airports
- Airport Influence Areas
- Airport Compatibility Zones
  - OTHER COMPATIBILITY ZONE
  - A
  - A-EXC1
  - B1
  - B1-APZ I
  - B1-APZ I-EXC1
  - B1-APZ II
  - B1-APZ II-EXC1
  - B1-EXC1
  - B2
  - B2-EXC1
  - C
  - C1
  - C1-EXC1
  - C1-EXC3
  - C1-EXC4
  - C1-HIGHT
  - C2
  - C2-EXC1
  - C2-EXC2
  - C2-EXC3
  - C2-EXC5

RCIT

0 385 770 Feet

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Notes

Map My County Map

Legend

- Parcels
- County Centerline Names
- County Centerlines
- Blueline Streams
- City Areas
- World Street Map

0 385 770 Feet

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Notes

Map My County Map

Legend

- County Centerline Names
- County Centerlines
- Blueline Streams
- City Areas
- World Street Map

0 770 1,539 Feet

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Notes

Map My County Map

Legend

- Parcels
- County Centerline Names
- County Centerlines
- Blueline Streams
- City Areas
- World Street Map

0 192 385 Feet

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Notes

Map My County Map

Legend

- Blueline Streams
- City Areas
- World Street Map

0 3,079 6,157 Feet

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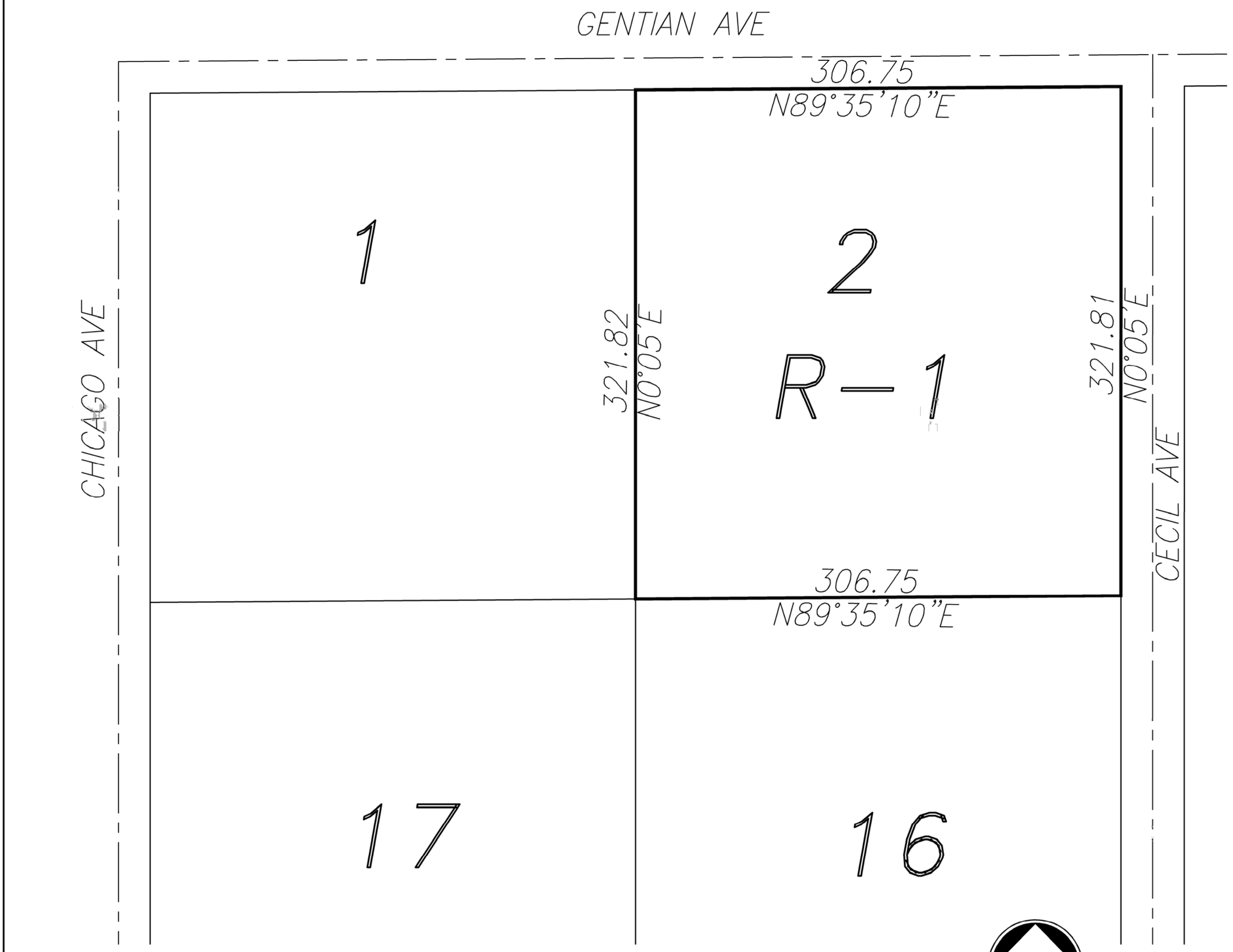
Notes

SEC. 19, T. 3S., R. 4W. S.B.B.&M.



LEGEND

R–1

ONE-FAMILY DWELLINGS

0 50 150
100 200

SCALE: 1" = 50'

MAP NO. _____

CHANGE OF OFFICIAL ZONING PLAN

WOODCREST DISTRICT

CHANGE OF ZONE CASE NO. CZ2200040

AMENDING ORDINANCE NO. 348

ADOPTED BY ORDINANCE NO. 348.____

DATE: _____

RIVERSIDE COUNTY BOARD OF SUPERVISORS

ASSESSORS PARCEL NO. 280-060-002

RIVERSIDE COUNTY
AIRPORT LAND USE COMMISSION

APPLICATION FOR MAJOR LAND USE ACTION REVIEW

ALUC STAFF ONLY

ALUC Case Number: ZAP1572MA23 Date Submitted: 4/27/23

AIA: March Zone: D Public Hearing ☑ Staff Review ☐

Applicant

Applicant Full Name: Dylan Bertino

Applicant Address: 18085 Gentian Avenue, CA, 92508

Phone: 951-95506935 **Email:** dylan@davidmbertinomanufacturing.com

Representative/ Property Owner Contact Information

Representative: Michael Brendecke/Adkan Engineers **Email:** mbrendecke@adkan.com

Phone: 951-446-3000

Address: 6879 Airport Drive, Riverside, CA, 92504

Property Owner: Dylan and Mindy Bertino **Email:** dylan@davidmbertinomanufacturing.com

Phone: 951-453-7605

Address: 18085 Gentian Avenue, CA, 92508

Local Jurisdiction Agency

Agency Name: Riverside County Planning Phone: 951-955-6035

Staff Contact: Calora Boyd **Email:** cboyd@rivco.org

Address: 4080 Lemon Street, 12th Floor, Riverside, CA 92501

Local Agency Case No.: CZ2200040

Project Location

Street Address: 18085 Gentian Avenue, CA, 92508 Gross Parcel Size.: 2.28

Assessor's Parcel No.: 280-060-002

Solar

Is the project proposing solar Panels? Yes ☐ No ☑ If yes, please provide solar glare study. (only if in Zone C or higher)

Data

Site Elevation:(above mean sea level) 1533

Height of Building or structures: 25

What type of drainage basins are being proposed and the square footage: None

Notice

A. NOTICE: Failure of an applicant to submit complete or adequate information pursuant to Sections 65940 to 65948 inclusive of the California Government Code, MAY constitute grounds for disapproval of actions, regulations, or permits.

B. REVIEW TIME: Estimated time for "staff level review" is approximately 30 days from date of submittal. Estimated time for "commission level review" is approximately 45 days from date of a complete application submittal to the next available commission hearing meeting.

C. SUBMISSION PACKAGE:

Please submit all application items DIGITALLY via USB or CD:

- Completed ALUC Application Form
- Plans Package: site plans, floor plans, building elevations, grading plans, subdivision maps
- Exhibits of change of zone, general plan amendment, specific plan amendment
- Project description of existing and proposed use

Additionally, please provide:

- ALUC fee payment (Checks made out to Riverside County ALUC)
- Gummed address labels of all surrounding property owners within a 300-foot radius of project site. (Only required if the project is scheduled for a public hearing).

Riverside County Airport Land Use Commission, County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, CA 92501, Phone: 951-955-5132 Fax: 951-955-5177 Website: www.rcaluc.org

SCHEDULE OF DEVELOPMENT REVIEW FEES (effective 3/1/19)

CASE TYPE	ALL OTHERS		MARCH ZONE E	
	INITIAL REVIEW FEE	AMENDED REVIEW FEE	INITIAL REVIEW FEE	AMENDED REVIEW FEE
General Plan or General Plan Element (County or City)	$3,696	$2,458	$2,310	$1,537
Community Plan or Area Plan (County or City)	$3,696	$2,402	$2,310	$1,502
(New) Specific Plan or Master Plan	$3,261	N/A	$2,038	N/A
Specific Plan Amendment	N/A	$2,181	N/A	$1,363
General Plan Amendment	$1,331	N/A	$832	N/A
Change of Zone or Ordinance Amendment	$1,331	$887	$832	$554
Non-Impact Legislative Project (as determined by staff)	$420	N/A	$375	N/A
Tract Map	$1,515	$1,017	$947	$636
Conditional Use Permit or Public Use Permit	$1,331	$887	$832	$554
Plot Plan, Development Review Plan or Design Review	$1,331	$887	$832	$554
Parcel Map	$1,331	$887	$832	$554
Environmental Impact Report*	$3,050	$2,033	$1,906	$1,271
Other Environmental Assessments*	$1,671	$1,109	$1,044	$693
Building Permit or Tenant Improvement	$573	$389	$359	$243

Effective March 1, 2019, an additional fee of $190.00 will be charged to projects requiring ALUC public hearings (no additional fee for staff review cases).

ADDITIONAL PROJECT SPECIFIC FEES (in addition to the above fees)				
Location in APZ I or II of March	$2,500	$2,500	N/A	N/A
AIA Large Commercial Solar Project (Energy Generation Facility)	$3,000	$3,000	$3,000	$3,000
Heliports/Helicopter Landing Sites	$1,000	$1,000	$1,000	$1,000
Speculative Nonresidential Multiple Buildings (4 or more)	$8,210	$8,210	N/A	N/A

NOTE: * THIS FEE IS COLLECTED ONLY FOR PROJECTS THAT ARE NOT CLASSIFIED UNDER ONE OF THE ABOVE CATEGORIES.

Checks should be made payable to: Riverside County Airport Land Use Commission

NOTICE OF PUBLIC HEARING

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

www.rcaluc.org

A PUBLIC HEARING has been scheduled before the Riverside County Airport Land Use Commission (ALUC) to consider the applications described below.

Any person may submit written comments to the ALUC before the hearing or may appear and be heard in support of or opposition to the project at the time of hearing. **Information on how to participate in the hearing will be available on the ALUC website at www.rcaluc.org.** The ALUC holds hearings for local discretionary permits within the Airport Influence Area, reviewing for aeronautical safety, noise and obstructions. ALUC reviews a proposed plan or project solely to determine whether it is consistent with the applicable Airport Land Use Compatibility Plan. For more information please contact **ALUC Planner Jackie Vega at (951) 955-0982**.

The County of Riverside Planning Department should be contacted on non-ALUC issues. For more information, please contact County of Riverside Planner Calora Boyd at 951-955-6035.

The proposed project application may be viewed by a prescheduled appointment and on the ALUC website www.rcaluc.org. Written comments may be submitted at the Riverside County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, California 92501, Monday through Friday from 8:00 a.m. to 3:30 p.m., or by e-mail to javega@rivco.org. Individuals with disabilities requiring reasonable modifications or accommodations, please contact Barbara Santos at (951) 955-5132.

PLACE OF HEARING: **Riverside County Administration Center**
4080 Lemon Street, 1st Floor Board Chambers
Riverside California

DATE OF HEARING: **July 13, 2023**

TIME OF HEARING: **9:30 A.M.**

CASE DESCRIPTION:

ZAP1572MA23 – David M. Bertino Manufacturing (Representative: Adkan Engineers)– County of Riverside Case No. CZ2200040 (Change of Zone). A proposal to change the sites zoning from Light Agriculture (A-1-10) to One Family Dwellings (R-1) on 2.28 acres, located on the southwest corner of Gentian Avenue and Cecil Avenue. (Airport Compatibility Zone D of the March Air Reserve Base/Inland Port Airport Influence Area).

RIVERSIDE COUNTY
AIRPORT LAND USE COMMISSION

STAFF REPORT

AGENDA ITEM:	3.9
HEARING DATE:	July 13, 2023
CASE NUMBER:	ZAP1573MA23 – U.S. Vets Housing Corporation (Representative: The Trimble Company)
APPROVING JURISDICTION:	March Joint Powers Authority
JURISDICTION CASE NO:	SP-6 (Specific Plan Amendment), PP10-02 (Plot Plan)
LAND USE PLAN:	2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan
Airport Influence Area:	March Air Reserve Base/Inland Port Airport
Land Use Policy:	Compatibility Zone D
Noise Levels:	Below 60 CNEL from aircraft
MAJOR ISSUES:	None

RECOMMENDATION: Staff recommends that the Commission find the Specific Plan Amendment CONSISTENT with the 2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, and also find the Plot Plan Review CONSISTENT, subject to the conditions included herein.

PROJECT DESCRIPTION: A proposal to construct a two-story 24-unit transitional housing building with office space totaling 11,850 square feet and 44 permanent supportive housing units totaling 22,150 square feet. The applicant also proposes to amend the U.S. Vets Transitional Program Specific Plan to reduce the number of housing units from 323 to 222 and eliminate buildings 4 through 8.

PROJECT LOCATION: The site is located northerly of N street, easterly of 4th street, and westerly of 6th street, approximately 6,441 feet northeasterly of the northerly end of Runway 14-32 at March Air Reserve Base.

BACKGROUND:

Residential Density: Pursuant to the Airport Land Use Compatibility Plan for the March Air Reserve Base/Inland Port Airport, the site is located within Compatibility Zone D, which does not restrict residential density.

Prohibited and Discouraged Uses: The applicant does not propose any uses prohibited or discouraged in Compatibility Zone D.

Noise: The March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan depicts the site as being outside the 60 CNEL range from aircraft noise. Therefore, no special measures are required to mitigate aircraft-generated noise.

Part 77: The elevation of Runway 14-32 at its southerly terminus is 1,535 feet above mean sea level. At a distance of approximately 6,441 feet from the runway to the site, Federal Aviation Administration (FAA) review would be required for any structures with top of roof elevation exceeding 1,599 feet AMSL. The site's finished floor elevation is 1,524 feet AMSL and the proposed building height is 40 feet, for a top point elevation of 1,564 feet AMSL. Therefore, review by the FAA Obstruction Evaluation Service (FAA OES) was not required.

Open Area: None of the Compatibility Zones for the March Air Reserve Base/Inland Port ALUCP require open area specifically.

Hazards to Flight: Land use practices that attract or sustain hazardous wildlife populations on or near airports significantly increase the potential of Bird Aircraft Strike Hazards (BASH). The FAA strongly recommends that storm water management systems located within 5,000 or 10,000 feet of the Airport Operations Area, depending on the type of aircraft, be designed and operated so as not to create above-ground standing water. To facilitate the control of hazardous wildlife, the FAA recommends the use of steep-sided, rip-rap lined, narrow, linearly shaped water detention basins. All vegetation in and around detention basins that provide food or cover for hazardous wildlife should be eliminated. (FAA Advisory Circular 5200-33C). The project is located 6,441 feet from the runway, and therefore would be subject to the above requirement.

The project includes a 7,100 square foot bioretention basin. Bioretention basins are not recommended in the vicinity of airports due to the potential that such areas could provide food, water, and shelter for hazardous wildlife. Pursuant to the study "Wildlife Hazard Management at Riverside County Airports: Background and Policy", October 2018, by Mead & Hunt, which is the basis of the brochure titled "Airports, Wildlife and Stormwater Management", such limited basins are permissible with the appropriate criteria: the basin is used in conjunction with appropriate landscaping for such uses as adjacent to structures, parking islands, medians, site entrances, planter boxes, and vegetation is selected carefully so as not to provide food, shelter, nesting, roosting, or water for wildlife. The project has been conditioned to be consistent with the basin criteria (as well as providing 48-hour draw down of the basin).

Specific Plan Amendment: The applicant also proposes to amend the U.S. Vets Transitional Program Specific Plan to reduce the number of housing units from 323 to 222 and eliminate buildings 4 through 8. The proposed amendments would be as, or more, consistent with the Compatibility Plan as the underlying compatibility zone does not restrict residential density.

CONDITIONS:

1. Any new outdoor lighting that is installed shall be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.

2. The following uses/activities are not included in the proposed project and shall be prohibited at this site:

   (a) Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight or circling climb following takeoff or toward an aircraft engaged in a straight or circling final approach toward a landing at an airport, other than a DoD or FAA-approved navigational signal light or visual approach slope indicator.

   (b) Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight or circling climb following takeoff or towards an aircraft engaged in a straight or circling final approach towards a landing at an airport.

   (c) Any use which would generate smoke or water vapor, or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses include landscaping utilizing water features, aquaculture, production of cereal grains, sunflower, and row crops, composting operations, wastewater management facilities, artificial marshes, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, and incinerators.)

   (d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.

   (e) Hazards to flight

3. The attached notice shall be provided to all prospective purchasers of the property and tenants of the building, and shall be recorded as a deed notice.

4. Any proposed detention basins or facilities shall be designed and maintained to provide for a maximum 48-hour detention period following the design storm, and remain totally dry between rainfalls. Vegetation in and around the detention basins that would provide food or cover for birds would be incompatible with airport operations and shall not be utilized in project landscaping. Trees shall be spaced so as to prevent large expanses of contiguous canopy, when mature. Landscaping in and around the detention basin(s) shall not include trees or shrubs that produce seeds, fruits, or berries.

   Landscaping in the detention basin, if not rip-rap, should be in accordance with the guidance provided in ALUC “LANDSCAPING NEAR AIRPORTS” brochure, and the “AIRPORTS, WILDLIFE AND STORMWATER MANAGEMENT” brochure available at RCALUC.ORG which list acceptable plants from Riverside County Landscaping Guide or other alternative landscaping as may be recommended by a qualified wildlife hazard biologist.

   A notice sign, in a form similar to that attached hereto, shall be permanently affixed to the stormwater basin with the following language: “There is an airport nearby. This stormwater basin is designed to hold stormwater for only 48 hours and not attract birds. Proper maintenance is necessary to avoid bird strikes”. The sign will also include the name, telephone number or other contact information of the person or entity responsible to monitor

the stormwater basin.

5. March Air Reserve Base must be notified of any land use having an electromagnetic radiation component to assess whether a potential conflict with Air Base radio communications could result. Sources of electromagnetic radiation include radio wave transmission in conjunction with remote equipment inclusive of irrigation controllers, access gates, etc.

6. The project has been evaluated to construct a proposal to construct a two-story 24-unit transitional housing building with office space totaling 11,850 square feet and 44 permanent supportive housing units totaling 22,150 square feet. Any increase in building area, change in use to any higher intensity use, change in building location, or modification of the tentative parcel map lot lines and areas will require an amended review to evaluate consistency with the ALUCP compatibility criteria**,** at the discretion of the ALUC Director.

7. The project does not propose rooftop solar panels at this time. However, if the project were to propose solar rooftop panels in the future, the applicant/developer shall prepare a solar glare study that analyzes glare impacts, and this study shall be reviewed by the Airport Land Use Commission and March Air Reserve Base.

X:\AIRPORT CASE FILES\March\ZAP1573MA23\ZAP1573MA23sr.doc

NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances [can vary from person to person. You may wish to consider what airport annoyances], if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. Business & Professions Code Section 11010 (b)(13)(A)

NOTICE

THERE IS AN AIRPORT NEARBY.

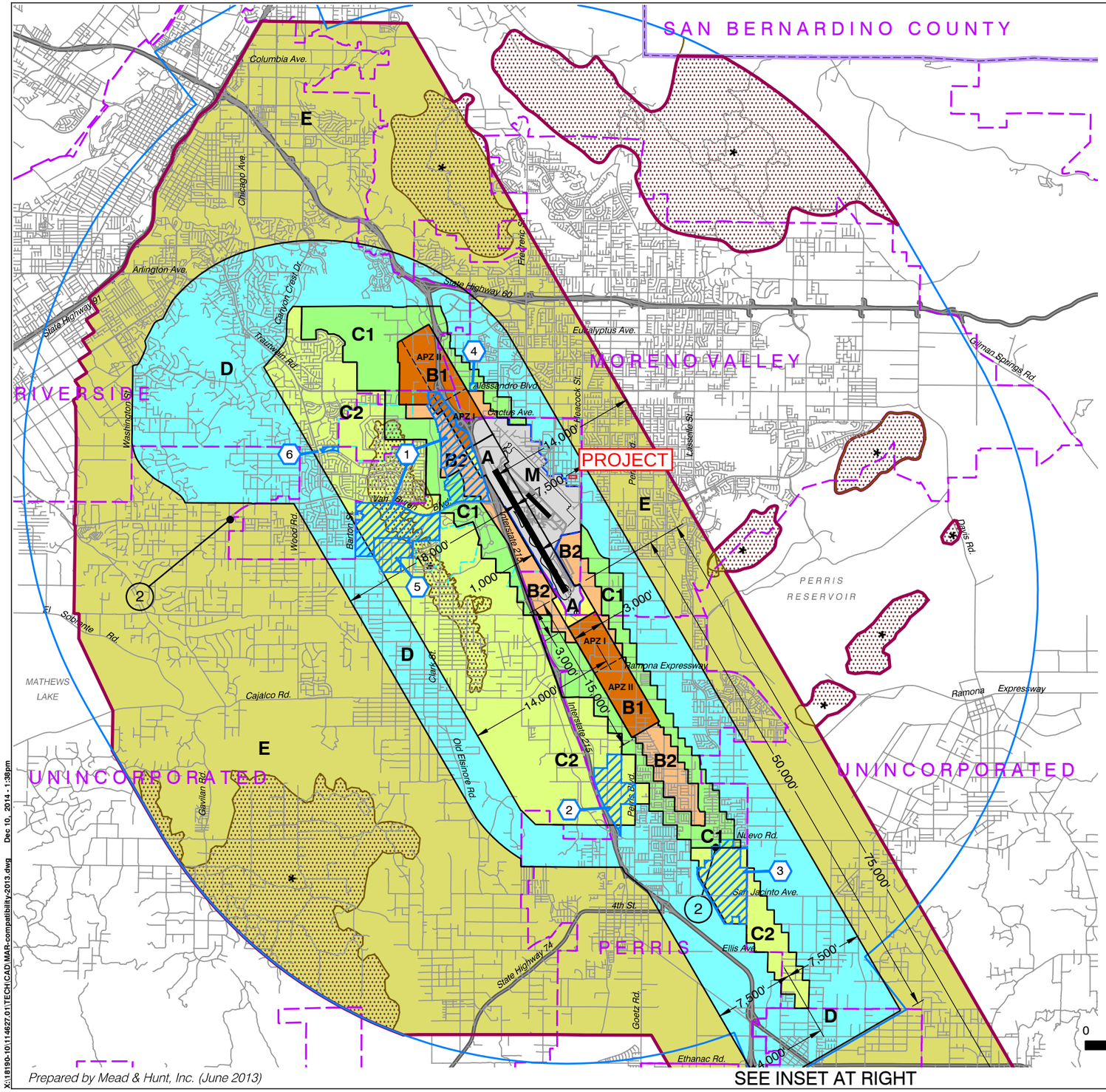
THIS STORM WATER BASIN IS DESIGNED TO HOLD STORM WATER FOR ONLY 48 HOURS AND NOT TO ATTRACT BIRDS

PROPER MAINTENANCE IS NECESSARY TO AVOID BIRD STRIKES

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION ALUC

IF THIS BASIN IS OVERGROWN, PLEASE CONTACT:

Name: _____ Phone: _____



LEGEND

Compatibility Zones

- Airport Influence Area Boundary
- Zone A
- Zone B1
- Zone B2
- Zone C1
- Zone C2
- Zone D
- Zone E
- Zone M
- High Terrain Zone
- FAR Part 77 Military Outer Horizontal Surface Limits
- FAR Part 77 Notification Area

Boundary Lines

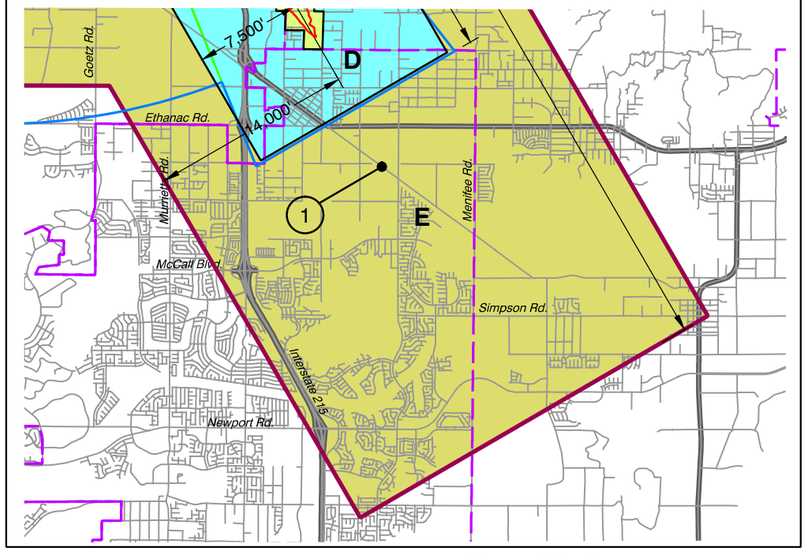
- March Air Reserve Base / Air Force Property
- March Joint Powers Authority Property Line
- County Boundary
- City Limits
- Site-Specific Exceptions (existing local agency commitments to development projects)

1. March JPA: March Business Center/Meridian
2. Perris: Harvest Landing
3. Perris: Park West
4. Moreno Valley: Affordable Housing
5. March JPA: Ben Clark Training Center
6. Riverside: Ridge Crest Subdivision

(1) Point at which aircraft on Runway 32 ILS approach descend below 3,000 feet above runway end. Airport Elevation is 1,535 feet MSL.

(2) Point at which departing aircraft typically reach 3,000 feet above runway end.

INSET



Note:
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N

0 2 4 MILES

Base map source: County of Riverside 2013

Prepared by Mead & Hunt, Inc. (June 2013)

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Riverside County
Airport Land Use Commission

March Air Reserve Base / Inland Port Airport
Land Use Compatibility Plan

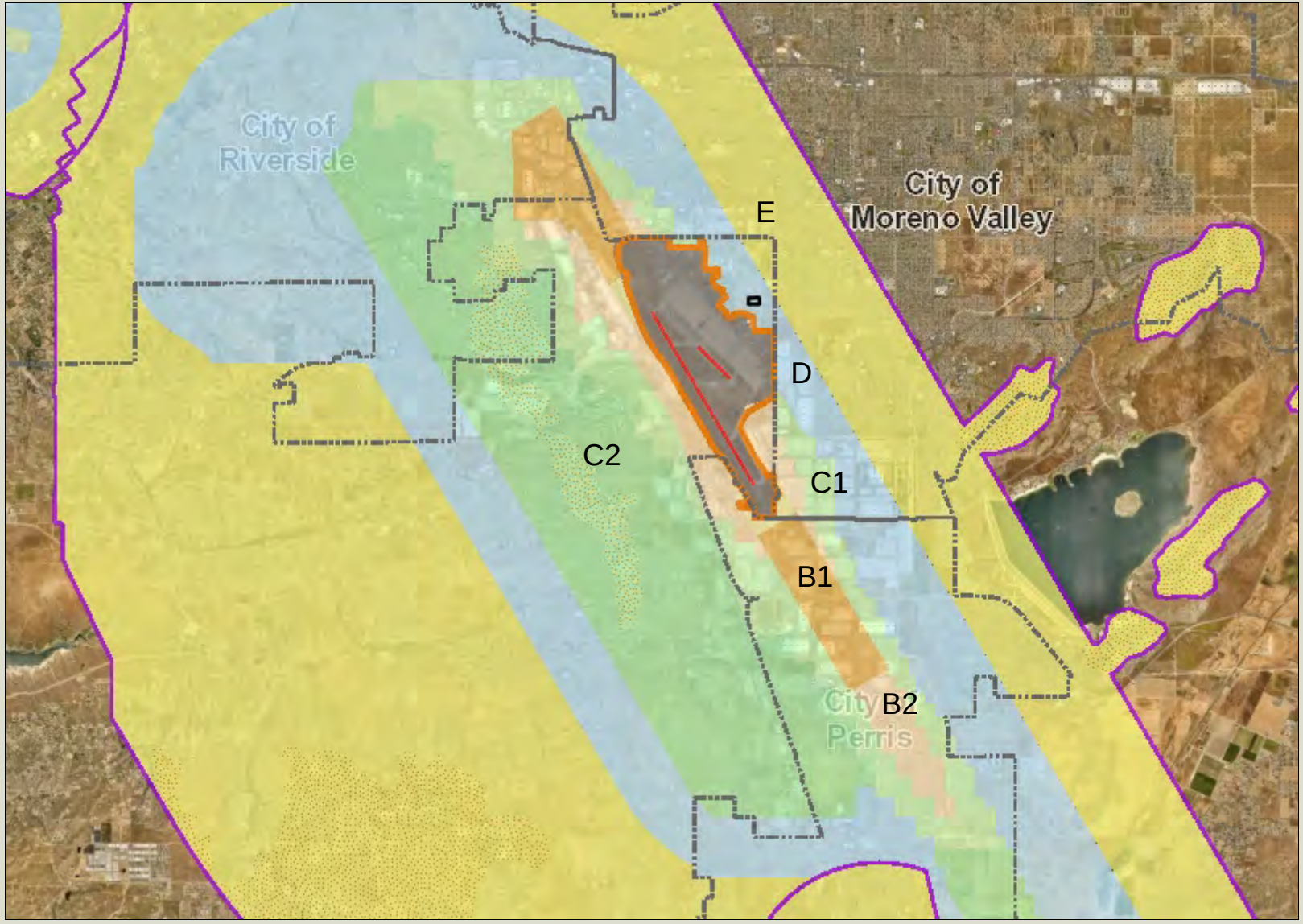
(Adopted November 13, 2014)

Map MA-1

Compatibility Map

March Air Reserve Base / Inland Port Airport

Map My County Map



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  - B1-EXC1
  - B2
  - B2-EXC1
  - C
  - C1
  - C1-EXC1
  - C1-EXC3
  - C1-EXC4
  - C1-HIGHT
  - C2
  - C2-EXC1
  - C2-EXC2
  - C2-EXC3
  - C2-EXC5
  - C2-EXC6

RCIT

0 12,314 24,629 Feet

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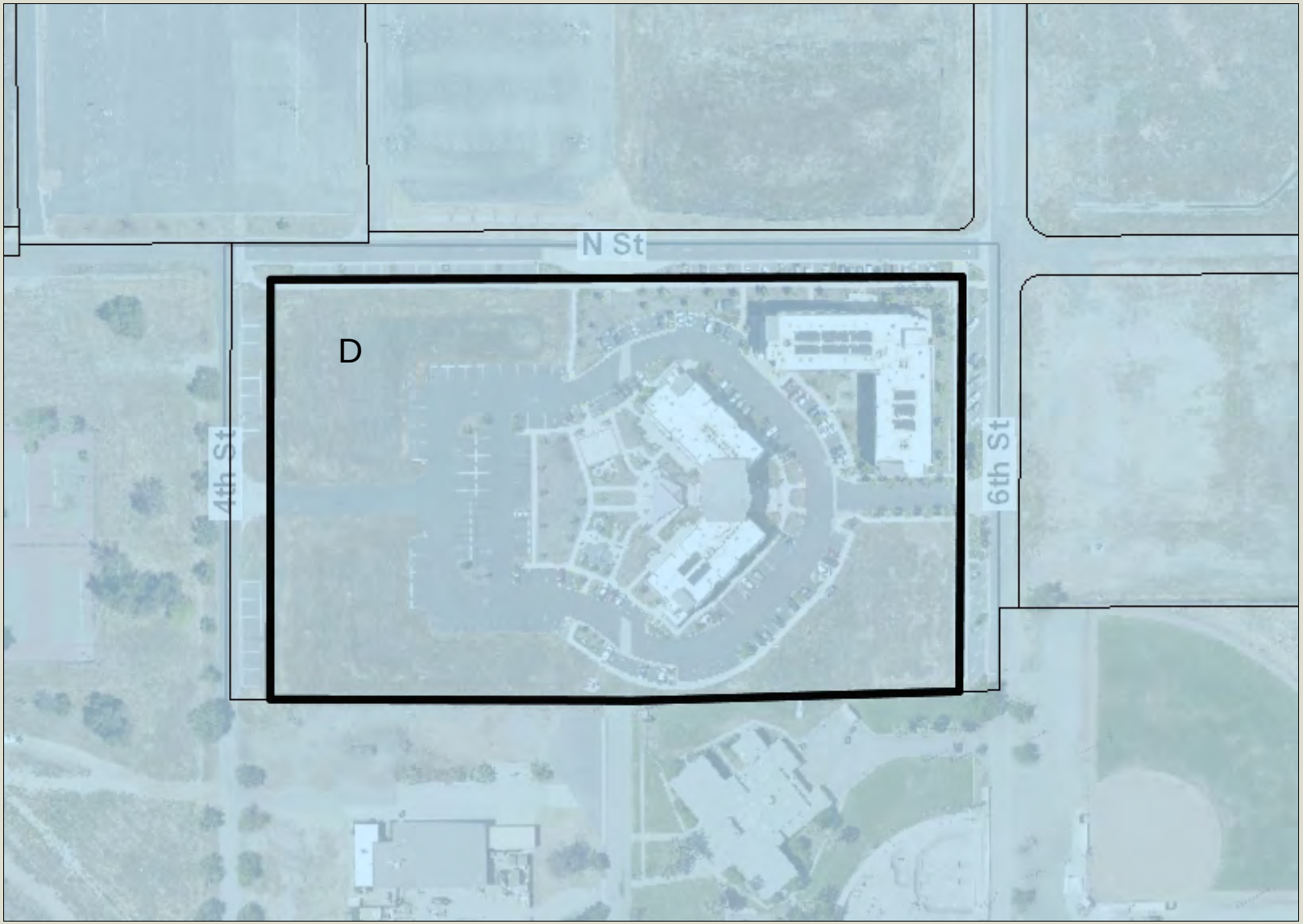
Notes

Map My County Map



Legend

- Parcels
- Runways
- Airports
- Airport Influence Areas
- Airport Compatibility Zones
  - OTHER COMPATIBILITY ZONE
  - A
  - A-EXC1
  - B1
  - B1-APZ I
  - B1-APZ I-EXC1
  - B1-APZ II
  - B1-APZ II-EXC1
  - B1-EXC1
  - B2
  - B2-EXC1
  - C
  - C1
  - C1-EXC1
  - C1-EXC3
  - C1-EXC4
  - C1-HIGHT
  - C2
  - C2-EXC1
  - C2-EXC2
  - C2-EXC3
  - C2-EXC5

RCIT

0 192 385 Feet

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- Parcels
- County Centerline Names
- County Centerlines
- Blueline Streams
- City Areas
- World Street Map

0 192 385 Feet

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0 3,079 6,157 Feet

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0 1,539 3,079 Feet

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Notes

0 6, 12,314 Feet

157

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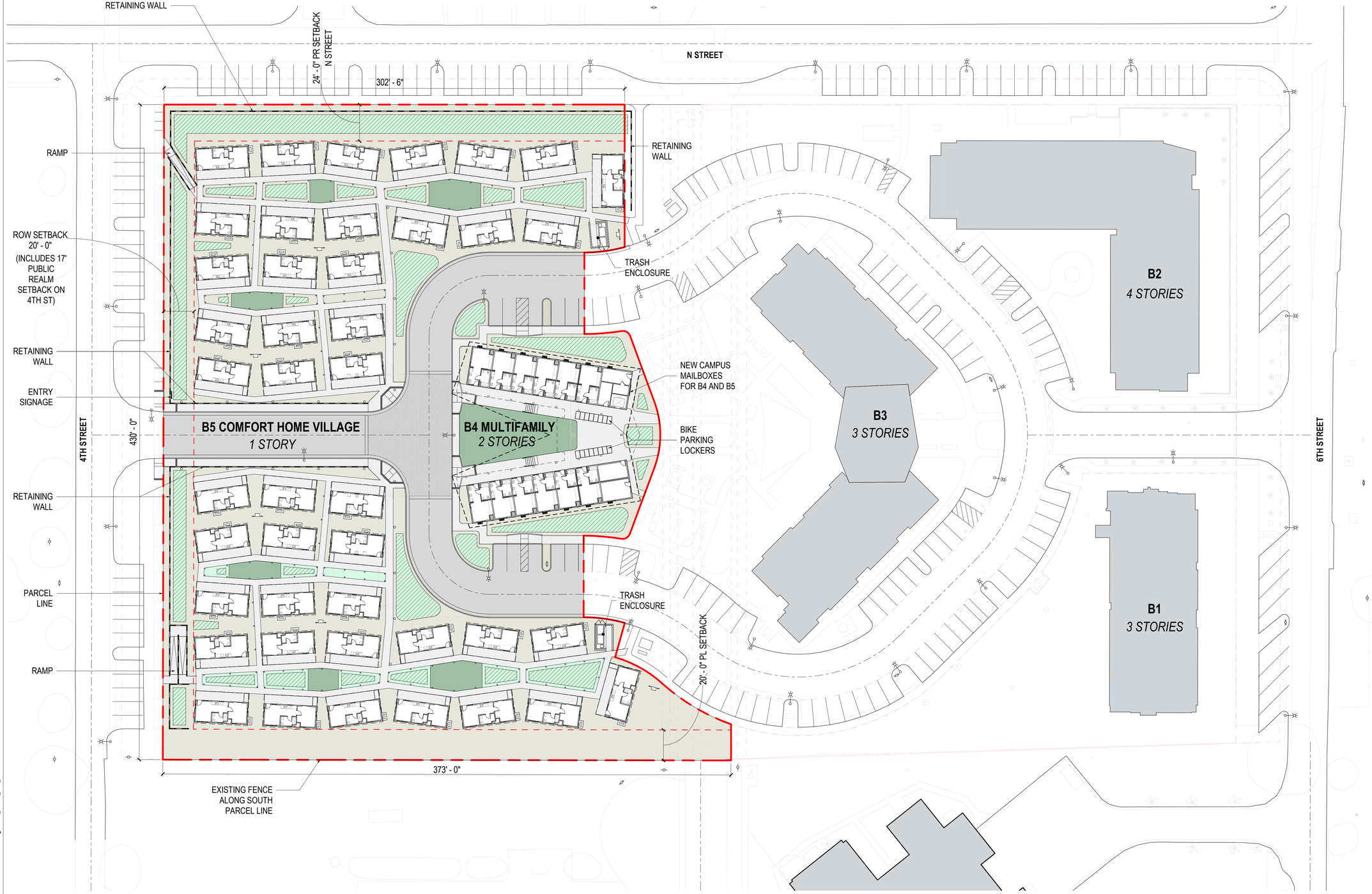
US VETS MARCH VETERANS VILLAGE - PHASE 03

15301 6TH STREET
RIVERSIDE, CA 92518

PLOT PLAN SUBMITTAL
FEBRUARY 2023



01 PRELIMINARY SITE PLAN
SCALE: 1" = 30'-0"

2/6/2023 2:16:09 PM BIM 360://005.4262.000 - US Vets March Veterans Village/MVV_ARCH_Site_R20.rvt

US VETS

March Air Reserve Base
15301 6th Street, Riverside, CA 92518

Gensler

500 South Figueroa Street
Los Angeles, California 90071
United States

Tel 213.327.3600
Fax 213.327.3601

△	Date	Description
1	FEB 2023	PLOT PLAN SUBMITTAL

Notes

Total Units:	**68 Units**
B4 (Multifamily):	24 Units
B5 (Comfort Homes):	44 Units

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Project Name

US Vets March Veterans Village

Project Number

05.4262.000

Description

PRELIMINARY SITE PLAN

Scale

1" = 30'-0"

A-1.0

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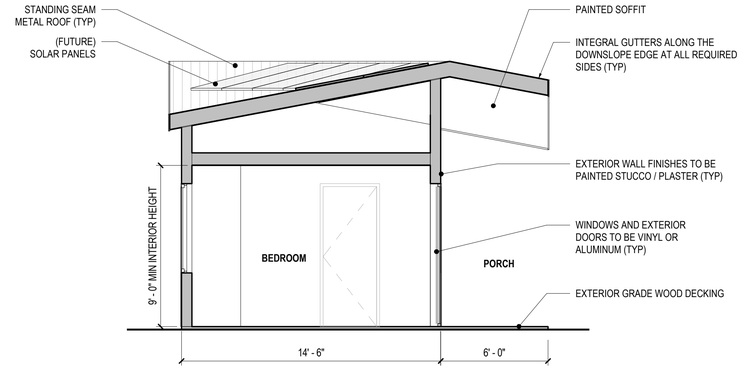

01 BUILDING TYPE B5 - COMFORT HOMES - TYPICAL UNIT SECTION

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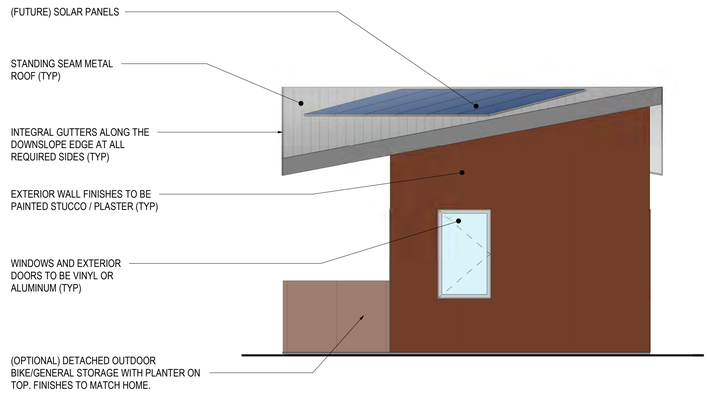
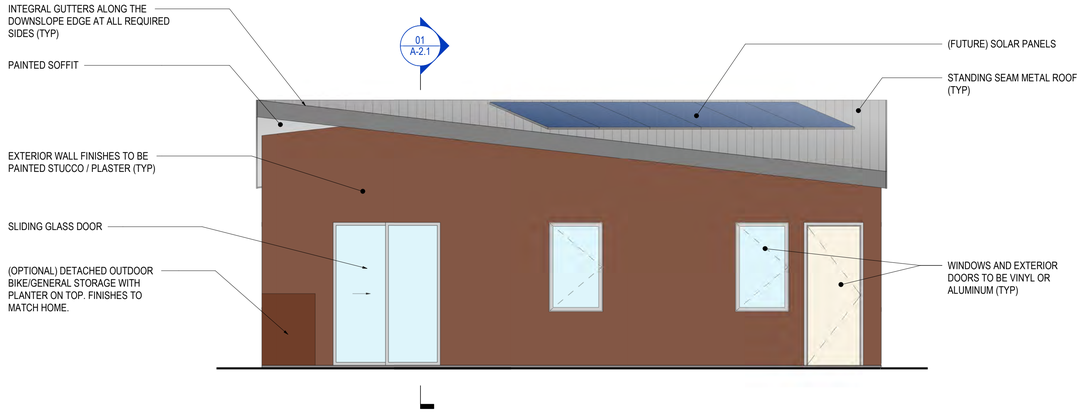


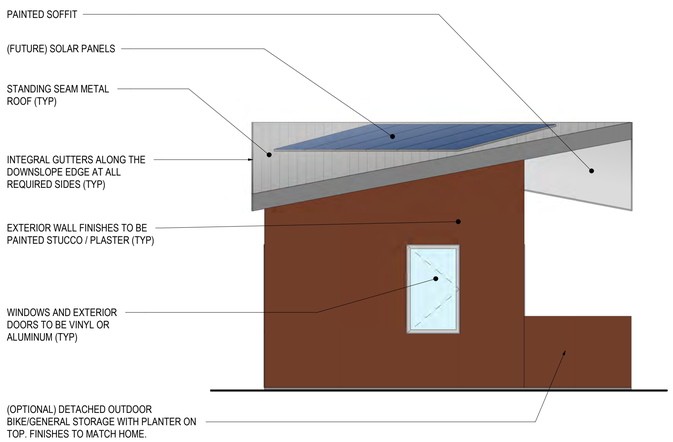
03 BUILDING TYPE B5 - COMFORT HOMES - TYP SIDE ELEVATION 01

SCALE: 1/4" = 1'-0"



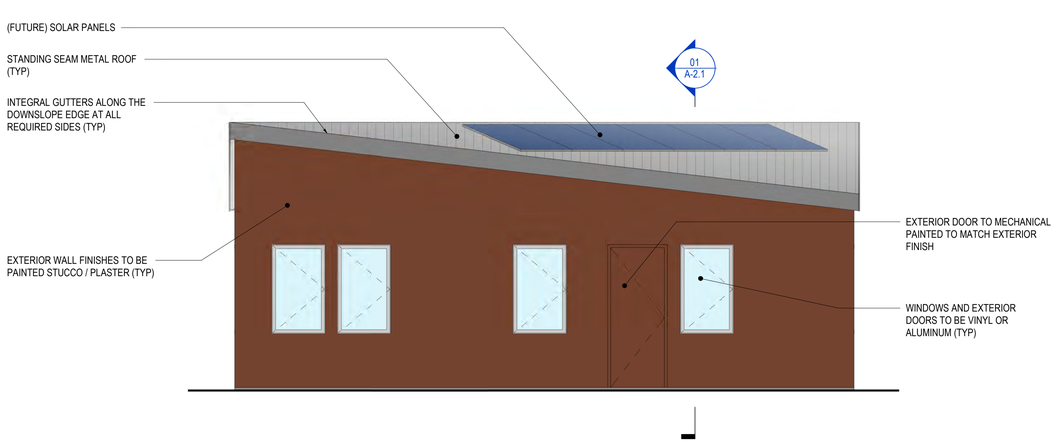
02 BUILDING TYPE B5 - COMFORT HOMES - TYPICAL FRONT ELEVATION

SCALE: 1/4" = 1'-0"



05 BUILDING TYPE B5 - COMFORT HOMES - TYP SIDE ELEVATION 02

SCALE: 1/4" = 1'-0"



04 BUILDING TYPE B5 - COMFORT HOMES - TYPICAL BACK ELEVATION

SCALE: 1/4" = 1'-0"

US VETS
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15301 6th Street, Riverside, CA 92518

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United States
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Fax 213.327.3601

△	Date	Description
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Project Name
US Vets March Veterans Village

Project Number
05.4262.000

Description
BUILDING TYPE B5 - COMFORT HOMES - TYPICAL ELEVATIONS AND SECTION

Scale
1/4" = 1'-0"

A-2.1

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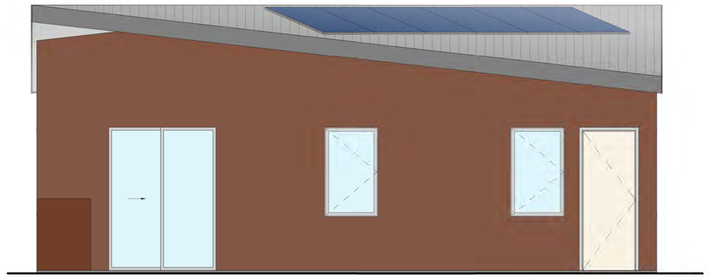
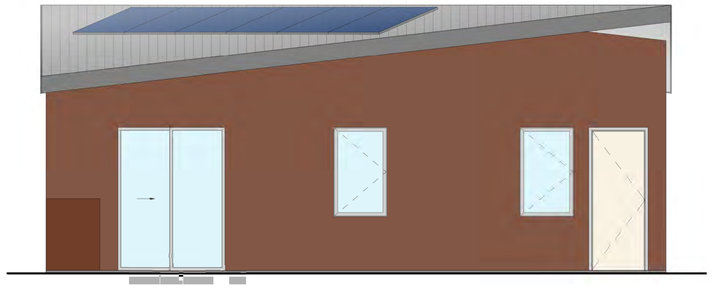
COLOR PALETTE PER SPECIFIC PLAN. COLORS TO MATCH EXISTING CAMPUS UNLESS NOTED OTHERWISE. TYPICAL ALL BUILDINGS.

THE COMFORT HOME UNITS WILL HAVE TWO ROOF TYPES THAT ARE MIRRORED VERSIONS OF ONE ANOTHER. ROOF TYPES TO ALTERNATE BETWEEN UNITS.

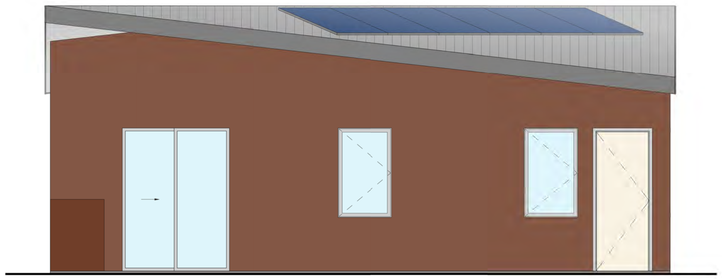


ROOF TYPE A

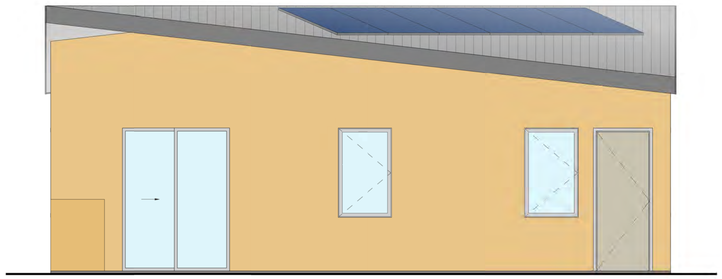


ROOF TYPE B

BUILDING TYPE B5 - COMFORT HOMES - ROOF TYPES



COLOR 01



COLOR 02

THE COMFORT HOMES WILL HAVE A VARIETY OF COLOR TYPES. FINAL COLORS TO BE DETERMINED. COLORS TO BE CONSISTENT WITH CAMPUS COLOR PALETTE.

COMFORT HOME COLOR DISTRIBUTION	
COLOR TYPE	NUMBER OF UNITS
COLOR 01	25% (11 UNITS)
COLOR 02	25% (11 UNITS)
COLOR 03	25% (11 UNITS)
COLOR 04	25% (11 UNITS)

COLOR 03

COLOR 04

BUILDING TYPE B5 - COMFORT HOMES - PROPOSED COLOR OPTIONS

US VETS
March Air Reserve Base
15301 6th Street, Riverside, CA 92518

Gensler
500 South Figueroa Street
Los Angeles, California 90071
United States
Tel 213.327.3600
Fax 213.327.3601

△	Date	Description
1	FEB 2023	PLOT PLAN SUBMITTAL

Seal / Signature

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Project Name
US Vets March Veterans Village

Project Number
05.4262.000

Description
BUILDING TYPE B5 - COMFORT HOME - UNIT OPTIONS

Scale
NOT TO SCALE

A-2.2

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U.S. VETS TRANSITIONAL PROGRAM SPECIFIC PLAN (SP-6)

NOVEMBER 2011

U.S. VETS
UNITED STATES VETERANS INITIATIVE

Amendment 1
February 2023

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Chapter 1.0 Introduction

PROJECT SUMMARY

Section 1.1 Background of the Specific Plan

The U.S. Vets Initiative Transitional Program is located within the limits of the adopted March LifeCare Campus Specific Plan (SP-7) and certified Program Environmental Impact Report (SCH#2008071021) that were approved by the March Joint Powers Commission in November of 2009, as well as the March LifeCare Campus Specific Plan Amendment (SP-7) and certified EIR Addendum that were adopted in August of 2011. The adopted SP-7 and certified environmental documents described and analyzed a 236 gross acre campus setting for hospitals, educational programs, research laboratories, medical office buildings, healthcare related uses and support services. The Specific Plan and EIR further analyzed the relocation of existing homeless shelters, Path of Life and the U.S. Veterans' Transitional Program, within the boundaries of the Specific Plan Area. The relocation of existing homeless shelters from the southwest corner of Meyer Drive and 6th Street, to March Joint Powers Authority (JPA) retained parcels southerly of N Street and westerly of 6th Street, helps facilitate the development of an integrated and comprehensive healthcare campus along Meyer Drive.

The U.S. Vets relocation and expansion Project would have represented the first implementing project pursuant to the adopted March LifeCare Campus. However, because the Project introduces a larger and more comprehensive design for the existing U.S. Vets Program than originally anticipated in the March LifeCare Campus, it was necessary to separate the Project from the whole of the March LifeCare Development which focuses on the development of healthcare related uses. The Proposed Project is to relocate and expand the existing U.S. Veterans' Transitional Program, and adopt a standalone Specific Plan for the new development that will create regulations and programs necessary for the successful operation of a comprehensive transitional program for homeless veterans.

Pursuant to the naming standard for specific plan set forth in JPA Development Code Section 9.13.40, the proposed Specific Plan Amendment is designated SP-6 and affects 7.75 acres of JPA owned parcels located south of N Street and west of 6th Street.

Section 1.2 Project Description

The United States Veterans Initiative (U.S. Vets) is the largest non-profit organization in the country dedicated to providing comprehensive services to homeless U.S. military veterans. Since 2003, the existing U.S. Vets facility at the March JPA has served veterans within the western Riverside County region by providing housing, educational and job training services.

Currently, the U.S. Vets Initiative operates a transitional housing program at 15106 6th

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Street and 15125 6th Street. The U.S. Vets Initiative would like to relocate and expand the existing U.S. Vets Program to a 7.75 acre site located less than 1,200 feet south of the existing Program site. The new site will accommodate a ~~401~~ 283 bed transitional housing center for homeless US veterans.

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Chapter 2.0 Specific Plan

Section 2.1 Executive Summary

US VETS (United States Veterans Initiative) is proposing a ~~401~~283 ~~-~~bed transitional housing center for homeless Veterans to be called March Veterans Village and located on 7.7533 acres within the March LifeCare Campus Specific Plan in Riverside County. The site is bound by 6th, N and 4th streets and borders a community center to the south operated by the City of Moreno Valley. ~~The net buildable area will be approximately 5.84 acres based on the project setbacks as noted in the Specific Plan.~~ The proposed development would result in the abandonment of 5th Street ~~during the second phase of the Project~~. The site is designated as Mixed Use Zone under the Specific Plan. The Project is allowed under the existing SP-7 zoning designation. Because of the specialized nature of the Project, however, the Project site will be rezoned to SP-6 in order to apply provisions and regulations within this document to the U.S. Vets Project site alone and not to the whole of the SP-7 project area.

Section 2.2 Development and Phasing Program

Housing Composition and Program

~~Three~~ Two veteran housing programs comprise this ~~323~~ 222 unit, ~~401~~ 283 bed project, which is designed to serve former military men and women in need of transitional housing, as well as health and mental services. The project will be constructed in ~~three~~ phases: (see also Appendix L – Phasing Exhibits)

Table 1. ~~PHASE I) –~~ Building & Unit Count

~~Type~~	~~Bldg. Qty.~~	~~Beds~~	~~Units~~	~~Area (SF)~~	~~Bed/Unit~~
~~Efficiency Building (B2)~~	~~1~~	~~143~~	~~107~~	~~61,278~~	~~1.3~~
~~Family Building (B1)~~	~~1~~	~~27~~	~~21~~	~~23,404~~	~~1.3~~
~~TOTAL~~	~~2~~	~~170~~	~~128~~	~~84,682~~	~~1.3~~

~~Type~~	~~Bldg. Qty.~~	~~Beds~~	~~Units~~	~~Area (SF)~~	~~Bed/Unit~~
~~(B1)~~	~~1~~		~~16~~	~~23,349~~	
~~(B2)~~	~~1~~	~~116~~	~~116~~	~~60,969~~	~~1.0~~
~~(B3)~~	~~1~~	~~38~~	~~22~~	~~41,710~~	~~1.7~~
~~TOTAL~~	~~3~~		~~154~~	~~126,028~~	~~1.~~

~~During Phase I of the Project the B2 building will implement Program Bed units that are designed to accommodate more than one bed per unit. Prior to the completion of Phase II development, these Program Bed units will be converted to Efficiency Bed units which will accommodate one bed for each unit. No more than 3 Program Units within the B2 building will be converted into community spaces such as classrooms, counseling rooms or office spaces. Please refer to Table 2 below for a total bed and~~

~~unit count for Building B2 during Phase II of the Project.~~ During Phase II of the Project, ~~44 buildings including a new 24-unit Multifamily Building (Building B4) and 44 single-unit Comfort Homes (Buildings B5) will be constructed.~~

~~Table 2. PHASE II – Building & Unit Count~~

~~Type~~	~~Bldg. Qty.~~	~~Beds~~	~~Units~~	~~Area (SF)~~	~~Bed/Unit~~
~~(B4)~~	~~1~~	~~24~~	~~24~~	~~11,~~	~~1.0~~
~~(B5)~~	~~44~~	~~44~~	~~44~~	~~22,~~	~~1.0~~
~~TOTAL~~	~~45~~	~~68~~	~~68~~		~~1.0~~

~~TOTAL – Building & Unit Count (Phases I and II)~~

Type	Bldg. Qty.	Beds	Units	Area (SF)	Bed/Unit
Transitional Housing **(B1)**	1	61	16	23,349	3.8
Permanent Supportive Housing **(B2)**	1	116	116	60,969	1.0
Permanent Supportive Housing **(B3)**	1	38	22	41,710	1.7
Transitional **(B4)**	1	24	24	11,850	1.0
Permanent Supportive Housing (Comfort Homes) **(B5)**	44	44	44	22,150	1.0
TOTAL	**48**	**283**	**222**	**160,028**	**1.1**

There will be ~~three~~ two primary types of housing programs within this project:

1. **Permanent Supportive Housing**

   116-beds, 116-units categorized as Permanent Supportive Housing will serve single veterans. Each of these units consists of a sleeping area, kitchenette and bathroom in an approximately 370 SF unit. These units are located in the Permanent Supportive Housing Building (Building B2).

   38-beds, 22-units categorized as Permanent Supportive Housing will consist of 16 two-bedroom units (2 beds per room in a two room, 734 SF unit with private bathroom and a one room 374 SF unit with private bathroom) and 6 one-bedroom units (approximately 640 SF each). At project completion, Each of these units includes a private bathroom. These units will be located only in the Administration Building (Building B3).

   44-beds, 44-units, or individual “Comfort Homes”, categorized as Permanent Supportive Housing units are proposed on the Campus. These individual “Comfort Homes” will be approximately 500 SF, and include a bedroom,

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bathroom, kitchen and living area. At this time, construction methods, either modular or stick built, depending upon cost and timing, is being considered. In addition, the architectural style and building color/materials will be compatible with the other Campus buildings. Primary access to these Comfort Homes (Building B5) will be off 4th Street, with additional access from 6th Street.

2. Transitional Housing

61-beds, 16-units categorized as Transitional Housing will consist of 15 two-bedroom units (approximately 710 SF each) and 1 one -bedroom unit (approximately 560 SF). Each of these units includes one bathroom, galley kitchen and living area. The two bedroom unit is 885 SF and the one bedroom unit is 609 SF. These units are located in the Family Building (Building B1).

24 beds, 24-units categorized as Transitional Housing will be studio apartments (approximately 375 SF each). The Building will also have administrative offices, computer room, laundry facility and community space. This building will be similar to Building 1, in terms of architecture and operations. The Transitional Housing Building SF is approximately 11,850 SF. Access to this Building (Building B4) will be off of 6th Street, but mainly from 4th Street.

The program housing will be supported by facilities housing operational staff, administration staff, property management personnel as well as career counselors and case workers. ~~. It is envisioned that the dining room, kitchen and multi-purpose room will be situated in a standalone 1-1/2 story building (Multi-purpose Building).~~ The remaining support functions will be located on the first floor of a 3-story building ~~(Administration Building) which will house the VIP program units~~. ~~These two buildings will be constructed in the second phase.~~ Additional offices as well as a dining and kitchen area will be provided ~~in the Efficiency Building in the first phase of construction~~. No commercial or retail uses are permitted within this development.

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Section 2.3 Infrastructure

Development of the Specific Plan will require the extension of existing infrastructure and services, and construction of new infrastructure, including:

 Street Improvements. The public roadways (N Street, 4th Street, and 6th Street) will be improved during the development of the Specific Plan. The private road infrastructure within the Specific Plan will be designed to achieve efficient and safe access to and from individual buildings as detailed site planning for the Specific Plan occurs.

 Water Distribution Facility Improvements. All existing pipeline within the Specific Plan will be replaced.

 Sewer Collection Facility Improvements. The Project site is adequately serviced through an existing 10 inch sewer pipeline that currently bisects the Project site.

 Storm Drain Improvements. The Specific Plan design will use a series of best management practices to reduce storm flows and minimize impacts to downstream drainage areas.

 Utilities. A backbone electrical conduit system will be installed in the right-of-way of what is now 5th St. A gas main and meters will be installed to serve each building in the Specific Plan area.

 Other Public Services such as Police and Fire. The Riverside County Sheriff's Department will continue to provide police services to the Specific Plan area. The Riverside County Fire Department will continue to provide Fire Marshall Services to the Specific Plan area.

Section 2.4 Open Space Facilities

An important consideration for the quality of a campus setting is the quality of its open space areas. The Specific Plan supports the ninth goal of the March Joint Powers Authority (MJPA General Plan, 1999, Page 5-14) General Plan Resource Management Element, which states that development should,

"Create a network of open space areas and linkages throughout the planning area that serves to preserve natural resources, protect health and safety, contributes to the character of the community, provide active and passive recreational use, as well as visual and physical relief from urban development."

The Specific Plan will provide open space throughout the development with courtyards, parkways and a tot lot that are incorporated into building layout and campus design. The campus design for this Project is to be a welcoming, easy-to-navigate community dedicated to service delivery, education, and job training. It is the intent of this Specific

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Plan to provide the land use, infrastructure, design plans, regulations, and guidelines needed to facilitate development of an integrated transitional housing campus setting for recovering/homeless U.S. veterans.

The Specific Plan guides the design, building, and operation of the U.S. Vets Initiative to enable environmental and social responsibility, and a healthy and prosperous environment that improves quality of life. The Specific Plan provides text and exhibits describing the proposed campus, including:

 Defining the uses, amenities, and pattern of development that will be provided to create an integrated transitional housing campus.

 Providing for the convenient and safe movement of private and transit vehicles, pedestrians, and bicycles within the campus.

 Establishing design guidelines to ensure high quality design of buildings, landscaping, lighting, site grading, and other campus features, including site design guidelines to guide the development of individual uses in a manner that yields an integrated campus setting.

 Providing plans for the provision of water, sewer, drainage, and utility infrastructure, as well as the public services and facilities needed to support development of the campus.

 Providing detailed development regulations for the community.

 Defining implementation programs for the development of the Specific Plan area.

The Specific Plan, when adopted, will serve as:

(1) a tool for the March JPA to implement the provisions of its General Plan as it applies to the site, and

(2) the zoning for the campus. The Specific Plan's development, performance, and design standards will govern future development of the Project and will ensure consistent and context-sensitive land use, landscape design, and architectural treatments, and will provide for logical development phasing and adequate and efficient provision of needed public services and facilities.

Section 2.5 Specific Plan Location

The approximately 7.8-acre Specific Plan area is situated east of Interstate 215 (I-215), southerly of the March LifeCare Campus Specific Plan. The site is adjacent to the City of Moreno Valley to the south, and is bounded by "N" Street to the north, 4th Street to the west, City of Moreno Valley to the south, and 6th Street to the east. A legal description of the Specific Plan Boundary is included in Appendix A.

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Major regional freeways provide convenient access to the Specific Plan area. Cactus Avenue provides direct access to I-215, located approximately 1.7 miles west of the Specific Plan site. State Route 60 (SR-60) is located approximately 2.2 miles north of the Specific Plan site, and can be directly accessed from Heacock Avenue and Cactus Avenue. Figure 1-1 shows the regional location of the Specific Plan.

Section 2.6 Existing Setting

2.6.1 Existing General Plan and Zoning

The current General Plan designation for the Project site is SP-7 ~~(Medical Campus)~~, which the Project will amend the General Plan designation for the Project site to SP-6. The Project designation of SP-6 is consistent with and complimentary to existing and future surrounding land uses. Surrounding land uses include the March LifeCare Campus Specific Plan to the north. Park, recreation, and open space land uses in the City of Moreno Valley border the Specific Plan to the west and south. The Project site is zoned Specific Plan (SP) and the proposed Project will maintain the same zoning of SP. A Zoning Consistency Chart is included in Appendix B. A General Plan Consistency Statement is included in Appendix C.

2.6.2 Existing Land Uses

The proposed 7.75 acre site is currently occupied by an abandoned restaurant and an abandoned military housing building. The site is bounded by existing City of Moreno Valley Park Facilities to the south including two buildings, abandoned tennis courts to the west, an active commissary to the northwest, abandoned military structures to the north and an existing structure that is proposed for a future homeless shelter to the east. The site is within Zone D (un-mapped area) of the FEMA Flood Insurance Rate Map 06065C0765G, dated August 28, 2008 and within the RCFCD Perris Valley Area Drainage Plan. The site consists of three existing parcels (B-942a, B-942b and K-5D B940) divided by the existing 5th Street right of way. The Project proposes to vacate the 5th Street right of way, and dedicate easements through the site for any utilities that remain in the 5th street alignment.

Sanitary Sewer and Domestic Water facilities are provided by Western Municipal Water District. A military base exchange and a vacant warehouse building are located directly north of the Specific Plan area, and a military commissary facility is located directly northeasterly of the Project. Former Marine dormitories are located east of the Project site; these dormitories will be used for the relocation of the Homeless Path of Life Program that is currently located near the intersection of Meyer Drive and Riverside Drive.

The Specific Plan rehabilitates a former developed portion of March Air Force Base in an urban area with existing infrastructure. This effective reuse helps reduce pressure on

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surrounding undeveloped land and water resources, and improves current storm water management with upgrades.

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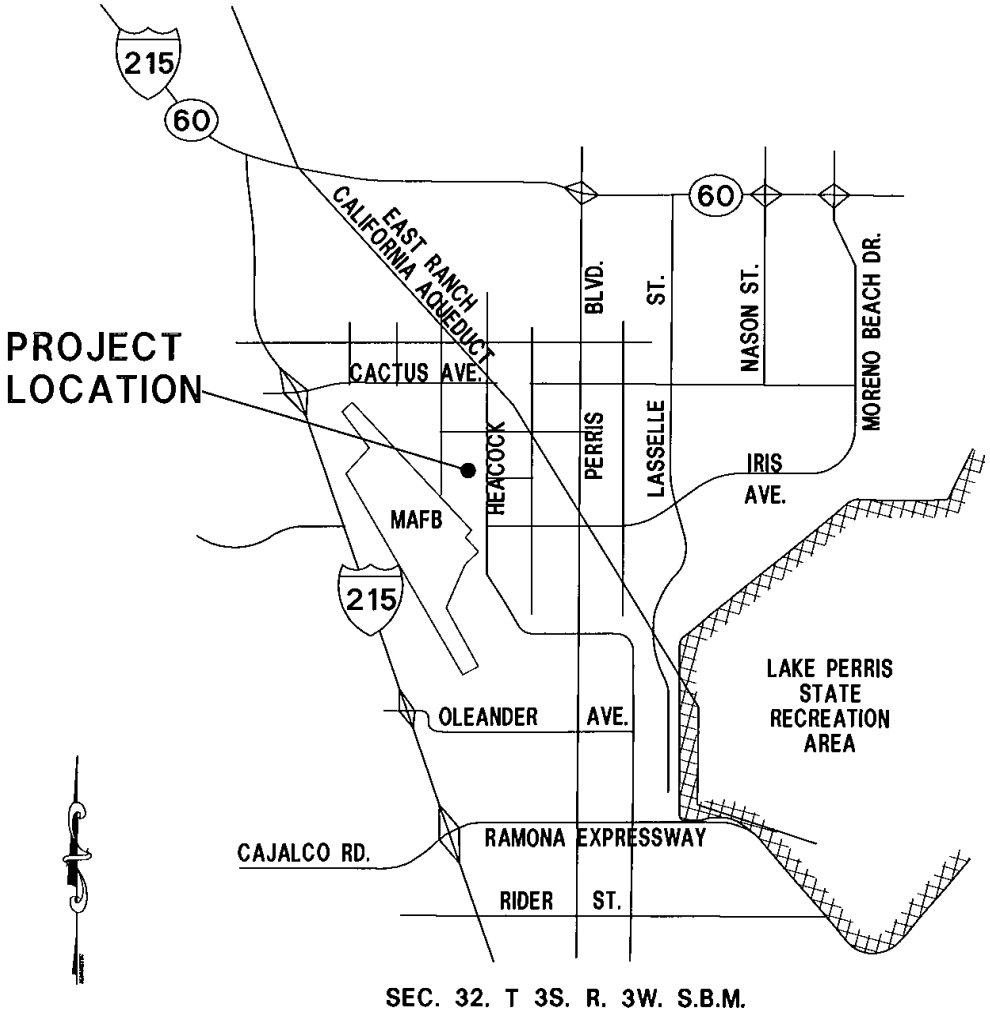
Figure 1-1 Regional and Vicinity Map



Section 2.7 Existing Infrastructure and Services

2.7.1 Existing Circulation

The Specific Plan is currently accessed from Riverside Drive, Meyer Drive, N Street, and 6th Street. Riverside Drive is a four-to-six lane roadway which generally runs in a north to south direction. Meyer Drive is a two-to-four lane roadway that runs in a east to west direction. N Street borders the Specific Plan area to the north and is currently a two lane roadway running in an east to west direction. 6th Street borders the eastern edge of the Specific Plan area and is currently a two lane roadway which generally runs in a north to south direction.

The Specific Plan area is currently served by the Riverside Transit Agency (RTA), which operates bus service throughout Riverside County. The area is served by the following route:

- Route 11 - Alessandro & Frederick to the Former March Air Force Base, runs to/from the Former March Air Force Base Main Gate at Ellsworth Street through the March JPA with a single stop at Meyer Drive at 6th Street, runs to the Moreno Valley Mall. RTA also provides Dial-A-Ride service for seniors and the disabled. This is an advanced reservation curb-to-curb service for those who live within 0.5 miles of a fixed bus route. All local roadways providing access to the Specific Plan currently have sidewalks along frontage where development has occurred. The Route connects to the City of Riverside Downtown Terminal, where transfers can be made to other Riverside bus routes, as well as to Omnitrans, which provides service to the 4th Street Transit Mall in San Bernardino. A stop at the Marketplace Station provides transfers to Metrolink and Amtrak service.

The Project will install a new bus route, with furniture and signs for bus users, between 4th and 6th Streets at N Street. A final location will be determined by RTA at final project design.

2.7.2 Existing Water Distribution Facilities

The Specific Plan and the March JPA planning area are within the boundaries of Western Municipal Water District (WMWD). In the March JPA planning area there are approximately 60 miles of water line varying between 2 to 16 inches in diameter. The WMWD supplies potable water through an existing 14 inch diameter pipeline under I-215 to supply their entire service area east of the interstate.

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2.7.3 Existing Sewer Facilities

The Specific Plan is within the WMWD service area for sewer. A 15 inch gravity line currently serves as the major conduit for the Specific Plan area. The gravity line is located in 6th Street. Additionally, there is an existing 10 inch line in 5th Street that provides the capacity for service to the Specific Plan area.

2.7.4 Existing Reclaimed Water Facilities

The Specific Plan area is not currently supplied with reclaimed water; however, irrigation lines will be plummed for reclaimed water in anticipation of future facilities planned within WMWD's water master plans for the region.

2.7.5 Existing Storm Drain Facilities

There are currently no existing underground storm drain facilities within the vicinity of the Project site. The existing surface sheet flows drain from the north to the south and are collected by the existing concrete trapezoidal channel just south of Z Street on Air force Base property. Z Street then flows into Heacock Channel, an existing unimproved earthen channel that conveys storm water generated from the Sunnymead Watershed.

The Heacock Channel runs north to south along the west side of Heacock Street and accepts flows from Sunnymead Channel and Cactus Channel. The Heacock Channel is undersized, not regularly maintained and vegetated with eroded banks; its conveyance capacity is inadequate. Under current conditions, storm flows overtop the banks and sheet flow into Heacock Street and in some conditions, areas surrounding the Project site.

In September 2006, the Riverside County Flood Control and Water Conservation District (RCFCWCD) prepared hydrology and hydraulic reports to address the flooding impacts from the Heacock channel within the March Air Reserve Base. These studies as well as a site specific hydrology study were used to establish the hydrology and depth of flooding for pre-design of the drainage for the Specific Plan.

With respect to flooding, the results of the hydraulic models prepared by the RCFCWCD for the study area confirmed that Heacock channel have minimal capacity and flows overtop both channels and inundate much of area around the site. Depth of flooding for the 100-year storm event varies between 0.1 inches and 1.5 feet for most of the Specific Plan area. Some areas along and including the existing channels are flooded up to 2.5 feet and above.

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2.7.6 Existing Utilities

Underground and overhead electric systems currently exist within the site boundaries. Southern California Edison Company currently has a 12 kilovolt (kV) overhead circuit along the east side of 5th Street that transitions to underground just south of N street. Underground electric extensions from the overhead line supply electricity to two pad mounted transformers that connect to the vacant dormitory.

The Southern California Gas Company currently has an underground gas main line along the south side of N Street that turns south and runs along the east side of 5th Street through the site. Two gas service lines extend from this main line to serve two meters on the existing buildings. Existing gas lines do not have capacity and a new gas main line will be required in 6th Street to a point of connection on Meyer west of Heacock.

Existing overhead telephone lines currently extend from the south along the east side of 5th Street and stop approximately 150 feet south of N street. Existing overhead Time Warner Cable lines run along the south side of N street and then turn south along the west side of 5th Street for approximately 300 feet. The overhead lines then cross over to the east side of 5th Street and continue south through the site. Existing phone lines do not meet requirements and a new phone main line will be required in 6th Street to a point of connection on Meyer east of 6th Street.

2.7.7 Existing Solid Waste Services

Solid waste generated by uses within the vicinity of the Specific Plan area, including the existing U.S. Vets facility, is currently disposed of through contracts with the County of Riverside Waste Management.

2.7.8 Other Public Services

Law enforcement services in the March JPA planning area fall under the Riverside County Sheriff's Department. Sheriff substations are located within the cities of Moreno Valley, Riverside, and Perris.

Fire Marshall Services to the Project site fall under the jurisdiction of the Riverside County Fire Department via the Moreno Valley Fire Department. Additionally, in the event of emergencies, fire protection services are also provided through a mutual aid agreement between local cities, the County of Riverside and the March Air Reserve Base Fire Departments.

The Riverside County Free Library, the City of Moreno Valley, and the Public Library of the City of Riverside provide library services to the March JPA planning area.

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Chapter 3.0 Campus Vision

Section 3.1 Overview

The Specific Plan will provide services to U.S. veterans in southwestern Riverside County, an area that is currently underserved by veteran services.

The Specific Plan is intended to consist of up to ~~three~~ two main types of transitional housing; ~~a drug and alcohol rehabilitation center; classrooms; a cafeteria;~~ a multipurpose room and recreation facilities. The Specific Plan will provide institutional residential settings for veterans as well as families who either can not or choose not to live in traditional housing due to the need for special services.

The Specific Plan will provide a campus setting that focuses on a pedestrian oriented design. Parking associated with the project will be provided with interior on-site parking spaces along the private streets, as well as off-site parking spaces along the public perimeter streets that are solely intended for residents' use. The off-campus parking design supports a more dense and walkable environment with greater open space opportunities.

Section 3.2 Guiding Principles

The following principles comprise the foundation upon which the Specific Plan is built. These principles address physical, economic, and environmental objectives, and frame a long-range vision for the campus.

The Project will provide for and support reuse of the former March Air Force Base consistent with the vision and intent of the March Air Force Base Master Reuse Plan and the March Air Force Base Redevelopment Plan. A key goal of the U.S. Vets Project is to provide for the reuse of lands within the former March Air Force Base that have been declared surplus and returned to civilian use. In addition to providing counseling and transitional housing services, the Specific Plan is designed to recapture economic development opportunities that were lost when base realignment occurred, by attracting quality programs and providing a substantial employment support base that will also strengthen economic opportunities for surrounding communities.

Achieve a campus atmosphere, which is defined by the following attributes:

- Abundant open space;
- Easily walkable with ample connectivity between all on-campus buildings;
- Conveniently placed campus amenities foster collegiality;
- Provide for the full range of service delivery and education for veterans of any age group as well as their families, if needed;

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- The layout of uses within the campus shall provide for critical adjacencies by providing for convenient and easy movement between the various facilities a veteran might need to use within the course of a day;

- Architectural, site, and landscape design shall recognize the stressful conditions often present for veterans, staff, and visitors, and provide tranquil places of quiet and solitude, as well as places where children can play while visiting family members;

- Signage shall provide adequate direction so that navigation within the campus is made simple, even for first time visitors;

- Implement sustainable design. The U.S. Vets Transitional Housing Campus will provide not only ~~counseling and~~ transitional housing, but will contribute to a healthy environment by implementing sustainable programs in relation to building, landscape, and lighting design; water and energy conservation; re-use of materials; solid waste management; and air quality management. Sustainable design standards are included in the Specific Plan to direct the way buildings and the campus will be designed to engage environmental and social responsibilities, and create a healthy campus environment;

- Take advantage of access provided by available regional and local roadway systems. The Specific Plan is located in an area of the former March Air Reserve Base that provides ready access to the local and regional roadway network. Siting of the Specific Plan in this manner will facilitate access, reduce vehicle miles traveled within the region, and promote full use of facilities and services available under the Specific Plan;

- Internal circulation elements shall provide for safe and efficient movement for vehicles, pedestrians, and bicycles. The design of the Campus shall provide a comprehensive vehicular and non-vehicular transportation network that will facilitate safe, convenient, and efficient access to, from, and within all portions of the campus. The appearance and experience of using the circulation system shall enhance the campus image. The campus shall be accessible by both private vehicles and public transit. Vehicular entrances to the campus shall be distinctive. Pedestrian circulation areas within and around the campus shall be as easily navigable as vehicular circulation areas;

- Provide efficient emergency access. Access to emergency facilities shall be easily identifiable and navigable, designed for clarity of access and efficient movement;

- Provide adequate infrastructure to support planned activities;

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- Protect public health and safety. The location and design of buildings within the campus will protect the continued joint use of aviation facilities on the March Air Reserve Base, as well as ongoing operations at the Defense Media Center and neighboring Base Exchange and Commissary. In addition, necessary design measures to facilitate fire and police protection for uses within the campus will be provided; and

- To ensure the provision of adequate infrastructure and parking, performance standards have been incorporated into the Specific Plan. The performance standards ensure that the development of infrastructure, streetscapes, pedestrian paths, and other amenities occur so that they are available for use by occupants of the campus buildings.

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CHAPTER 4. DEVELOPMENT PLAN

Section 4.1 Proposed Land Use

~~In order to develop an integrated, state-of-the art medical campus, the~~The Development Plan will accommodate the following land use on the campus:

- Institutional Residential

The Specific Plan provides for a broad range of complimentary care services for homeless U.S. veterans. A maximum of 285,000 square feet of building area will be permitted within the Specific Plan area.

Section 4.2 Institutional Residential

The Institutional Residential land use type is anticipated to accommodate residential care facilities and uses in a variety of footprints and densities. The residential care units will not be subdivided or sold as individual properties for residential uses; the entirety of the units will be under the ownership of the U.S. Veterans Initiative.

It is anticipated that the Institutional Residential land use type would accommodate the full range of residential care facilities, from licensed care facilities for recovering alcohol or drug users to independent living facilities for veterans that have graduated out of the first phase of their program and beginning to transition successfully into the workforce. Certain aspects of the Program are subject to state licensing requirements under the California Health and Safety Code, and the U.S. Vets Initiative is required to maintain all licensing requirements throughout the life of the Project.

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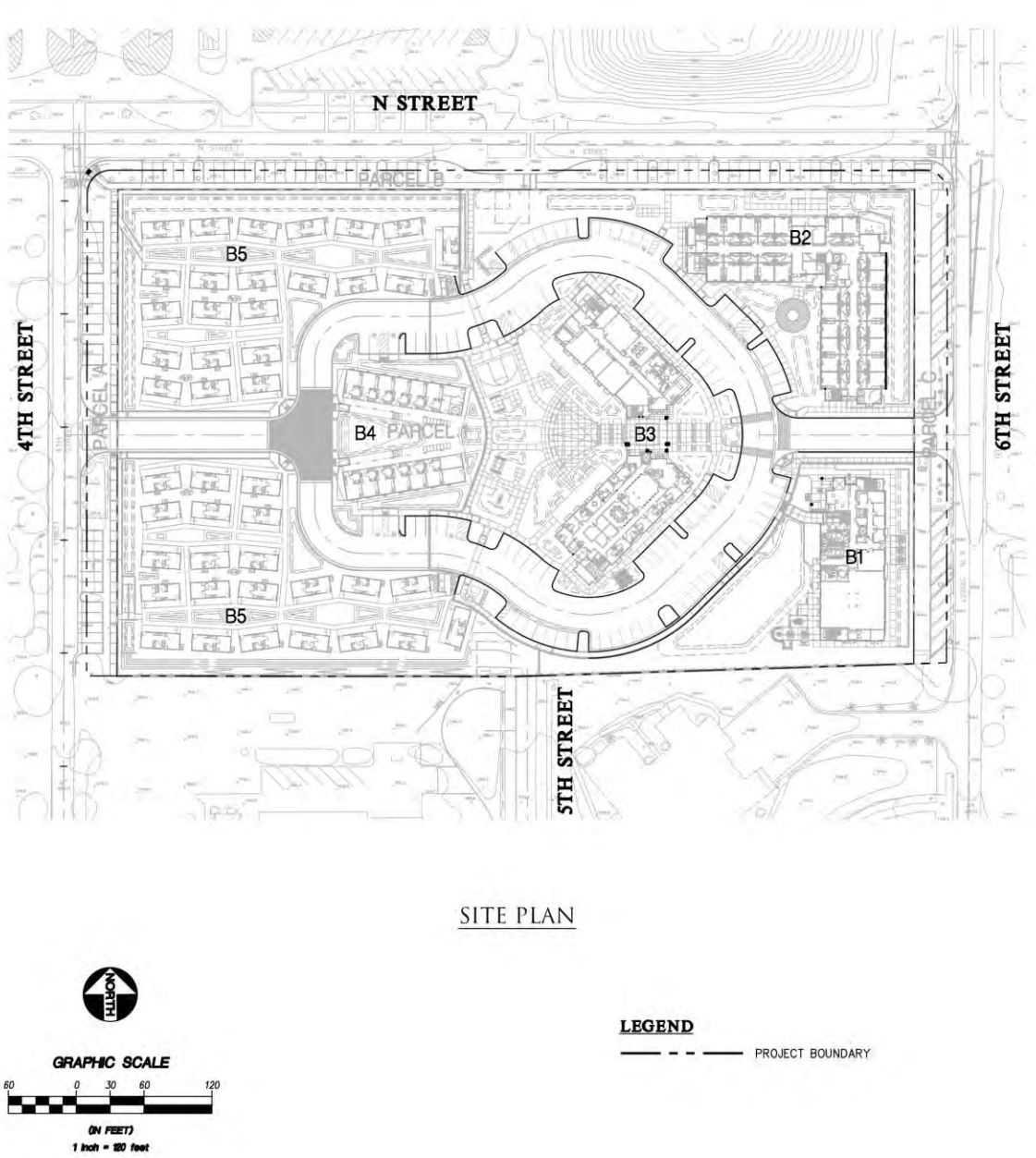
Figure 4-1 Site Plan **[UPDATED]**



Section 4.3 Development Plan

The facility will be constructed to provide a linkage of open space, as conceptually shown in Figure 4-1. The use areas will be located in approximately this order, from the outside edges of the campus to the center:

- Parking
- Landscaped edge
- Buildings
- Landscaping
- Pedestrian circulation
- Street Parking
- Pedestrian circulation
- Campus Center and Open Space

Development of buildings adjacent to arterial streets shall incorporate setbacks and landscaped or architectural barriers to reduce received vehicular-source noise.

The building types for the transitional veterans housing facility are described with each of their intended uses below.

B1 – ~~Family Housing Building~~Transitional Housing
~~Three~~ Transitional Housing, ~~family housing buildings~~ will be provided at the Project site. This ~~Family~~ housing will allow a veteran to live with family while going through the transitional program. This component is important to the program as parenting and family relations are part of the curriculum offered by US Vets.

Each building will provide amenities for occupants such as elevators, laundry facilities, mail rooms, kitchenettes, offices for staff or resident advisors. To promote a sense a community within these facilities resident lounges will be provided.~~.~~

B2 – ~~Efficiency Housing Building~~Permanent Supportive Housing
~~Three efficiency housing buildings will be provided at the Project site.~~ This Permanent Supportive Housing ~~Efficiency housing~~ is intended for singles or seniors that are in the later phases of the transitional program. These ~~are~~ individuals are gaining life and job skills and preparing for transition into the community. As with B1 ~~Family Housing~~Transitional Housing, each building will provide amenities for occupants such as elevators, laundry facilities, mail rooms, kitchenettes, offices for staff or resident advisors. To promote a sense a community within these facilities resident lounges will be provided.

B3 – Permanent Supportive Housing~~Support Services / VIP Building~~
This Permanent Supportive Housing~~The VIP building~~ will be V shaped in order to pay homage to the stealth fighter. This building will serve as the administration facility with

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offices for staff, a reception area, conference and classrooms, storage rooms, and a large career training center. The ~~VIP~~ building will also house a fitness center and game room that can be used by residents.

B4 - Transitional Housing Building
This building will consist of 24-studio apartment units. The Building will also have administrative offices, computer room, laundry facility and community space. This building will be similar to Building 1, in terms of architecture and operations. Primary access to this will be off 4th Street, with additional access from 6th Street.

B5 – Permanent Supportive Housing "Comfort Homes"
Forty-four (44)-permanent supportive housing units. These individual "Comfort Homes", include a bedroom, bathroom, kitchen and living area. The architectural style and building color/materials will be compatible with the other Campus buildings. Primary access to this will be off 4th Street, with additional access from 6th Street.

~~The wings of the building will frame an outdoor amphitheater. The proposed building will mixed use in nature because the 2nd and 3rd floors are residential.~~

~~VIP stands for Veterans In Progress. VIP is the first step in the transitional program offered by US Vets. VIPs need the most counsel and staff support so living immediately above the administration facility is ideal. Individuals in this program live in dormitory style units. The wings of the building are designed to be somewhat separated from the other wing on the same floor, giving staff the ability to effectively and comfortably accommodate men and women VIPs on the same floor.~~

~~*B4 – Dining Room / Multi-Purpose Building*~~
~~The dining hall will be designed with a kitchen to prepare meals for the 400 bed facility plus staff and residents. The building will contain a 2,300 SF multi-purpose room that can be separated from the dining area via an accordion door. The multi-purpose room may be used for large gatherings and training opportunities.~~

Section 4.4 Sustainable Development Strategy

The Specific Plan incorporates standards from the Leadership in Energy and Environmental Design (LEED) campus criteria. The LEED rating system can be applied for new construction projects in a campus or multi-building setting where the buildings share amenities and common design features. The LEED rating system establishes performance goals in five environmental categories: Sustainable Sites, Water Efficiency, Energy & Atmosphere, Materials & Resources, and Indoor Environmental Quality. Additionally, a sixth category, Innovation & Design Process, addresses those environmental issues not included in the other categories. The majority of campus-specific opportunities to meet LEED standards arise in the Sustainable Sites, Water Efficiency, and Energy & Atmosphere categories. The Specific Plan includes sustainable practices that shall be incorporated into the overall campus development.

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Initial Site Development within the Specific Plan Area will utilize incorporated site development standards consistent with the LEED Campus Design Criteria as identified in Appendix F of this Specific Plan.

These development standards and practices are generally applicable to the horizontal development phase of the Specific Plan site. Site preparation and development of infrastructure for the majority of the Specific Plan Area will be undertaken by a master developer. Subsequent vertical construction will be undertaken by purchasers of individual parcels. By requiring horizontal construction to be consistent with certain LEED Campus Design Criteria, as well as compliance with certain LEED Credit Prerequisites, individual developers can take credit for site development activities, which will assist individual developers meeting LEED criteria with subsequent developments. A complete checklist (Appendix F) is provided to guide future development seeking LEED certification.

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Section 4.5 Circulation

The Specific Plan circulation infrastructure will be designed to support efficient and safe vehicular and non-vehicular access to and from individual uses throughout the Specific Plan Area. The campus will contain features to facilitate alternative modes of transportation and handle parking capacity to reduce pollution and land development impacts of single occupancy vehicle use, including pedestrian pathways and linkages.

4.5.1 Entrances and Access

It is anticipated that the Specific Plan area will be connected to the existing circulation system through two major points of access (see Figure 4-2). The first will be located at 6th Street and the second will be located at 4th Street. Riverside Drive ultimately connects vehicular traffic from the Project site to Cactus Avenue while Meyer Drive connects traffic to Heacock Boulevard.

4.5.2 Roadway Proposed Improvements

At the buildout of the U.S. Vets Transitional Housing Program, the public roadways serving the Specific Plan area (4th, N and 6th Streets) will be improved by the developer for the projects half width requirements. 4th and 6th streets will be connected to a private internal circulation system with project entrances that will provide access to individual buildings and to parking within the campus.

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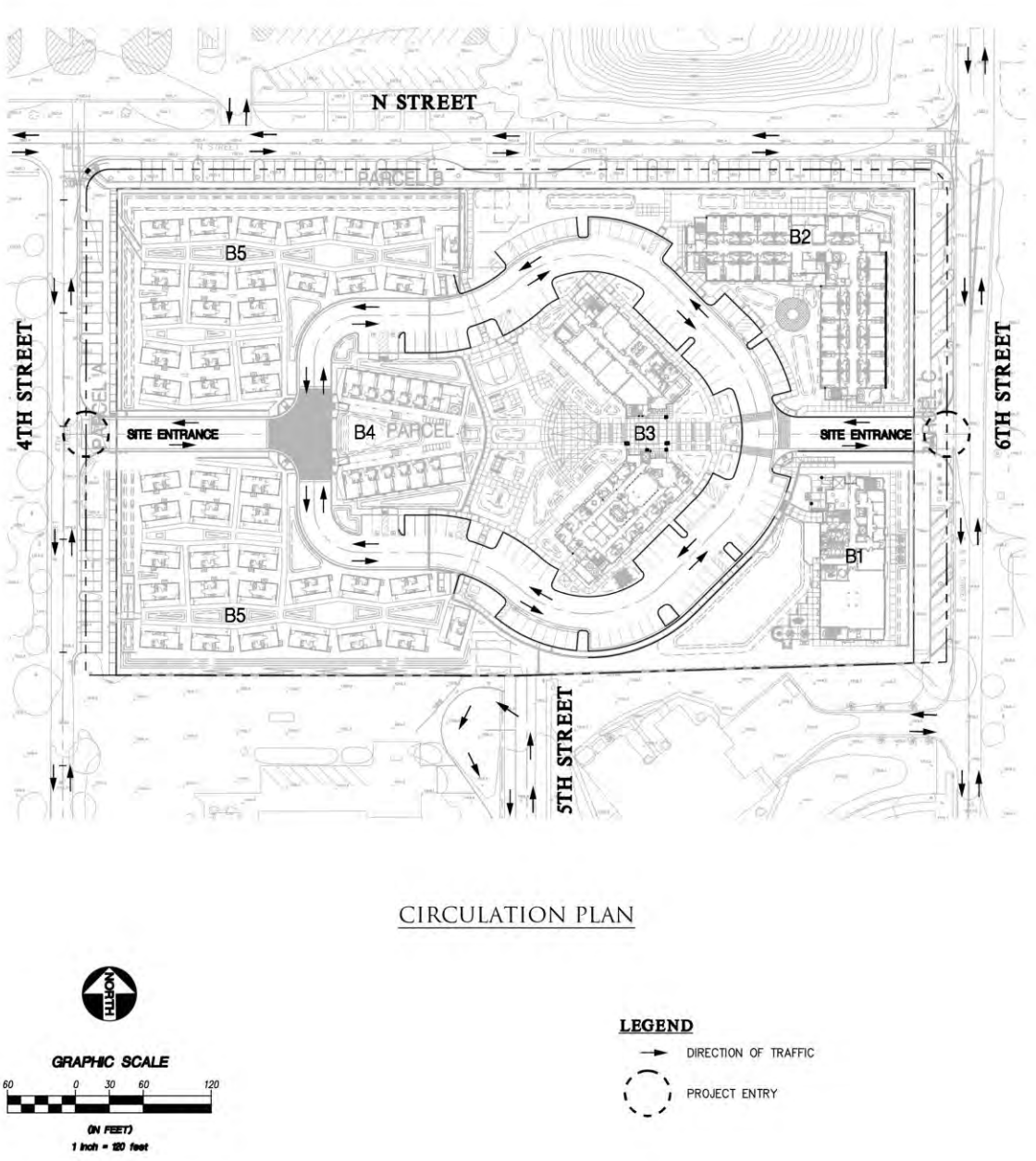
Figure 4 – 2 Circulation **[UPDATED]**



4.5.3 Truck Routes

Truck routes within the Specific Plan will be planned so as to limit the intrusion of trucks and associated vehicular noise within hospital grounds and institutional residential areas. Proposed truck routes will be identified as early as practicable and delineated on affected circulation plans.

4.5.4 Parking

Parking areas will be designed to provide adequate parking for users within the Specific Plan area. On-street parking will allow for a pedestrian oriented design within the campus. Street improvements along 4th Street, N Street and 6th Street will include the installation of on-street parking spaces for the Project, within the first phase of development. Because on-street parking would be within public right-of-ways the developer will establish a maintenance agreement with the MJPA for the designation and maintenance of parking spaces.

The parking concept supports limiting the amount of parking on-campus and providing a shared parking approach for all campus buildings. The campus design promotes preferential car and van pooling parking opportunities. Furthermore, the campus supports the use of pedestrian and bike facilities to access individual buildings on campus. The Project will assign a minimum of five percent of the total parking as preferred car and van pool spaces.

Lastly, the parking design has planned flexibility to allow opportunities that will reduce heat island effects. The parking design also allows for extensive shading of surface parking and plans for the efficient transition to space saving and shaded structured parking solutions. Specific parking spaces will be designated for expectant mothers, motorcycles, carpool vehicles, and ADA parking.

4.5.5 Transit

The Specific Plan will be located within 1/4 mile of at least one stop for public transit lines.

The following transit-related improvement will be provided, subject to approval by Riverside Transit Agency.

- Bus stop along N Street, including turn-outs, kiosks, and benches.

4.5.6 Non-Vehicular Circulation

The Specific Plan is designed to encourage walking and biking. The parking program promotes walking and biking in the campus and is supported by the following features.

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- A system of pedestrian linkages which will provide convenient connections between buildings and parking while minimizing conflict with on-site vehicular circulation;

- Dedicated van/car pool spaces in locations convenient to main entrances to activity centers;

- Central information kiosks with maps showing locations of buildings, parking areas, bus routes and stops, pedestrian linkages, bikeways, and trails; and

- Requiring securable bicycle lockers and/or racks

All site plans submitted for development in the Specific Plan area will be required to contain a pedestrian path that extends across the parcel from edge to edge. The site plan will also have to identify the location at the edge of all adjacent parcels where the pedestrian linkage will continue into the adjacent parcel, and must follow the locations identified in the Plot Plan. Figure 4-3 is a schematic layout of the transit and non-vehicular circulation features.

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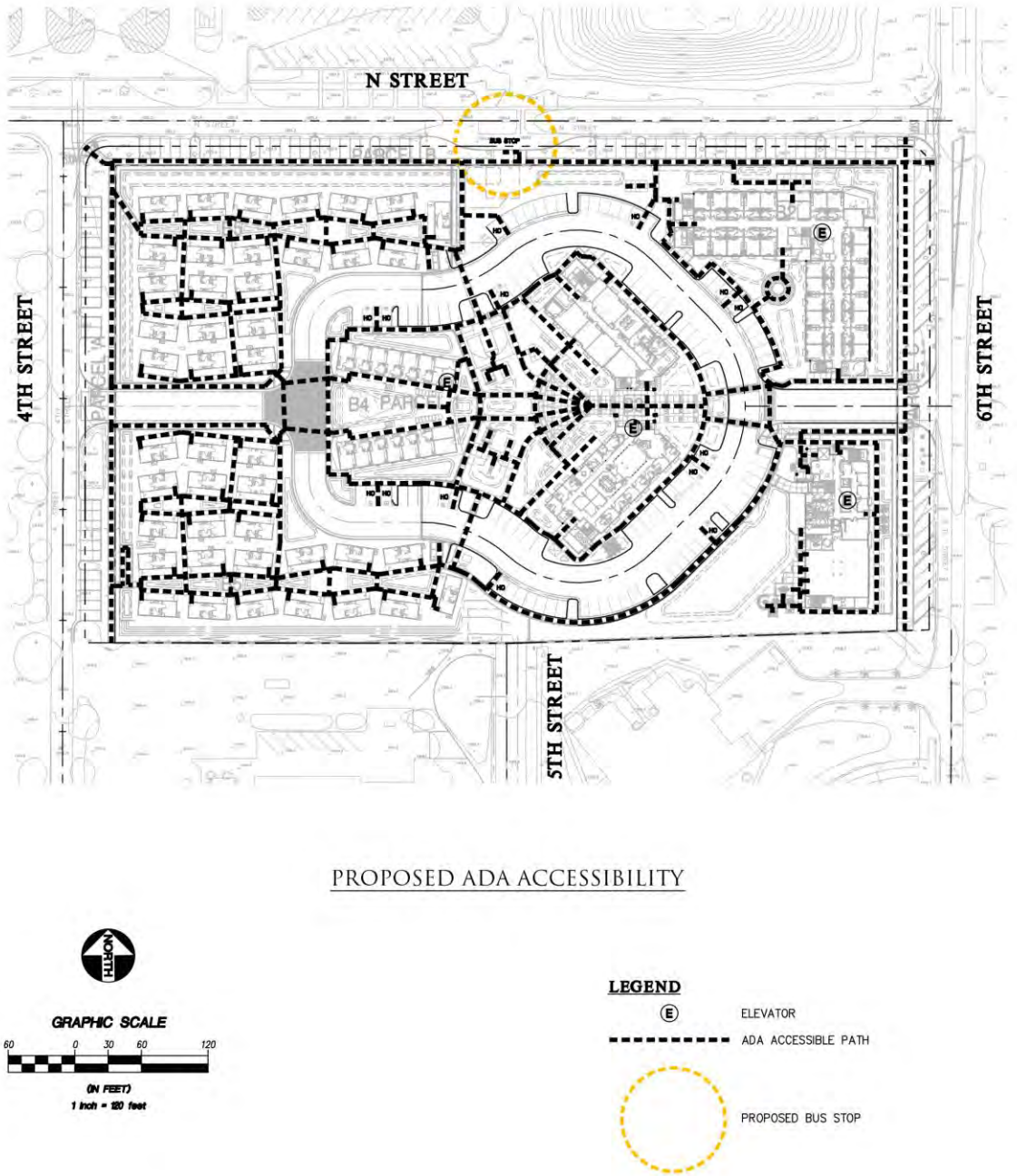
Figure 4-3 Proposed Transit and Non-Vehicular Circulation [UPDATED]



Section 4.6 Water Distribution Facilities

Based on the Infrastructure Report prepared by Albert A. Webb Associates May 2008 for the Northeast Corner of the March JPA Planning area, existing water pipelines on and around the U.S. Vets Project site are not large enough to handle the required flows for the proposed development. All existing pipeline within the Specific Plan must be replaced. The proposed water facilities are shown on the Water Facilities Layout Map.

The water distribution for the U.S. Vets' system has been designed to tie to the existing 14 inch water line in Meyer Drive at 6th Street, and it will consist of a 12 inch transmission pipeline from that point of connection to the perimeter of and around the project site. The 12-inch backbone lines in 6th Street and N Street are included in the March LifeCare Campus Specific Plan (SP-7) as proposed facilities and the proposed locations are consistent between each specific plan. The proposed 12 inch water line in N Street and 6th Street will be installed by the MLCSP. Additionally, the U.S. Vets' system will support water-efficient landscaping and the potable water demand on the Project site.

Specific line sizes will be determined in the final design stage of individual site plan development, subject to WMWD approval. Final pipeline design will confirm that facilities are sized to provide the maximum daily flow plus the required fire flows (to be determined by the Fire Marshall and noted below).

The future installation of the backbone facilities will be in N and 6th Street. The existing domestic water system consists of a 6" mainline in 4th~~,~~ and 6th Street (south of N Street), 12-inch main in N Street and 6th Street (north of N Street); and a 10-inch main line in 5th Street. Existing fire hydrants exist on all streets. Proposed new water lines include ~~a 12-inch line in N Street from 4th to 6th Street,~~ a 12-inch line in 4th Street from N Street to the southern boundary of the Project site, and a 12-inch line in 6th Street from N Street to the southern boundary of the project site. The project will take domestic water service from the proposed 12-inch line in 6th Street with a meter manifold system that allows for the installation of individual 2" meters and backflows to meet the demand as the project buildings are constructed and occupied. A private 6" water line within the site after the meter manifold will provide private domestic service to all the buildings on the property. The on-site fire hydrants and building sprinkler systems will be served by a private 12-inch fire line that loops through the project site and connects to the existing / proposed domestic water line within 4th Street, 5th Street, 6th Street and N Street at four points of connection with a 12" Double Detector Check Assembly (DDC) at each point of connection. ~~a 12-inch line from 4th Street to 6th Street that is located within the interior private street system of the project site.~~ 5th Street contains an existing 10-inch main line and this existing pipe will be replaced within the site by the proposed interior project water and fire lines as noted above, and it will join the proposed 12-inch lines at N Street and reconnect to the existing 10-inch line south of the Project site boundary. There are currently no reclaimed water facilities that service this site, so the landscape irrigation system will temporarily be on domestic as well. The Project will comply with CalGreen standards for water efficiency and will meet certain criteria under LEED.

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Additionally, 100 percent of landscaping for the campus will be drought tolerant. As such, the Project will be designed to lower water demand.

The on-site water system will consist of an interior ~~looped~~ private 6-inch domestic water service and a looped 12" fire line / ~~and a separate~~ fire prevention system that is connected to the domestic mainline. ~~This system within the project~~The public portion of the system will consist of pipeline, water meters, backflow devices, double detector check valves, gate valves, and fire hydrants ~~and fire department connections~~ . The private on-site portions of the system will consist of pipeline, fire hydrants, valves, post indicator valves, fire department connections, building fire riser connections and building domestic service connections as required to properly service this project. Pumps for the fire sprinkler system would be required if adequate flows and pressure are not available. Proper fire flows for the Project will be provided prior to the issuance of any building permit.

The development is dependent on a pressure reducing station interconnect between Western Municipal Water District (WMWD) and Eastern Municipal Water District (EMWD) at a location near Cactus. This in conjunction with the proposed upgraded mainlines in the public streets are required to provide adequate pressure and flow to meet the demands of the proposed project. Proposed development for the project beyond the available re-distribution of the existing water meters will require that the interconnect and PRV be completed and will be related to the phasing of the proposed development.

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Section 4.7 Sewer Facilities

The existing sanitary sewer system consists of a 10 inch mainline gravity sewer that flows north to south in 5th Street. Existing sewer manholes are located with the site area in the street right of way. The proposed sewer design for the project will connect on-site sewer flows to the existing 10 inch line in 5th Street with the installation of a new manhole on-site. This existing sewer line in N and 5th Street collects a large tributary area to the northwest of the site, and this line will remain active for those properties as well. The proposed on-site sewer system will consist of sewer mainline, manholes, service laterals and cleanouts as required to serve the demand of the proposed buildings. The system is proposed to be a gravity sewer system.

Section 4.8 Reclaimed Water Facilities

Reclaimed water, sometimes called recycled water, is former wastewater that has been treated to remove solids and certain impurities, and then is used to recharge an aquifer rather than being discharged to surface water. The Specific Plan area is not currently supplied with reclaimed water. To facilitate future use of reclaimed water, reclaimed water lines will be installed within the Specific Plan area. It is the intent of the Specific Plan that reclaimed water would be used throughout the Specific Plan area for irrigation once supplies become available. In addition, the Specific Plan requires water efficient landscaping as outlined in Section 5.8.1 by plant selection, irrigation efficiency, and use of captured rainwater. Irrigation systems will be installed to the existing domestic water system, but will be designed to accommodate a conversion to reclaimed if that becomes available in the future.

Section 4.9 Drainage

4.9.1 Proposed Drainage Improvements

The 7.75 acre Project site is within an overall 187 Acre tributary drainage area that extends from the Meyer Street Channel at the north to the Z Street at the south. The entire 187 acre drainage area consists of surface sheet flow drainage from the north to the south utilizing the existing streets for ultimate conveyance of the storm flows. All of this existing drainage is discharged by surface flows or small channel inlets to the existing concrete trapezoidal channel known as the Z Street channel, which runs along the entire length of the southern boundary of the drainage area. ~~This channel is on the March Air Force Base property, and it currently accepts all the drainage from this area and conveys it easterly for discharge into the existing Heacock Channel that runs along the eastern boundary of this drainage area.~~ There are currently no existing water quality treatment facilities or storm water detention facilities within this existing drainage system. ~~This existing condition is illustrated on the following "Existing Drainage" exhibit.~~ The privately maintained Z Street Channel can accept post developed storm water discharge under their current California Regional Water Quality Control Board Industrial Permit for the March Air Force Base.

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The general goal of the site grading and drainage is to reduce the storm flows to pre-developed discharge rates, improve the water quality, and minimize any impacts to the downstream drainage areas. The site design will use a series of best management practices that will assist in achieving this goal that include: partial infiltration, evapo-transpiration, natural bio-filtration, media filtration and detention systems; and all requirements from the California Regional Water Quality Board MS4 Construction Permit for the Project site will be satisfied.

The Project is designed to mitigate on-site storm water hydrology including storm water run-off through the use of surface or underground detention basins or systems. The Project is designed to accommodate the off-site drainage tributary area to the north of N Street that currently drains through the Project site with surface flows on 5th Street; but these off-site flows will remain as un-developed existing storm flows that are not required to be detained or treated for water quality as part of our site system. The Project Storm Water Management Plan shall prevent the post-development peak discharge rate and quantity from exceeding the pre-development peak discharge rate and quantity for the 1, 3, 6 and 24 hour storm events for the 2, 5 and 10 year storms; based on the fact that post-development discharges rates will exceed pre-development rates for the 100 year storm. The Project Storm Water Management Plan shall also reduce impervious cover, promote infiltration, and capture and treat the storm water runoff from 90 percent of the average annual rainfall using acceptable best management practices.

~~The proposed drainage concepts for the project were revised after the originally approved concept with the US Vets Specific Plan and Site Plan per the requirements of the City of Moreno Valley that restricted any surface or sub-surface flows from the developed project site through their property to the south of the site. Subsequently, the natural drainage patterns that flow from north to south can't be maintained for the site drainage, and the new proposed drainage concept must collect , treat and divert this site drainage to the north for ultimate discharge into the Heacock Channel. Both the original and proposed concepts result in final discharge into the Heacock Channel, but at different locations. Off-site flows that historically drain through the project site on 5th Street will continue historical drainage patterns for discharge to surface flows down 5th Street through the City property as it currently does today.~~

The proposed drainage concept removes the RCP storm drain and catch basins in N Street at 5th Street, which collect the offsite tributary drainage area from the north. The offsite tributary flows will be conveyed by six onsite 12" PVC storm drain lines running in parallel down the middle of the site (previously 5th Street), and outlet to 5th Street, maintaining existing drainage patterns. Onsite flows will be conveyed in a separate onsite storm drain system, and discharged into the existing Heacock Channel to the north of the site via a force main storm drain that pumps the site drainage in lieu of maintaining historical drainage patterns to the south per City restrictions on drainage through their property.

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Onsite storm flows will be collected and routed via onsite storm drains, from the northwest corner of the site to the southeast corner of the site, to a proposed underground CMP detention system, which is sized to detain the stormwater flows, to reduce post development flows to the predevelopment flowrates and quantity for the 2, 5, and 10 year storm events, and the noted durations below. Storm flows exiting the detention basin are pumped upstream by a proposed onsite pump, into a PVC force main running parallel to 6th Street, to the future location of the March Lifecare ultimate Water Quality Basin. The onsite stormwater pump will be designed, in conjunction with the onsite underground CMP detention system, for the post development 100 year storm flows. An interim vegetated will convey the pumped storm flows northeasterly and into the Meyer Channel, which ultimately outlets into the Heacock Channel.

Storm Events/Durations: Storm drain and hydrology design criteria and analysis are based on the County of Riverside Hydrology Manual. The storm events and durations analyzed include the 2, 5, 10, and 100 year storm event, and the 1, 3, 6, and 24 hour durations, for the pre-development and post development conditions.

Water Quality Treatment: Water quality treatment for onsite flows will follow the current 4th Term MS4 Permit, and per the March Joint Powers Authority, is not considered to be grandfathered under the previous 3rd Term MS4 permit. The proposed onsite BMPs will consist of LID Principles (ie. Self Treating Areas and Self Retaining Areas) and LID BMPs (ie. Bioretention Facilities – "Rain Gardens").

~~The proposed storm drain and hydrology design will maintain the existing drainage patterns; however, the proposed concept would divert flows away from the existing discharge locations into the "Z" Street channel with the new discharge location into the Heacock Channel. Based on the outlet location just north of the "Z" Street channel connection, impacts to the existing Heacock channel will be minimal and impacts to the "Z" Street channel will be reduced significantly. The proposed storm drain design consists of a 24 inch underground storm drain in N Street and 6th Street that will collect the off-site tributary drainage area from the north at catch basin inlets at the intersection of N Street and 5th Street. The project's proposed on-site storm drain system will collect, clean and detain our on-site drainage in a series of bio-filtration planters and underground media filtration units. The treated discharge from our site flows into an 18 inch storm drain line at the southeast corner of the property that will join the proposed 24 inch line from N and 6th Street. These combined flows will extend down 6th Street in an underground 30 inch storm drain pipe. The alignment of the proposed 30 inch line will extend easterly to 8th Street within the City of Moreno Valley park area, and then it will continue south down 8th Street where it will cross through MARB property for its ultimate connection to the existing Heacock Channel at its most downstream area close to where it joins the "Z" Street Channel. The 30 inch line will extend between the two existing Site 4 land fill zones within the current 8th Street right of way, it will then run parallel with the "Z" Street channel, it will be located horizontally to miss the existing landfill monitoring wells, and will outlet directly into the Heacock Channel at a 45 degree angle through the westerly side of the earthen/rip rap channel wall.~~

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On-site flows will be cleaned by a series of localized bio-filtration gardens or rain gardens throughout the site before being collected by the on-site area drain / storm drain system. The parking lot and private drive will consist of surface flows and concentrated gutter flows that will be collected by catch basins within the street system. The first flush from the combined on-site flows from the landscape areas and the parking lots will be collected and treated with the use of on-site biofiltration systems consisting of smaller localized rain gardens and a larger site biofiltration basin.The treated first flush and the bypassed storm flows will be collected and detained in an underground storm drain pipe detention system that will reduce the storm drain flows to pre-development discharge rates and quantities. These are the flows that will be pumped from the detention system via a force main storm drain line that extends from the site detention system pump to 6th Street, north on 6th Street to the intersection of 6th and N, and then to the existing property at the northeast corner of that intersection where the pumped storm flows are discharged into a proposed open concrete trapezoidal channel that will convey the storm flows northwesterly for discharge into the existing Meyer Channel which then joins the Heacock Channel. —By moving the connection to the Heacock channel, the diverted flow impacts to the existing Heacock channel will be minimal (if any) and impacts to the "Z" Street channel will be reduced significantly.

4.9.2 Flood Protection

The proposed storm drain facilities and grading have been designed to provide adequate drainage and flood protection at the site prior to the full improvement of the Cactus and Heacock channels being completed by the Riverside County Flood Control and Water Conservation District and U.S. Army Corps of Engineers. The finished floor elevations of proposed buildings will be a minimum of one foot above the surrounding flood elevations.

The site flooding conditions are mostly due to significant off site runoff from large areas to the north and northwest, and the insufficient capacities of existing Cactus and Heacock Channels. The March Life Care Specific Plan notes that this area is within a potential Flood Zone where the depth of flooding for the 100 year storm varies between 0.1 inches and 1.5 feet for most of the area. In order to mitigate the off-site runoff and potential flooding, the site will be raised so that the finished floor elevations of the buildings are a minimum one foot above the 100-year floodplain elevation as well as required for the on-site gravity storm drain system to function. –The Project will require import material to rough grade the site. The grading design for the project establishes a finished floor of one foot above the base flood elevations for proposed buildings, as provided by Riverside County Flood Control and Conservation District for the existing Cactus and Heacock Channels.

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Figure 4-4 Proposed Water Distribution Facilities **[UPDATED]**

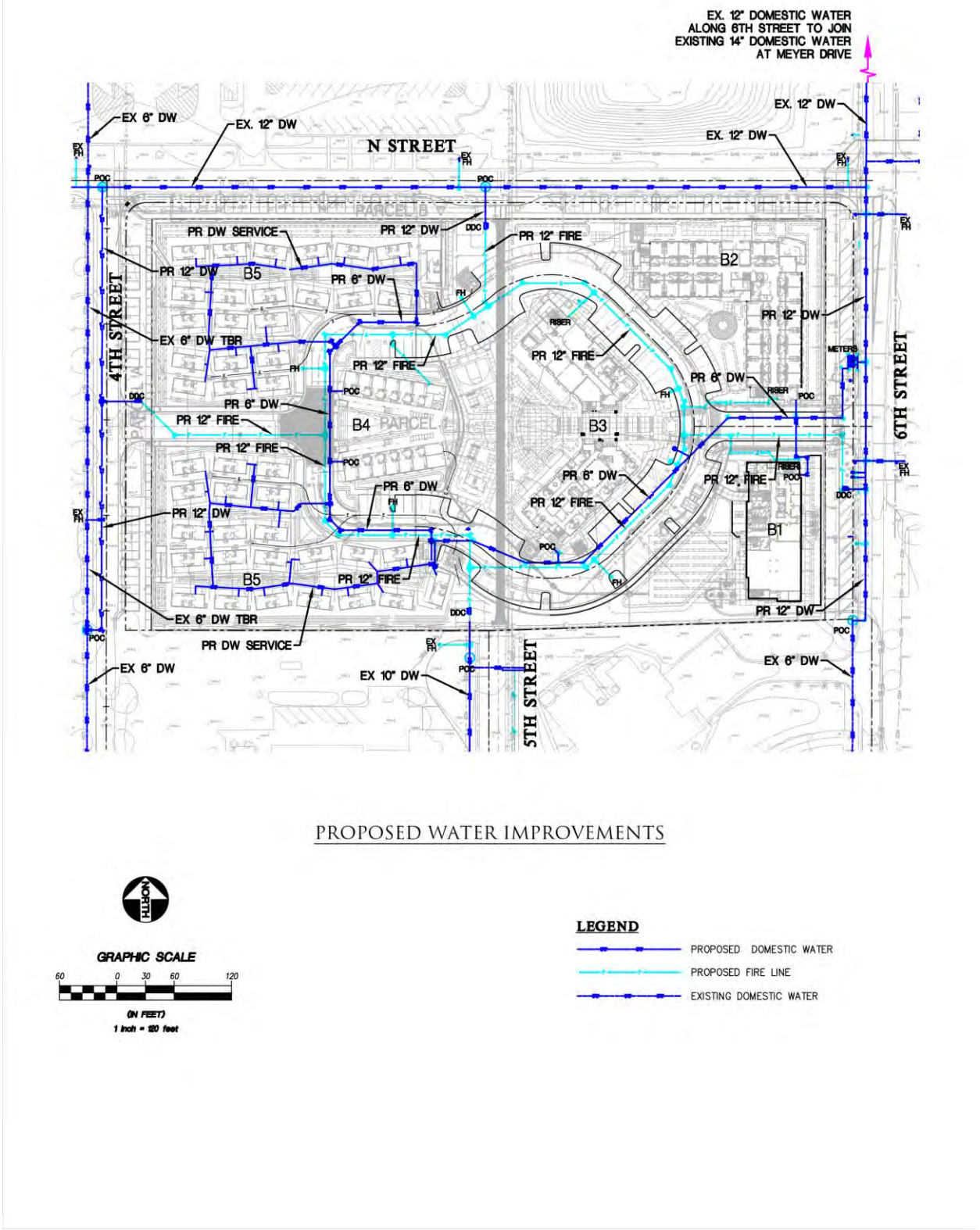


Figure 4-5 Proposed Sewer Facilities **[UPDATED]**

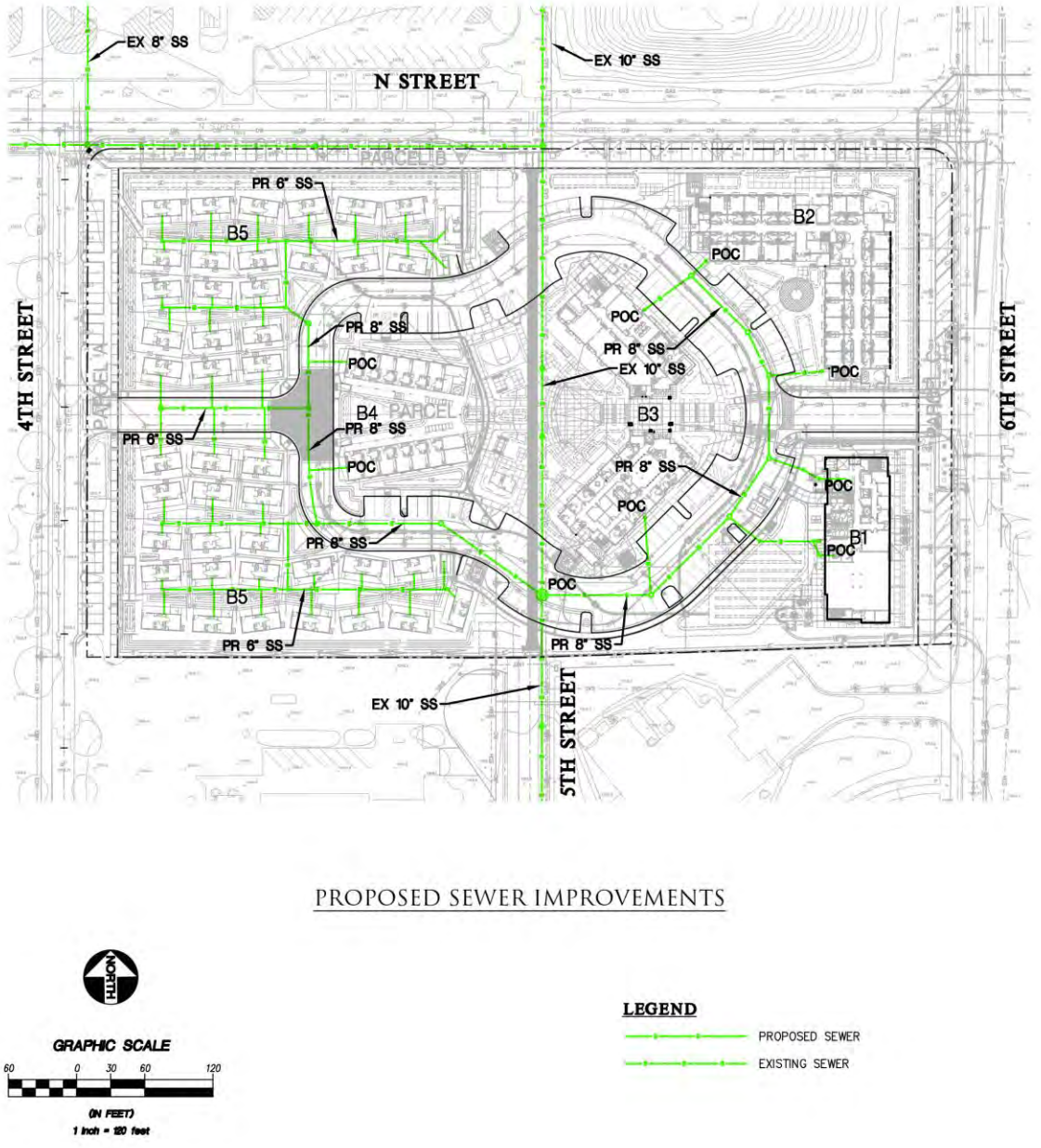
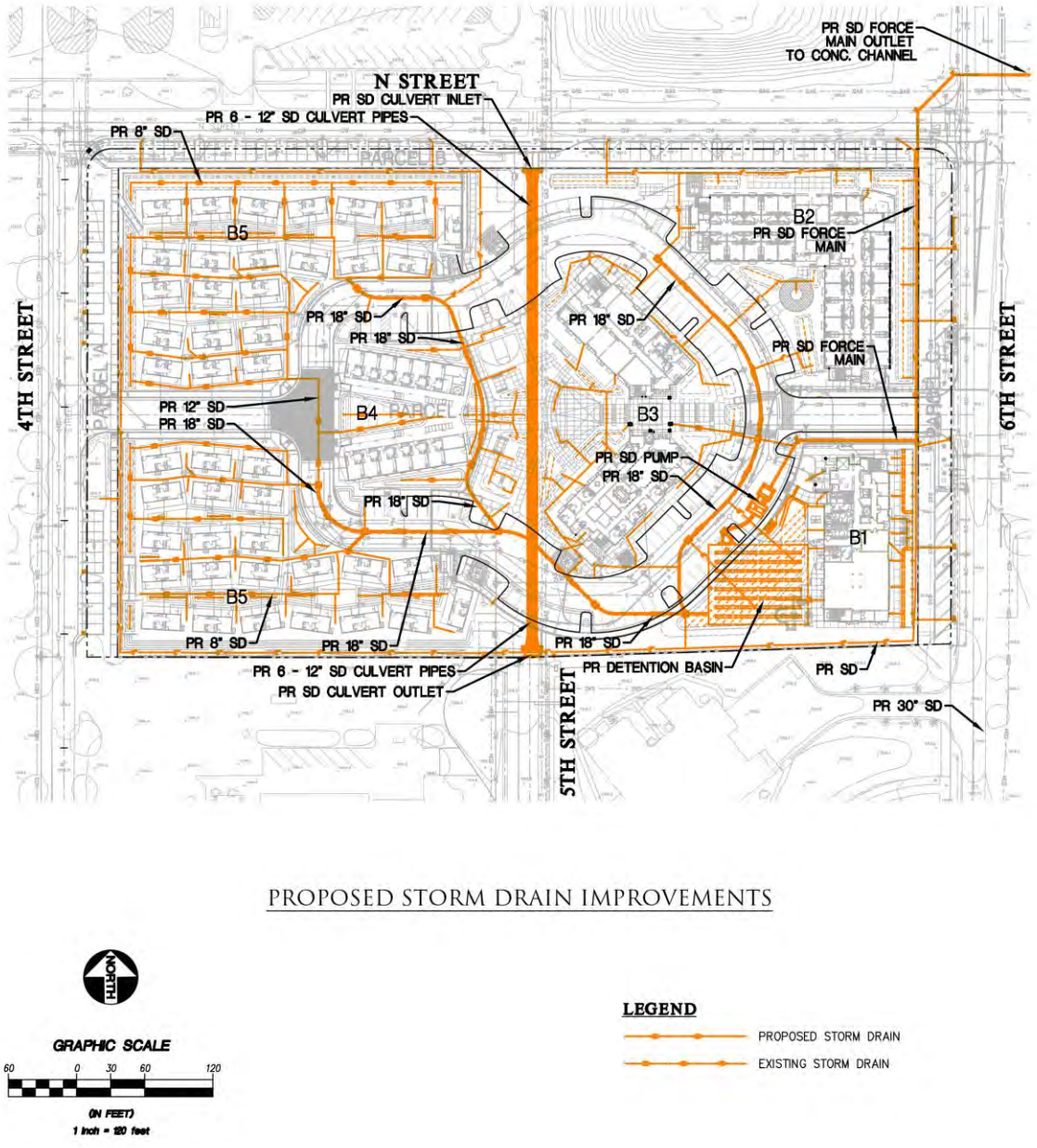


Figure 4-6 Proposed Drainage Improvements **[UPDATED]**



PROPOSED STORM DRAIN IMPROVEMENTS

NORTH

GRAPHIC SCALE

60 0 30 60 120

(IN FEET)

1 inch = 120 feet

LEGEND

PROPOSED STORM DRAIN

EXISTING STORM DRAIN

4.9.3 Proposed Storm Water Treatment

Storm water treatment is mandated by the State of California for all new construction. The Specific Plan drainage infrastructure plan shall achieve significant enhancements in storm water treatment. Development for the Specific Plan shall be designed to meet the intent of the storm water runoff and treatment requirements summarized in the following discussion.

The Storm Water Management Plan specifies ways in which new development shall control storm water runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. The Storm Water Management Plan identifies methods of preventing post-development peak discharge rates and quantities from exceeding the pre-development peak discharge rates and quantities for the one- and two-year, 24-hour design storms. The plan must show a minimization of impervious cover, promotion of infiltration, and the capture and treatment of stormwater runoff from 90 percent of the average annual rainfall using acceptable Best Management Practices (BMP's). BMP's used must be capable of removing 80 percent of the average annual post development total suspended solids (TSS) load based on existing monitoring reports or as required under incumbent WQMP / NPDES standards.

The March JPA engineer shall identify the BMP's that may be implemented to prevent such deterioration and shall identify the manner of implementation. The BMP's may, among other things, require new developments to do any of the following:

- Increase permeable areas by leaving porous soil and low lying areas undisturbed; by incorporating landscaping and open space into the Specific Plan design, and by incorporating detention ponds and infiltration trenches into the Specific Plan design.

- Direct runoff to permeable areas by orienting it away from impermeable areas to earthen swales, berms, green strip filters, and gravel beds; by installing rain-gutters oriented towards permeable areas; by modifying the grade of the property to divert flow to permeable areas and minimize the amount of storm water runoff leaving the property; and by designing curbs, berms, or other structures such that they do not isolate permeable or landscaped areas.

Drainage facilities and terracing of graded slopes shall conform to the following standards, unless otherwise noted on the approved grading plan.

- Subsurface Drainage. Cut and fill slopes shall be provided with subsurface drainage as necessary for stability and as recommended by the project soil engineer and/or engineering geologist.

- Storm Water Discharge. All drainage facilities shall be designed to carry stormwater runoff to the nearest practicable drainage way approved by the March JPA engineer and/or other appropriate jurisdiction, as an acceptable and

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safe location to deposit such runoff . Erosion of the ground in the area of discharge shall be prevented by installation of non-erosive down drains, energy dissipaters, or other devices as approved by the March JPA engineer.

- Interceptor Drains. Concrete interceptor drains (brow ditches) shall be installed along the top of all cut slopes where the tributary drainage area above the cut slope drains toward the cut slope, unless waived by the March JPA engineer. The slope gradient for the interceptor drain shall be the same as for terrace drains or as approved by the March JPA engineer.

- Stormwater Runoff. Stormwater runoff shall not be allowed to flow over cut or fill slopes, which are greater than five horizontal to one vertical (5:1), but shall be provided for as follows:

    - Whenever practical, each lot shall be graded so that storm water will drain from the backyard through the side yard and front yard toward approved drainage facilities at a gradient of no less than one percent. Where possible, drainage shall not be directed across other lots nor over cut or fill slopes.

    - When the prior measure is not feasible, as determined by the March JPA engineer, stormwater shall be collected along the top of slopes or at the rear of graded lots by means of concrete gutters, and carried to properly sized outfall or area drains which shall also serve as erosion control devices. Such drainage shall not be allowed to drain across the surface of sidewalks or parkways. Asphalt concrete may not be used for any drainage device. Down drain ditches shall be a minimum of 18 inches deep.

    - Where slopes are terraced at 30-foot intervals, drainage shall be provided in paved ditches a minimum of 36 inches wide and 12 inches deep. Construction of the ditches shall be as described below, and shall be located on the terraces with one side of the ditch two feet from the toe of the slope. Where a terrace is constructed to conform to slope requirements, but is intended to be of a temporary nature, the March JPA engineer may waive the drainage ditch requirements, if a satisfactory surety bond, or other means to guarantee the improvement, is posted with the March JPA.

    - Down drains, interceptor drains, and terrace drains shall be connected together to collect and transport all storm water runoff entering the drains. They shall be of sufficient depth, as verified by hydraulic calculations, to allow for an unimpeded flow when terraces are crossed. Down drains, interceptor drains, and terrace drains shall be constructed of portland cement concrete or air blown mortar. They shall be reinforced with wire mesh and/or other appropriate concrete reinforcement as determined by

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the project engineer and approved by the March JPA engineer. If pipe is used for down drains to transport runoff from terrace ditches, it shall be either reinforced concrete pipe, plastic pipe (polyvinyl chloride pipe), or other pipe material as approved by the March JPA engineer. Anchor lugs or collars may be required by the city engineer if the pipe slope is equal to or greater than two horizontal to one vertical (2:1). Pipe specifications shall be approved by the March JPA engineer. Special design features shall be provided for abrupt changes in direction of terrace ditches and down drains.

- The discharge from any down drain, ditch or pipe shall be controlled so as to prevent erosion of the adjacent grounds. Velocities shall be reduced by means of adequately sized aprons of rock, grouted rip-rap, box-type energy dissipaters, or other materials as approved by the March JPA engineer.

Drainage Easements. For all drainage-ways where the continuous functioning of the drainage-way is essential to the protection and use of the property other than the lot on which the drainage-way is located, a covenant and/or deed restriction shall be recorded by the applicant, placing the responsibility for the maintenance of the drainage-ways on the owner and operator of the proposed Project. Permanent off site drainage easements, as required by the March JPA engineer, shall be acquired by the permittee.

Such easements shall be subject to the approval of the March JPA engineer and March JPA attorney and recorded prior to the issuance of the grading permit.

4.9.4 Water Quality Management Practices

A Water Quality Management Plan (WQMP) for the Specific Plan area must be created by the developer and submitted for approval to the March JPA during submission of the Plot Plan. The future proposed developments on the Specific Plan will be required to comply with the WQMP. A treatment control BMP with a medium or high effectiveness for treating pollutants will be required during the site plan approval process for each of the proposed parcels.

Examples of treatment BMP's with medium or high effectiveness to remove POCs include the use of filtration/infiltration bioswale trenches and water quality filtration/infiltration basins.

Site Design and Water Quality BMPs may include, but are not limited to, the following:

- Use of building materials, such as porous pavement, unit pavers, turf blocks directing on site roof run-off onto landscaped buffer strip areas;

- Placement of storm drain inlet filters to remove sediments and oil and grease; and

- Vegetated swales to enhance the removal of metals, sediments, and oil and grease.

The Specific Plan shall incorporate a combination of the following Low Impact Development (LID) design strategies into its design:

- Landscaped buffer strip;
- Vegetated swales;
- Roadway runoff onto landscaped areas;
- Roof runoff onto vegetated areas; and
- Pervious surfaces and alternative permeable building material.

Urban runoff and associated impacts shall be reduced by installing pervious surfaces and incorporating LID measures that will increase the infiltration capacity of the proposed site to replicate existing conditions or reduce impacts to the pre-development conditions. The goal of these techniques is to achieve post development runoff flow rates, volumes, velocities, and durations that prevent significant increases in downstream erosion compared to the pre-development condition.

Drainage facilities within the public road right-of-ways, drainage easements, and the drainage basins will be maintained by the U.S. Vets Initiative.

4.10 Air Quality Management Practices

Throughout all demolition, site preparation, and building construction activities, the Specific Plan will comply with all applicable South Coast Air Quality Management District (SCAQMD) Rules, and will employ all applicable Best Available Control measures (BACs) and BMP's acting to reduce short-term and long-term air pollutant emissions. The Specific Plan will also incorporate energy efficient designs and operational practices, acting to reduce energy consumption, with associated air pollutant emissions reductions. The U.S. Vets Transitional Housing Program Specific Plan Air Quality Management Practices shall include, but not be limited to, the following:

- Application of soil stabilizers to eliminate visible dust;
- Timely Ground cover replacement in disturbed areas;
- Watering of all active disturbed surfaces;
- Construction will proceed in a manner such that demolition, mass grading, and building construction activities do not substantially overlap;
- Reduced speeds (not to exceed 15 mph) for construction-related traffic will be enforced;
- Low or no-VOC paints shall be universally employed in the construction of Specific Plan buildings; and
- Design of proposed buildings or structures must demonstrate a minimum of 20 percent increased energy efficiencies beyond incumbent standards established under Title 24.

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Section 4.11 Utilities

The site will be served with electricity, telephone, cable, internet, natural gas, and solid waste collection service from private companies serving the March JPA as detailed in Table 4-1. All utilities will be provided underground.

Table 4-1: Utility Providers	
Utility	Provider
Water	Western Municipal Water District
Sewer	Western Municipal Water District
Electricity	Southern California Edison
Gas	SoCal Gas Company; MJPA
Telephone	Verizon
Cable	Time Warner Cable
Solid Waste	Waste Management Inland Empire

The existing overhead electric lines along 5th Street will be converted to underground and will provide the source for the project. This system will provide primary power to the development. Conduits will be stubbed and extended to set transformers that will provide power to the buildings. The Edison Company will maintain these systems, once installed by the developer, based on plans approved by Edison.

The existing Southern California Gas Company gas mains along the south side of N street and along the east side of 5th Street do not have the capacity to serve the proposed project. A proposed gas line will be required to extend from a point of connection on Meyer Drive just west of Heacock Street where it will extend west on Meyer to 6th Street, then south on 6th Street all the way to the southern boundary of the project site. Gas lines will be extended from this new mainline in 6th street to serve the new buildings via gas meter locations at each building being served.

The existing overhead telephone lines along 5th Street will be converted to underground. This system will provide the telephone source for the site. Conduits will be extended to service the new buildings. In addition, a new telephone mainline will also be required to provide adequate service to the project. This new mainline will have a point of connection on Meyer Drive just east of 6th Street, and will then extend south on 6th Street to our project entrance on 6th. Phone lines will be extended from this new mainline in 6th Street to serve the new buildings via conduit connections to each building. In addition, a new phone mainline will also be required to provide adequate service to the project. This new mainline will have a point of connection on Meyer Drive just east of 6th Street, and will then extend south on 6th Street to our project entrance on 6th. Phone lines will be extended from this new mainline in 6th Street to serve the new buildings via conduit connections to each building.

The existing overhead cable system along N Street and 5th Street will be undergrounded and used to provide cable and high speed internet service to the Site if available. In addition, a new telephone mainline will also be required to provide

adequate service to the project. This new mainline will have a point of connection on Meyer Drive just east of 6th Street, and will then extend south on 6th Street to our project entrance on 6th. Phone lines will be extended from this new mainline in 6th Street to serve the new buildings via conduit connections to each building. In addition, a new CATV mainline will also be required to provide adequate service to the project. This new mainline will have a point of connection on Meyer Drive just east of 6th Street, and will then extend south on 6th Street to our project entrance on 6th. This will be in a joint trench with the phone line as noted above. CATV lines will be extended from this new mainline in 6th Street to serve the new buildings via conduit connections to each building. Once the underground utility systems have been designed and installed, new easements will be needed for the facilities for public agencies.

Solid waste will be disposed of through contracts with Waste Management of the Inland Empire. In order to reduce the amount of material generated by the Specific Plan, the Specific Plan will comply with the requirements of the County of Riverside's Source Reduction and Recycling Element.

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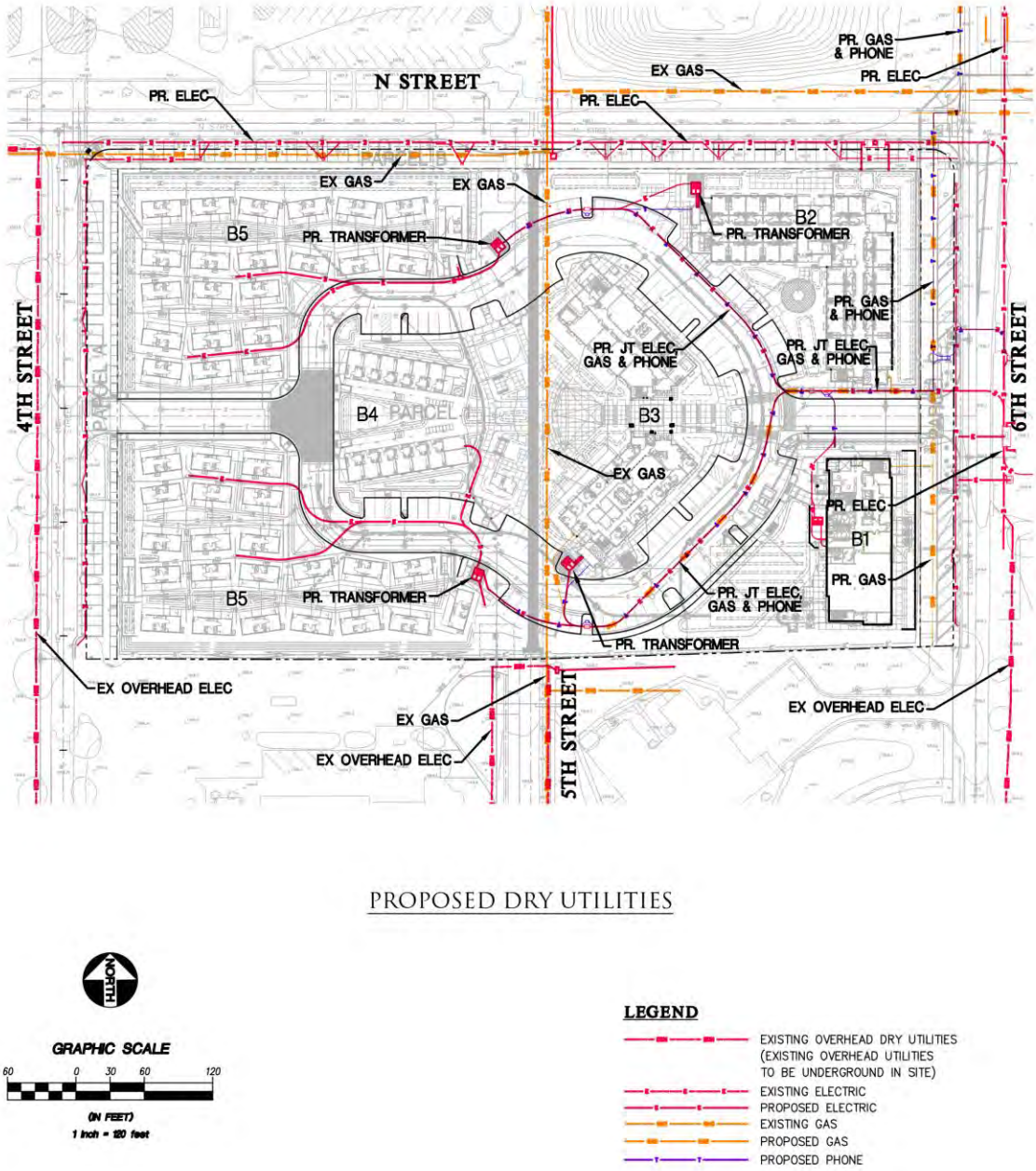
Figure 4-7 Proposed Utility Backbone **[UPDATED]**



Section 4.12 Public Services - Police and Fire Protection

Law enforcement services will continue to be provided by the Riverside County Sheriff's Department. Fire Marshall services will continue to be provided by the Riverside County Fire Department.

These necessary public services may be financed through one or a combination of the financing mechanisms listed in Section 6.6, Financing of Public Infrastructure.

Section 4.13 Grading Concept and Plan

Grading for the Specific Plan will be minimal, as the existing terrain is relatively flat and slopes from the northwest to southeast with an average slope of 0.7 percent; but the project grading will require import material in order to raise the elevation of the site to remove the project from the flood plain. A large portion of the Specific Plan site is developed with structures, appurtenances, roads, and utilities.

The Conceptual Grading Plan is shown in Figure 4-8. Based on the Infrastructure Report for the Project (Southern California Soil & Testing Inc., January 2011), several assumptions influence the Conceptual Grading Plan, including:

- General site clearing should include removal of vegetation, organic materials, and existing utilities, structures, trees and associated root systems, rubble, rubbish, and any loose and/or saturated materials.
- A mass grading operation could raise the site approximately 0.0-4.0 feet on average above the existing topography of the site.
- There will be additional import material required to raise future building pad elevations 1.5 feet to three feet above such mass grading in order to place building floors one foot above the 100-year floodplain.
- The preliminary grading concept includes a super-pad sloping from the north to the south with an average slope of 0.5 percent, including interim desilting basins for sediment control.
- Site stripping should extend to a minimum depth of two to four inches, or until all organics in excess of three percent by volume area removed.
- Excavations that result from clearing operations should be backfilled with engineered fill.
- The proposed buildings finished floor elevations also need to be a minimum of one foot above the surrounding flood elevations.

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The grading for the Specific Plan site is expected to require approximately 35,000 – 50,000 cubic yards of imported material to develop proposed building pads parking areas and on site roadways. The quantity of material required to be moved and the phasing will be refined as more detailed grading plans are developed. Final grading plans shall meet the incumbent standards of the March JPA that are in effect at the time of grading permit application. The grading will be completed incrementally as required for each phase of development as required to construct rough graded building pads, street undercuts, landscape areas, and undeveloped mass graded pads. (See also Appendix L – Phasing Exhibits)

A Stormwater Pollution Prevention Plan, which encompass an Erosion and Sedimentation Control Plan (ECP) and airborne dust control measures will be prepared for approval by the March JPA prior to any grading activities taking place. The ECP will use stringent erosion and sedimentation control requirements to prevent loss of soil during construction by wind or rain, prevent sedimentation of storm sewer or receiving waters, and prevent dust and particulate matter from entering the air.

Section 4.14 Phasing of Development and Infrastructure

At the present time, most of the infrastructure required for the Specific Plan does not exist, or requires significant upgrades. As such, infrastructure will be installed to accommodate the proposed development. The performance standards for Specific Plan Infrastructure are to meet the following objectives:

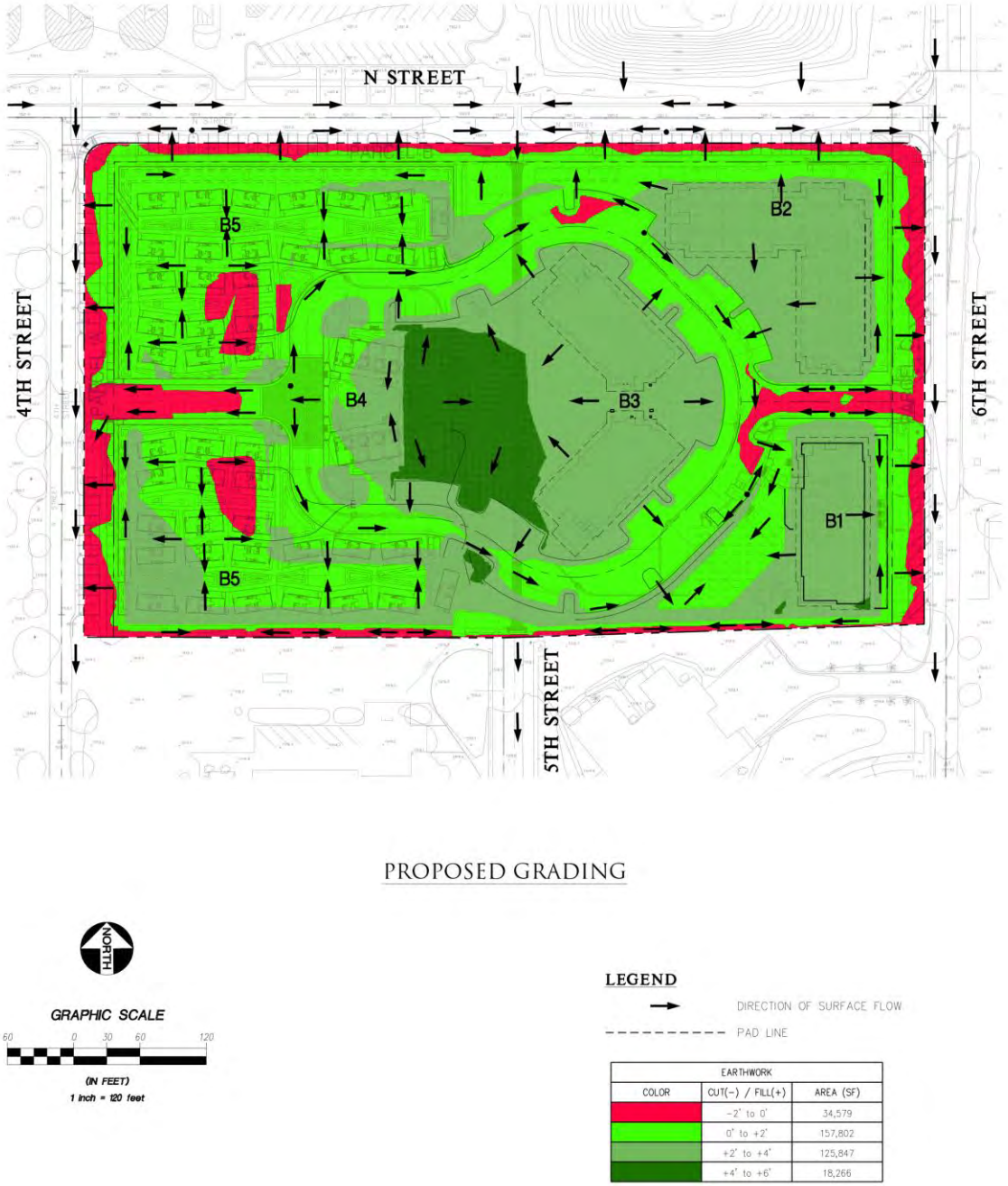
- Provide orderly buildout of the campus;
- Provide adequate infrastructure and public facilities;
- Protect public health, safety and welfare; and
- Provide uninterrupted service to existing campus users throughout construction.

Necessary infrastructure will be required to demonstrate, through engineering studies, that sufficient capacity exists to service the ultimate buildout of the Specific Plan. Implementation of Specific Plan will require construction of new (and/or improvement of existing) utility infrastructure, including electrical and natural gas facilities, as well as an internal private loop / street.

Section 4.15 Sequencing of Water, Sewer, and Drainage Improvements

The planned development of the U.S. Vets Transitional Housing Program is based on the anticipation that the site will develop incrementally, with the submittal of site plans for each phase. The transitional veterans housing facility consists of ~~eight buildings~~ five main buildings or building areas (B1, B2, B3, B4 and B5). Water, Sewer and Storm drain utilities have and will be installed in a phased approached to meet the demands of the phased development per the utility descriptions noted above. ~~There is a private loop street that runs through the development connecting 4th and 6th streets.~~ Wet utilities will be installed incrementally as required for each phase of development. (See also Appendix L – Phasing Exhibits)

Figure 4-8 Proposed Grading Concept [UPDATED]



4.15.1 Water System Phasing

Additional water lines will be constructed on- and off site as required to serve the Specific Plan. The off site water improvements shall be consistent with approved WMWD Water Master Plans. The backbone system shall be constructed in phases consistent with an approved infrastructure and development phasing plan. Water service shall be available to provide adequate fire flow as established by the Riverside County Fire Department, along with sufficient water storage for emergency situations and for continuous maintenance of service pressures based on WMWD's Planning standards and approvals, prior to any building permit issuance. The on and off-site water improvements will be installed incrementally as required for each phase of development.

The development is dependent on a pressure reducing station interconnect between Western Municipal Water District (WMWD) and Eastern Municipal Water District (EMWD) at a location near Cactus. This in conjunction with the proposed upgraded mainlines in the public streets are required to provide adequate pressure and flow to meet the demands of the proposed project. Proposed development for the project beyond the available re-distribution of the existing water meters will require that the interconnect and PRV be completed and will be related to the phasing of the proposed development.

(See also Appendix L – Phasing Exhibits)

4.15.2 Sewer System Phasing

The Project will use existing 10" sewer in 5th Street. The on-site sewer improvements will be installed incrementally as required for each phase of development. (See also Appendix L – Phasing Exhibits)

4.15.3 Storm Drain System Phasing

The Project will develop on-site storm water hydrology facilities and mitigation for storm water run-off through the use of surface or underground detention basins or systems. The project is responsible for the off-site drainage tributary area to the north of N Street that currently drains through the Project site with surface flows on 5th Street; but these off-site flows will remain as un-developed existing storm flows that are not required to be detained or treated for water quality as part of the Project site system. The Project Water Management Plan shall prevent the post-development peak discharge rate and quantity from exceeding the pre-development peak discharge rate and quantity for the 1, 3, 6 and 24 hour storm events for the 2, 5 and 10 year storms; based on the fact that post-development discharges rates will exceed pre-development rates for the 100 year storm. It shall also reduce impervious cover, promote infiltration, and capture and treat the storm water runoff from 90 percent of the average annual rainfall using acceptable best management practices. The stormwater drainage system and site grading shall be

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developed to ensure that it carries adequate amounts of stormwater and protects structures designed for human occupancy during a 100-year storm event.

Additionally, the storm drain system shall be designed to prevent any increased runoff from the site, even as the impervious surfaces in the Specific Plan area increase. ~~The off-site storm drain will extend southerly from the site for discharge into existing Heacock Channel just north of the Z Street Channel. These off-site storm drain improvements will be completed as part of Phase I1 improvements.~~

4.15.4 Street Improvements Phasing

The street improvements shall be constructed as approved by the March JPA Engineer and consistent with an approved infrastructure and development phasing plan. The on and off-site street improvements will be constructed incrementally as required for each phase of development as required to provide vehicular, pedestrian and emergency access to the individual buildings and parking areas.

Section 4.16 Maintenance Plan

The intent of the maintenance plan is to establish responsibilities for the operation and maintenance of various facilities and community improvements for the Specific Plan. The planned infrastructure and improvements necessary to serve the Specific Plan area may be financed through one or a combination of several of the following financing mechanisms, as approved by the March JPA:

- Developer improvement with reimbursement agreement
- Developer improvement with credits against fees
- Special Assessment Districts
- Landscape and Maintenance District (LMD)
- Public Enterprise Revenue bonds
- Impact Fees and Exactions

It is expected that costs will change over time and therefore each funding mechanism employed shall include a method for adjusting the amount of funding to reflect current costs at the time of construction.

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CHAPTER 5. DEVELOPMENT REGULATIONS AND GUIDELINES

Section 5.1 Purpose and Applicability

5.1.1 Purpose

These Development Regulations are intended to facilitate the phased and orderly development of the Specific Plan area in a manner that successfully creates a walkable and human-scaled campus environment in accordance with the guiding principles set forth in Chapter 2 of this Specific Plan.

These graphically oriented Development Regulations clearly describe and carefully regulate the urban design framework and pattern, the backbone circulation system, the placement and configuration of buildings, vehicle parking and access, and public space in a way that supports the Specific Plan's Guiding Principles.

These Development Regulations also contain basic design principles for structures and landscapes to ensure that development will be attractive, pleasant, diverse, and interesting in accordance with the Specific Plan's Guiding Principles. Furthermore, these Development Regulations are intended to foster sustainable practices on all levels from site planning to building technology in order to protect and enhance the natural environment and to provide a healthy and healing human environment.

5.1.2 Applicability

The requirements and regulations of these Development Regulations apply to all proposed development, subdivisions, and land uses within the Specific Plan area, the boundary of which is shown in Figure 4-1.

The LEED checklist, as provided in Appendix F, shall be provided for evaluation as a part of all proposed development, subdivision, or land use with this Specific Plan.

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5.2 Building Areas and their Purposes

The Specific Plan area is divided into the following building areas, which shall be applied to the Plan as shown on the Regulating Plan. The Development Standards in Section 5.3 specify detailed regulations and requirements for each of the building areas described here.

Public Realm (PR)

The PR area is intended to be a recreational facility, providing unique locations with a strong sense of place, civic character, and lasting value. This linear recreational facility constitute an uninterrupted "open space loop". The PR area is complemented by publicly accessible open space areas required in the Building 1 (B1) area and the Village Green (VG), which contribute to an attractive and interesting open space corridor. Additionally, the PR area accommodates the primary motorized and non-motorized circulation. The primary pedestrian access to on-street parking areas and all buildings is taken from and oriented to the Public Realm area.

Section 5.3.2 sets forth the Development Standards for the PR area.

Village Green (VG):

The Village Green area is intended to be the "Campus Commons", providing a strong sense of place, civic character, and lasting value. This "Campus Commons" offers a distinct open space for community gathering, active and passive recreation, reflection, and healing. These open spaces are contiguous and constitute an uninterrupted "open space loop". The VG area is complemented by Buildings 3 (B3) and 4 (B4), which contribute to a~~n attractive dining facility,~~ multipurpose room and central administrative building. Additionally, the PR area is the organizing spine around the campus; it accommodates the primary motorized and non-motorized circulation. The primary pedestrian access to all buildings is taken from and oriented to the Public Realm area.

Building 1 (B1)~~, Building 5 (B5) and Building 8 (B8):~~

Buildings B1~~, B5 and B8 are proposed as Family~~ is proposed as a Transitional Building~~s,~~ which shall be placed at the ~~northwesterly~~ ~~corner and the~~ southerly portion of the Project site. This building would allow veterans to live with family while going through the transitional program. The building~~s~~ must create an attractive and interesting meandering open space corridor that connects to pedestrian parkways along streets, as well as a tot lot for children. ~~In addition, the B1 zone may contain private yard space intended for tenant use only, which may be physically and visually separate from the PR area.~~

Section 5.3.3 sets forth the Development Standards for all buildings within the Project.

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Building 2 (B2)~~, Building 6 (B6) and Building 7 (B7):~~

Buildings B2 ~~, B6 and B7 are~~ is proposed as ~~Efficiency buildings~~ Permanent Supportive Housing, which shall be oriented and configured to enhance the campus character along ~~4th Street,~~ N Street and 6th Street. ~~The~~ B2 ~~, B6 and B7 areas~~ must abut publicly accessible pedestrian parkways, trails or other recreation facilities. This~~ese~~ area~~s~~ may provide private yard space intended for tenant use only.

Section 5.3.3 sets forth the Development Standards for all buildings within the Project.

Building 3 (B3)

Building B3 is proposed ~~for~~ as ~~Campus Support Services as well as VIP transitional housing.~~Permanent Supportive Housing. The building shall be oriented and configured to enhance the campus center. The B3 area shall provide a design that allows visual and physical accessibility to the VG area.

Section 5.3.3 sets forth the Development Standards for all buildings within the Project.

Building 4 (B4) Transitional Housing

Building B4 is proposed as Transitional Housing and will consist of 24-studio apartment units, each approximately 375 sq.ft. The Building will also have administrative offices, computer room, laundry facility and community space. Primary access to this will be off 4th Street, with additional access from 6th Street. ~~is proposed as the Dining Hall and Multi-purpose Room.~~ The building shall be oriented and configured to enhance the campus center. The B4 area shall provide a design that allows visual and physical accessibility to the VG area.

Section 5.3.3 sets forth the Development Standards for all buildings within the Project.

Building 5 (B5) Permanent Supportive Housing (Comfort Homes Village)

Building B5 is proposed as Permanent Supportive Housing and is comprised of forty-four (44)-permanent supportive housing units. These individual “Comfort Homes”, will be approximately 500 sq.ft., and include a bedroom, bathroom, kitchen and living area. In addition, the architectural style and building color/materials will be compatible with the other Campus buildings. Primary access to this will be off 4th Street, with additional access from 6th Street.

Section 5.3.3 sets forth the Development Standards for all buildings within the Project.

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5.2.1 Height Limitations

The maximum building height in the Specific Plan area is 52 feet as measured from the proposed building pad elevation to the highest point on the building for each specific building site; with the actual top of building elevation not to exceed a height above sea level per the FAA requirements for this site. Height restrictions will apply to meet Federal Aviation Regulation Part 77 (Obstructions to Navigation) standards. The Project site is located approximately 2,100 feet south of the American Forces Network (AFN) facility. The allowable building heights in the SP area is necessary to accommodate a satellite array; all required building heights are less than the restrictions for the satellite. Building heights will be restricted as shown along that line of sight and shall be consistent with the FAA limitations.

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Section 5.3 Development Standards

5.3.1 Purpose

This section is intended to produce the type of development that achieves the envisioned character for each of the zones. The Typical Illustrative Cross Section, illustrated in Figure 5-1, shows a "slice" of the type of development these Development Standards support in the various building areas. The cross section runs from the public right-of-way of a perimeter street to the center of the campus plan. Each area is described in detail on the following pages. Note that this drawing illustrates only one of a multitude of configurations permitted by these Development Standards.

Figure 5-1 Typical Illustrative Cross Section

5.3.2 Public Realm Standards

The Public Realm (PR) area is intended to be a linear recreational facility and the organizing outer feature of the campus. It accommodates the primary motorized and non-motorized circulation and provides unique locations that create a strong sense of place, civic character, and lasting value. This linear facility shall be the key pedestrian corridor that connects campus residents to other amenities within close proximity of the project. To ensure a significant amount of publicly accessible open space, the PR area requires a minimum distance between the zone boundary and the curb (30 feet of open space). Figure 5-2 illustrates a typical cross section of the PR area. The street configuration included here is one of a variety of configurations that could be used (see Section 5.6, Street Layout).

Figure 5-2 Public Realm Area

A. Vehicle Circulation, Access and Parking

1. Streets shall be allowed in the Public Realm (PR) area in compliance with Section 5.6, Street Layout.

2. Lateral driveways connecting the street with a parking lot may be provided and shall be limited as follows:

    a. Driveways shall be 28 feet in width, or as required by Fire Department;
    b. Driveways shall be limited to one driveway per 200 feet of frontage to minimize the number of curb cuts;
    c. Driveways shall comply with the standards set forth in Section 5.3.4, Driveways;
    d. To the extent possible, driveways shall be shared by adjacent parcels;
    e. Driveways shall be detailed with concrete aprons, rather than curb returns. Where a driveway and a sidewalk intersect, the sidewalk shall be the dominant feature and continue without change in grade or material, depicted in Figure 5-3.

3. Vehicle parking shall not be permitted in the PR area, except on-street parking (see Section 5.6, Street Layout). Parking in driveways shall be prohibited.

4. Passenger drop-off zones may be provided at the curb in place of on-street parking near building entrances. Curb-side drop-off zones shall be wheelchair accessible, clearly marked, and may be provided with a pedestrian shelter.

The curb frontage of a drop-off zone shall be limited to 75 feet in length. To preserve on-street parking drop-off zones shall be spaced at minimum 300 feet apart.

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Figure 5-3 Sidewalk and Interface

B. Pedestrian Circulation and Access

1. Sidewalks shall be provided along all streets in the PR area in compliance with Section 5.6, Street Layout.

2. Lateral walkways may be located in the PR area to provide the primary pedestrian access to individual building entrances, open spaces, and plazas located near proposed buildings. All walkways shall comply with the regulations set forth in Section 5.6, Street Layout.

3. Paved walkways and trails may be located in the PR area to provide additional pedestrian routes for secondary access or recreational use. All walkways and trails shall comply with the regulations set forth in Section 5.6, Street Layout.

C. Buildings

1. Buildings shall not be permitted in the PR area.

2. No more than one pedestrian shelter may be provided at each curb-side passenger drop-off zones located in the parkway. Shelters shall be limited to 150 square feet in size and shall be transparent, visually unobtrusive, and compatible with the campus-wide street furniture design.

D. Publicly Accessible Open Space and Landscaping

1. Open spaces and plazas shall complement the streets throughout the PR area.

2. A minimum of 30 feet shall be provided between any point along the zone boundary and the curb to accommodate continuous publicly accessible and usable open space, except where a multi-use trail is located, in which case the minimum shall be 40 feet. This area may contain sidewalks, walkways, open spaces and plazas. Additionally, building frontages may encroach into this area as permitted in Section 5.5, Frontage Type Standards. Lateral driveways may be located within this area in compliance with subsection A above. Streets shall be prohibited.

3. All areas within the PR area not occupied by streets shall be designed for access and use for active or passive recreation, gathering, reflection, and/or healing.

4. Open spaces and plazas shall be contiguous and visually connected with one another to contribute to an open “Campus Commons” character.

5. Open spaces, and plazas shall be publicly accessible and usable. They shall include any of the following amenities:

   a) Pedestrian walkways (see Section 5.6, Street Layout);
   b) Park benches;
   c) Shade structures, such as trellises;
   d) Picnic benches and tables;
   e) Bike racks;
   f) Street lighting (see Section 5.6, Street Layout); and
   g) Single bag trash and recycling receptacles.

6. Fences shall be prohibited in the PR area. Garden walls a maximum of 24 inches in height may be permitted as part of a specific open space or plaza design

7. Landscaping shall support the campus center character and shall be in compliance with the Landscape Standards, Section 5.8.

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E. Private Open Space and Landscaping

1. All open space and landscaping in the PR area shall be accessible to all users; private yards or patios associated with specific users and enclosed by walls or fences shall not be permitted in the PR area.

F. Services and Utilities

1. Above ground utility devices, equipment, access or meters shall be installed per agency standards.

2. Private trash and recycling dumpsters, such as those used in collection by Waste Management, shall not be permitted in the PR area at any time.

3. All above-ground utilities within the Specific Plan area shall be undergrounded, or as approved by the March JPA Engineer.

5.3.3 All Building Areas within the Specific Plan

A. Vehicle Circulation, Access and Parking

1. Streets shall be allowed in compliance with Section 5.6, Street Layout.

2. A secondary vehicle circulation and access system shall be provided consisting of:

    a. Driveways that connect the street with parking and any service areas behind the buildings. Driveways shall be limited as follows:

        i. Driveways shall be 24 feet in width, or as required by Fire Department.

    b. Driveways shall comply with the standards set forth in Section 5.3.4, Driveways:

        i. To the extent possible, driveways shall be shared by adjacent parcels.

3. Vehicle parking shall be permitted and shall be limited as follows:

    a. On-street parking in compliance with the applicable Street Layout Standards;

    b. Parking lots shall be landscaped in compliance with Section 5.8, Landscape Standards;

    c. Parking in driveways and alleys shall be prohibited; and

    d. All parking areas shall comply with Section 5.7.4, Parking Standards.

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B. Pedestrian Circulation and Access

1. The primary entrance to a building shall be accessed from the sidewalk through an allowed frontage. A lateral walkway between the sidewalk and the building entrance shall provide direct access. All walkways shall comply with the regulations set forth in Section 5.6, Street Layout.

2. Paved walkways may provide additional pedestrian routes for secondary access or recreational use. All walkways shall comply with the regulations set forth in Section 5.6, Street Layout.

C. Buildings

1. Placement:
   a. Setbacks: B1, B2, and B3 ~~Each building~~ shall be located in compliance with the following setback requirements:

      i. Setback from the public realm: 0 feet minimum for the primary building façade; building frontages may encroach into the PR area as permitted in Section 5.5, Frontage Type Standards.

      ii. Side yard setback:
      • 0 feet if attached with adjacent building;
      • 10 feet minimum from side property line if detached;
      • 20 feet minimum between buildings on the same parcel; and

      iii. Setback from abutting property line or public right-of-way: 20 feet minimum

      Setbacks: B4 and B5 shall be located in compliance with the following setback requirements:

      i. Setback from the public realm: 0 feet minimum any building façade;

      ii. 5' minimum between B5 Comfort Home buildings

      iii. Setback from abutting property line or public right-of-way: 20 feet minimum

   b. The footprint of a building shall be limited to 60 percent of a parcel's area; if multiple buildings are located on the same parcel the cumulative footprint of all buildings shall be limited to 60 percent of the parcel's area.

2. Profile:
   a. Height limit: as per Section 5.2.1.

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b. Frontage for B1, B2, and B3:

i. The transition from public to private, indoor to outdoor at the primary entrance shall be created by appropriate frontage types;

ii. The primary entrance to a building shall be accessed from the sidewalk through an appropriate frontage type;

iii. The following frontage types are permitted (see Section 5.5, Frontage Types Standards):
- Common Yard;
- Dooryard;
- Forecourt;
- Covered Forecourt;
- Shopfront and Awning;
- Gallery; and
- Arcade.

iv. Façades shall be composed in compliance with Section 5.9, Architectural Design Standards.

c. Frontage for B4 and B5:

i. The primary entrance to a building shall be accessed from the sidewalk;

ii. The frontages shall not comply to the façade portion of Section 5.5 or Section 5.9.2 Architectural Design Standards due to the campus-like characteristic of the Comfort Homes Village, as each Comfort Home has access to a communal open space courtyard while maintaining the architectural style and building color/materials that are compatible with the other Campus buildings; nor shall it comply with the façade portion of the low-rise multifamily building type, as the requirement does not apply to the unique program and location of the low rise multifamily building type on the project site.

D. Public Open Space and Landscaping

1. Open spaces and/or plazas are permitted but not required.

2. If provided, open spaces and plazas shall:

a. Be at minimum ~~20~~ 15 feet in depth and ~~30~~ 10 feet in width;

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b. Be publicly accessible and usable; and

c. Be landscaped in compliance with the Landscape Standards.

E. Private Open Space and Landscaping

1. Private yards or patios are permitted.

2. Private yards or patios may be separated through the use of fences, garden walls, landscaping, or adjacent building walls.

   a. Fences or garden walls in the setback area facing the Public Realm area shall be limited to 42 inches in height and shall complement the architecture of the building(s) in style, materials, and color. Chain link and barb wire fences shall be prohibited.

   b. Privacy fences or garden walls located along the side or section of a building facing the public right-of-way shall be limited to 72 inches in height and shall complement the architecture of the building(s) in style, materials, and color. Chain link and barb wire fences shall be prohibited.

3. Landscaping shall be in compliance with the Landscape Standards, Section 5.8.

F. Services and Utilities

1. Ground and wall mounted utility devices, equipment, access or meters shall be permitted. Any such devices shall be set back from the public right-of-way and shall be screened from public view using landscaping, fences, or garden walls.

2. Roof mounted electrical and mechanical equipment shall be completely screened from public view.

3. Trash and recycling cans and dumpsters shall be located behind the primary buildings and shall be screened from public view using landscaping, fences, or garden walls.

4. Loading areas shall be located behind the primary buildings and shall be screened from public view using landscaping, fences, or garden walls. Where necessary, adequate turn-around and back-up space for service and delivery vehicles shall be provided.

5.3.4 Driveway Standards

A system of streets, driveways and alleys provides vehicular access to parking and for service vehicles on the individual sites. To ensure that driveways do not impede pedestrian comfort and safety the following requirements shall apply to all zones. To the

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extent feasible, driveways shall be shared between properties, and a continuous alley system shall provide secondary circulation and access. Driveways and alleys shall be configured and spaced in accordance with Figure 5-4, and as described below, or as approved by March JPA:

- Minimum spacing between adjacent driveway curb cuts: 200 feet, measured centerline to centerline.
- Minimum spacing between a driveway curb cut and the nearest street intersection: 200 feet, measured centerline to centerline.
- Minimum spacing between an alley curb cut and the nearest street intersection: 150 feet, measured centerline to centerline.
- One-way drop-off lanes located between driveway curb cuts shall comply with the following:
- Minimum spacing between the drop-off lane's entry and exit curb-cut: 75 feet, measured centerline to centerline; and
- Minimum spacing between the drop-off lane's entry and exit curb-cut and the nearest driveway curb-cut or street intersection: 100 feet, measured centerline to centerline.
- In order to minimize conflicts of vehicles turning in and out of driveways, driveway curb-cuts on opposite sides of a street shall comply with one of the following:
- Be aligned, or
- Be offset by a minimum 100 feet, measured centerline to centerline, or
- Be separated by a landscaped median.

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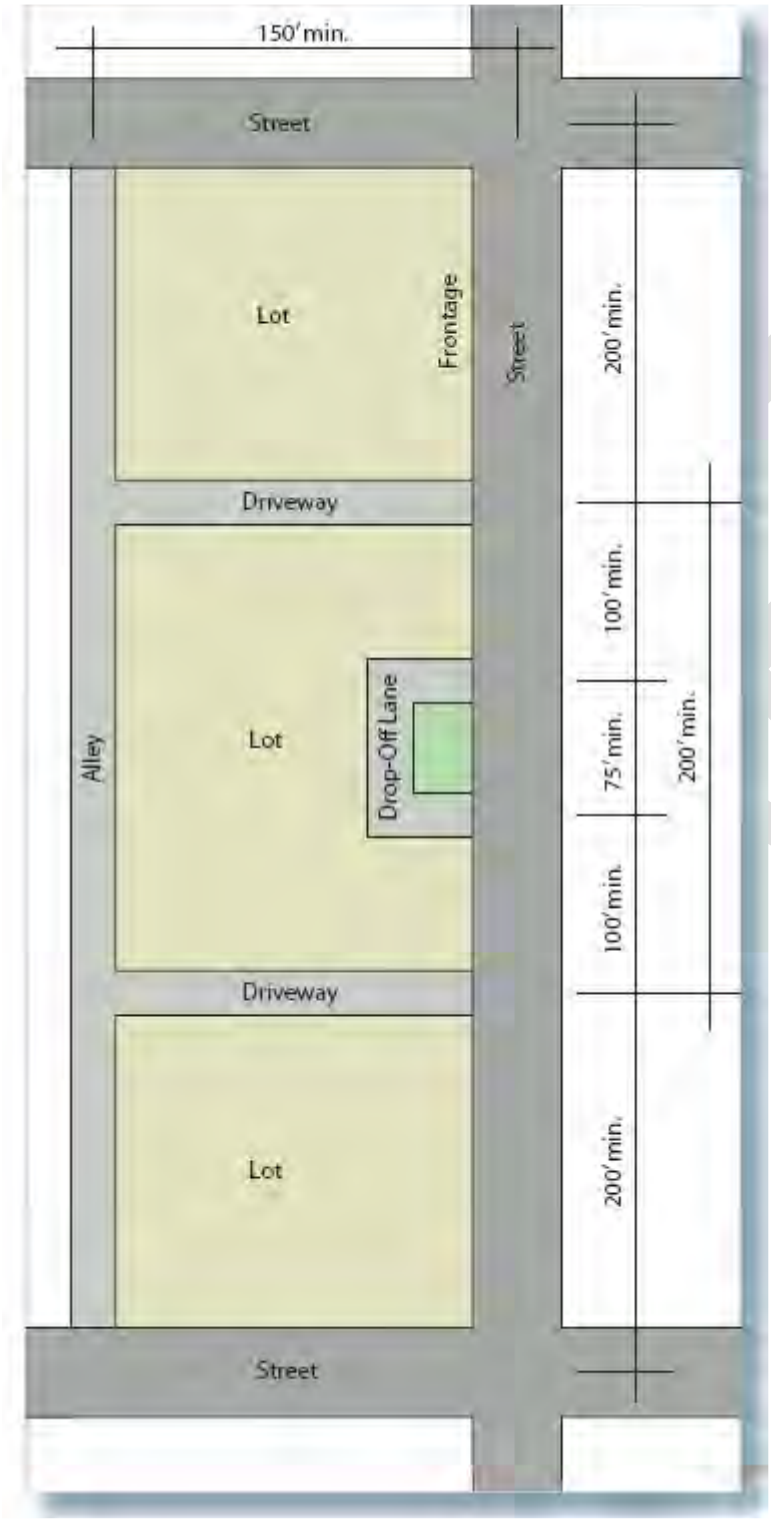
Figure 5-4 Driveway Diagram



5.4 Design Emphasis Locations

Given the original land use as an Air Force Base, the Specific Plan architecture will make gestures to celebrate and respect the historic nature of the original use.

Emphasized Corners

The following guidelines apply to B1, B2, and B3

Buildings on corner lots shall address both street frontages through architectural means and require careful articulation of their corner expression. Acceptable corner emphasis techniques include:

Building mass:

- taller building volume at corner; or
- chamfered corner; or
- projecting building mass at the corner.

Wall elements:

- Façade that wraps the corner and equally addresses both sides; and
- Entrances and frontages on both sides.

Roof elements:

- tower element at the corner; or
- accentuated roof line at the corner.

Applied elements:

- wrap-around gallery or arcade frontage; or
- wrap-around balconies.

The following guidelines apply to B4 and B5

Buildings on corner lots shall address both street frontages; however, are not subject to express such through architectural means and do not require additional articulation of their corner expression.

Primary Access Points

Primary access points to the campus shall be designed in a manner that helps create a distinct visual identity and conveys a sense of arrival at a special place. Primary access points shall be easily identifiable to support way finding that does not overly rely on signage. Acceptable access point design techniques that convey the sense of entering a place include:

- Gateway markers or monumentation

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- All such elements shall be of complementary design and shall support the overall campus design and architecture.
- Vertical architectural and/or sculptural elements are encouraged.
- Taller buildings that frame the access point.
- To achieve this buildings shall be placed near the intersection.
- Frontages facing the access street and corner emphasis is encouraged.
- Trees located in a small center median island at the access point.
- Deciduous trees with semi-transparent canopies are encouraged.

Section 5.5 Frontage Types Standards

The following Frontage Types Standards apply to B1, B2, and B3, and not B4 and B5 due to the unique characteristics of the campus-like Comfort Home Village which adopts an active, walkable, and pedestrian oriented scale to the housing type, nor shall it apply to the low-rise multifamily building type, as the requirement does not apply to the unique program and location of the low rise multifamily building type on the project site.

5.5.1 Purpose

A building's frontage defines the transition between the inside and the outside, and between the private and public realms. The frontage design is important as it dictates how the building affects the pedestrian realm. The Frontage Type Standards on the following pages describe the design characteristics of each of the Frontage Types permitted in the plan area. The images are intended to illustrate typical conditions. The actual design and configuration of a building's frontage may vary depending on the building's architecture and floor plan. This section also determines which Frontage Types are permitted in each of the zones, shown in Table 5-1. Table 5-2 determines the maximum permitted encroachment of a building frontage into the Public Realm area.

Table 5-1 Permitted Frontage Types

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Frontage Type	PR	B1	B2
Common Yard	N/A	P	P
Dooryard	N/A	P	P
Forecourt	N/A	P	P
Covered Forecourt	N/A	P	P
Shopfront & Awning	N/A	P	X
Gallery	N/A	P	X
Arcade	N/A	P	X

Notes:
P = Permitted Frontage Types are permitted in this zone subject to compliance with these Frontage Type Standards.
X = Frontage Types are not permitted in this zone.
L = Limited. Permitted as secondary entrance only.
N/A = Frontage Types not applicable in this zone.

Table 5-2 Permitted Frontage Types

Frontage Type	Frontage Encroachment Into the Public Realm Zone
Common Yard	10 feet maximum for covered entries
Dooryard	15 feet or back of sidewalk, whichever is less
Forecourt	0 feet maximum, except 6 feet maximum for awnings attached to the facade
Covered Forecourt	0 feet maximum, except 6 feet maximum for awnings attached to the facade
Shopfront & Awning	6 feet maximum for awnings attached to the facade
Gallery	12 feet maximum
Arcade	0 feet maximum

5.5.2 Common Yard

The Common Yard frontage, depicted in Figure 5-5 is created by substantially setting back the building façade from the property line. Covered entries or front porches may encroach into the Common Yard. Common Yards shall remain unfenced to achieve a visually continuous common landscape that ties into the public realm. Landscaping shall not be used to separate the front yard from the public realm or adjacent yards, and shall be limited to groundcovers, low shrubs, and trees with sufficiently transparent canopies that permit views of the building façade. See Section 5.8, Landscape Standards for additional requirements.

Figure 5-5 Common Yard Frontage

5.5.3 Dooryard

The Dooryard frontage, illustrated in Figure 5-6, is created by slightly elevating the front yard and surrounding it with low garden walls. Garden walls shall be limited to 24 inches in height to maintain visual connectivity between the Dooryard and the public realm, and the garden wall's design and materials shall be compatible with the building's architecture. Steps and/or ramps shall be provided to connect the Dooryard with the adjacent sidewalk. The building's entrance shall be accessed directly from the Dooryard, which may be hardscaped or landscaped, or a combination thereof. Landscaping shall not be used to separate the Dooryard from the public realm or adjacent yards, and shall be limited to grasses, groundcovers, low shrubs, and trees with sufficiently transparent canopies that permit views of the building façade. Plants may be planted directly in the ground or in pots. See Section 5.8, Landscape Standards for additional requirements.

Figure 5-6 Dooryard Frontage

5.5.4 Forecourt

The Forecourt frontage, shown in Figure 5-7 is created by setting back a portion of the building façade, typically the middle, to create an entry square that is surrounded by building façades on three sides. Forecourts shall be at minimum 20 feet in depth and width. Forecourts may provide access to a central lobby of a larger building or may provide access to multiple users through individual entrances. A Forecourt may be combined with other frontage types at individual entrances, such as a Shopfront. Forecourts may be hardscaped or landscaped, or a combination thereof, and may be elevated above the sidewalk level a maximum of 24 inches to maintain visual connectivity between the Forecourt and the public realm. If elevated, steps and/or ramps shall be provided to connect the Forecourt with the adjacent sidewalk. Landscaping shall not be used to separate the Forecourt from the public realm, and shall be limited to groundcovers, low shrubs, and trees with sufficiently transparent canopies that permit views of the building façade. See Section 5.8, Landscape Standards for additional requirements.

Figure 5-7 Forecourt Frontage

5.5.5 Covered Forecourt

The Covered Forecourt frontage, depicted in Figure 5-8, is created by setting back a portion of the ground-floor façade, typically the middle, to create an entry square that is surrounded by building façades on three sides and covered by the upper stories extending over that space. Covered Forecourts shall be at minimum 10 feet in depth and 20 feet in width. Covered Forecourts may provide access to a central lobby of a larger building or may provide access to multiple users through individual entrances. A Covered Forecourt may be combined with other frontage types at individual entrances, such as a Shop-front.

Figure 5-8 Covered Forecourt

5.5.6 Gallery

The Gallery frontage, shown in Figure 5-9, is created by attaching a colonnade to the building façade. The Gallery encroaches into the front setback and provides a covered or partially covered walkway that parallels the sidewalk alongside the façade that leads to the primary entrance. The Gallery also provides a balcony for second-story uses. The Gallery frontage shall provide at minimum eight feet of clearance between the façade and the inside of the posts or columns, and a minimum clearance height of 10 feet. Landscaping shall not be used to separate the front yard from the public realm, and shall be limited to groundcovers, low shrubs, and trees with sufficiently transparent canopies that permit views of the building façade. See Section 5.8, Landscape Standards for additional requirements.

Figure 5-9 Gallery Frontage

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5.5.7 Arcade

The Arcade frontage, depicted in Figure 5-10 is created by projecting the building's upper floors and encroaching into the front setback. A colonnade structurally and visually supports the projecting building mass. Similar to the Gallery, the Arcade provides a covered or partially covered walkway that parallels the sidewalk alongside the façade that leads to the primary entrance. The Arcade also provides habitable and usable interior space on upper floors. The Arcade frontage shall provide at minimum eight feet clearance between the façade and the inside of the columns, and a minimum clearance height of 10 feet. Landscaping shall not be used to separate the front yard from the public realm, and shall be limited to groundcovers, low shrubs, and trees with sufficiently transparent canopies that permit views of the building façade. See Section 5.8, Landscape Standards for additional requirements.

Figure 5-10 Arcade Frontage

Section 5.6 Street Layout

5.6.1 Purpose

The U.S. Vets Transitional Housing Program Campus circulation system is based on the design principle that understands streets as linear public spaces with a multitude of functions (see Public Realm area). Streets are planned as an integral part of the public realm rather than transportation utilities with the sole purpose of moving automobiles. Therefore, circulation in the plan area shall be provided through a multimodal, interconnected and hierarchical system of thoroughfares that balances the needs of automobile traffic, pedestrians, bicyclists, and potentially transit. This section provides the standards for a range of thoroughfares that may be located in the Specific Plan area. These standards ensure that the plan area provides safe, attractive and interesting routes for pedestrians, bicyclists and automobiles, in order to provide genuine transportation choices and encourage non-motorized trips for much of the internal traffic. This reduction in vehicle trips increases the efficiency and performance of the streets and parking areas and may allow street cross sections with fewer lanes and smaller, shared parking areas than conventional development would require.

5.6.2 Vehicular Circulation

The vehicular circulation system consists of a hierarchy of thoroughfares, including Arterials that bound the plan area on three sides (Cactus Avenue, Riverside Drive north of Meyer Drive, and Heacock Avenue), Major Connectors that provide primary access to the plan area from adjacent streets (Meyer Drive and Riverside Drive), and Minor Connectors that provide local access and circulation. The Specific Plan proposes two primary entry points into the plan area, one at 6th Street and the other at 4th Street. The internal campus circulation of a loop road that provides circulation and primary access throughout the campus building areas.

5.6.3 Emergency and Service Vehicle Access Points

To reduce emergency response time and minimize conflicts between emergency vehicles and regular traffic as well as pedestrians the Specific Plan will provide emergency access to the site per fire and police standards and requirements.

5.6.4 Pedestrian Circulation

The pedestrian circulation system primarily consists of continuous sidewalks along the proposed Major and Minor Connectors ~~(see Vehicular Circulation Diagram)~~, which are intended to provide the primary access to all buildings in the plan area. These sidewalks are complemented by lateral walkways that provide access to individual building entrances, open spaces and plazas located in the building areas. Further walkways and trails may be located in the Public Realm area and the building areas to provide additional pedestrian routes for secondary access or recreational use. All pedestrian

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walkways and trails shall be interconnected and form a continuous network of pedestrian routes.

5.6.5 Bicycle Circulation

The bicycle circulation system is based on a two-tiered approach. Experienced bicyclists and bike commuters may share the travel lane with slow moving vehicular traffic on internal streets. West of 6th Street where a higher volume of traffic is anticipated a multi-use trail located along the building frontages provides a continuous off -street path for recreational bicyclists and those less comfortable riding on the streets. See also Section 5.6.6, Street Layouts.

5.6.6 Street Layouts

The plan area circulation shall be developed using street layouts that support a balanced and hierarchical system. As described above the vehicular circulation system consists of a hierarchy of thoroughfares, including Arterials that bound the plan area on three sides (Cactus Avenue, Riverside Drive, and Heacock Avenue), Major Connectors that provide primary access to the plan area from adjacent streets (Meyer Drive, and a new street in the northern portion of the plan area connecting Riverside Drive and Cactus Avenue), and Minor Connectors that provide local access and circulation. Although minor connectors south of Meyer Drive are encouraged to provide bike lanes, they may not be provided if land use density and traffic volumes justify co-location of auto and bike trails. While all street layouts intend to balance the needs of all transportation modes, Major Connectors and Minor Connectors differ in focus and operational needs as follows:

 Major Connectors provide the primary vehicular access to the plan area. They are designed to accommodate more significant traffic loads and slightly higher traffic speeds than Minor Connectors. Travel lanes may be slightly wider, vehicular and pedestrian cross movements may be limited, and driveway access may be more constrained to reduce friction.

 Minor Connectors provide local access throughout the plan area. They are designed for slow moving traffic that is compatible with a vibrant pedestrian environment and frequent pedestrian crossings. Travel lanes shall be narrow to encourage slower speeds and ease in crossing. Additional turning lanes could be added at intersections as necessary for traffic operations. If roundabouts are deemed appropriate, they could be used at intersections for traffic control.

A series of Street Layouts is provided in the following discussions. Table 5-3, Street Layouts, identifies which Street Layouts are allowed for Major Connectors and Minor Connectors. Additionally, the selection of a Street Layout for a given location shall be based on capacity needs and context, with the goal to create a balance between the needs of all transportation modes. The internal loop circulation system will be designed as a private way / parking lot with 30 foot wide drive aisles and 18 foot deep

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perpendicular parking stalls adjacent to the drive aisles where parking is proposed. The primary entrance to the site would be off of 6th Street and the secondary entry would be off of 4th Street.

Table 5-3 Street Layouts

Street Layout	Major Connector	Minor Connector
A: 2 travel lanes, parallel parking with parkway	X	P
B: 2 travel lanes, perpendicular parking with no parkway	P	P
C: 2 travel lanes, perpendicular parking with parkway	P	P
Notes: P = Permitted X = Not Permitted		

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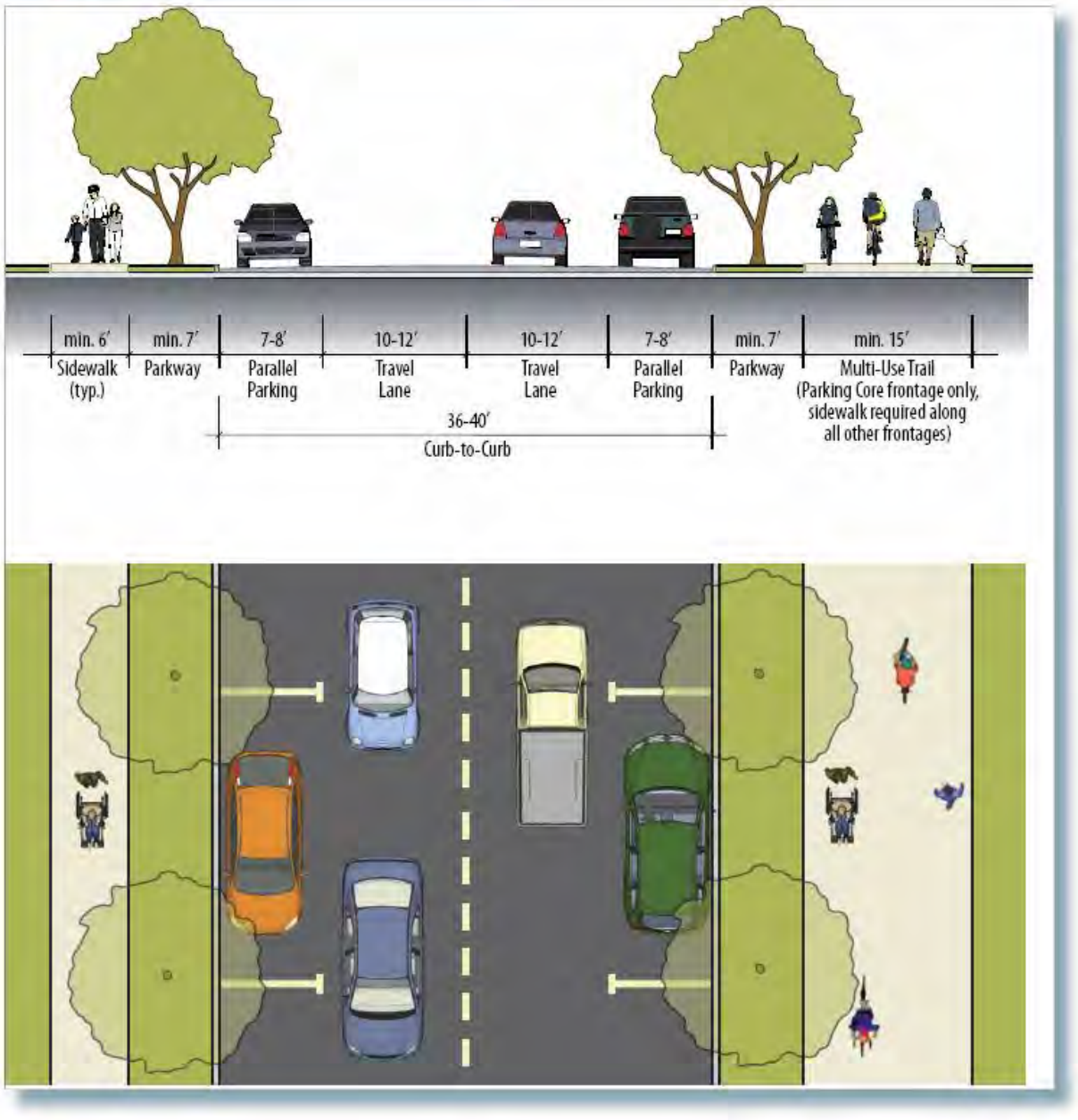
Street Layout A:

Street Layout A provides one travel lane in each direction, as well as parallel on-street parking on both sides. Sidewalks are provided on both sides of the street, separated from the street by landscaped parkways with street trees. All dimensions shall be as shown in Figure 5-11, below.

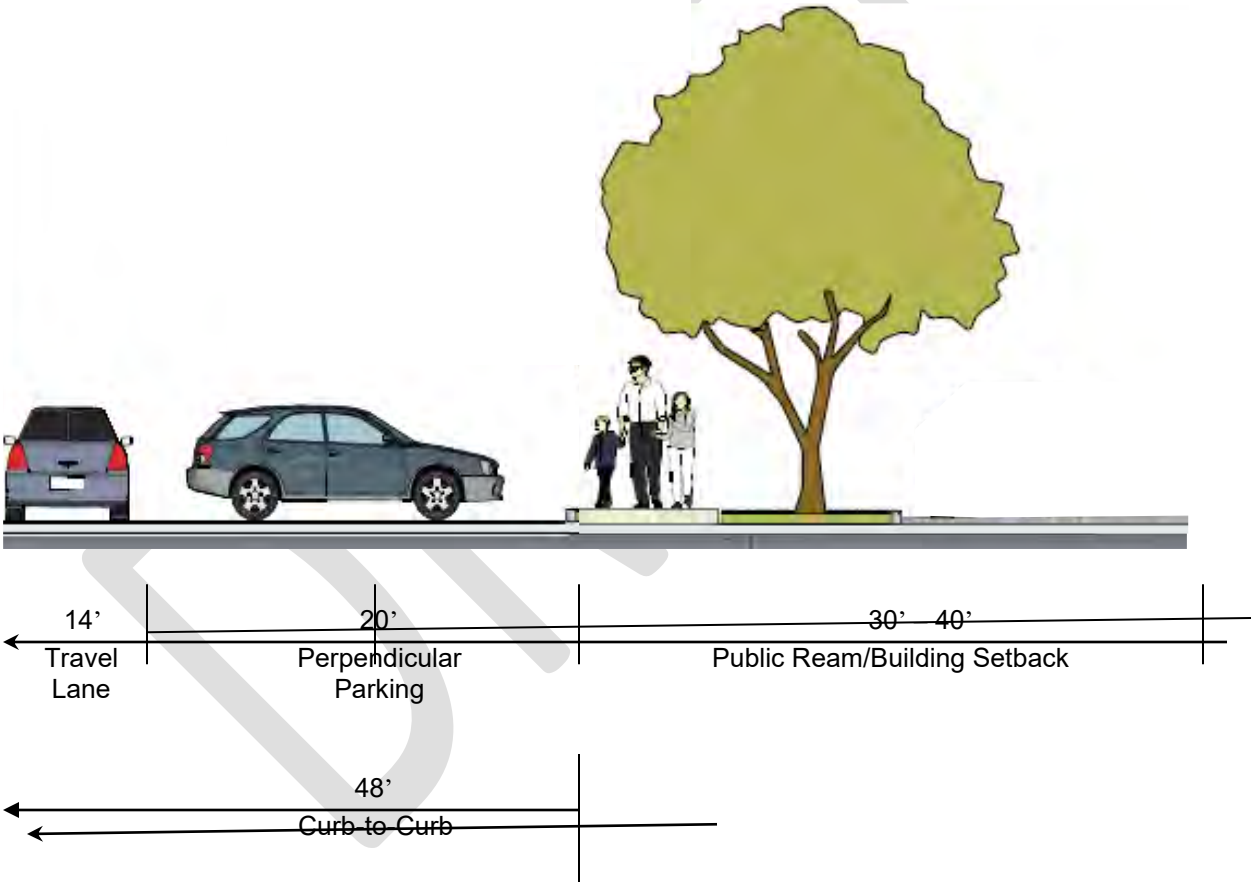
Figure 5-11 Street Layout A



Street Layout B:

Street Layout B provides one travel lane in each direction. Perpendicular on-street parking is permitted on both sides of the street. Sidewalks are provided on both sides of the street, adjacent to the back of the parking stall curb. All dimensions shall be as shown in Figure 5-12 below.

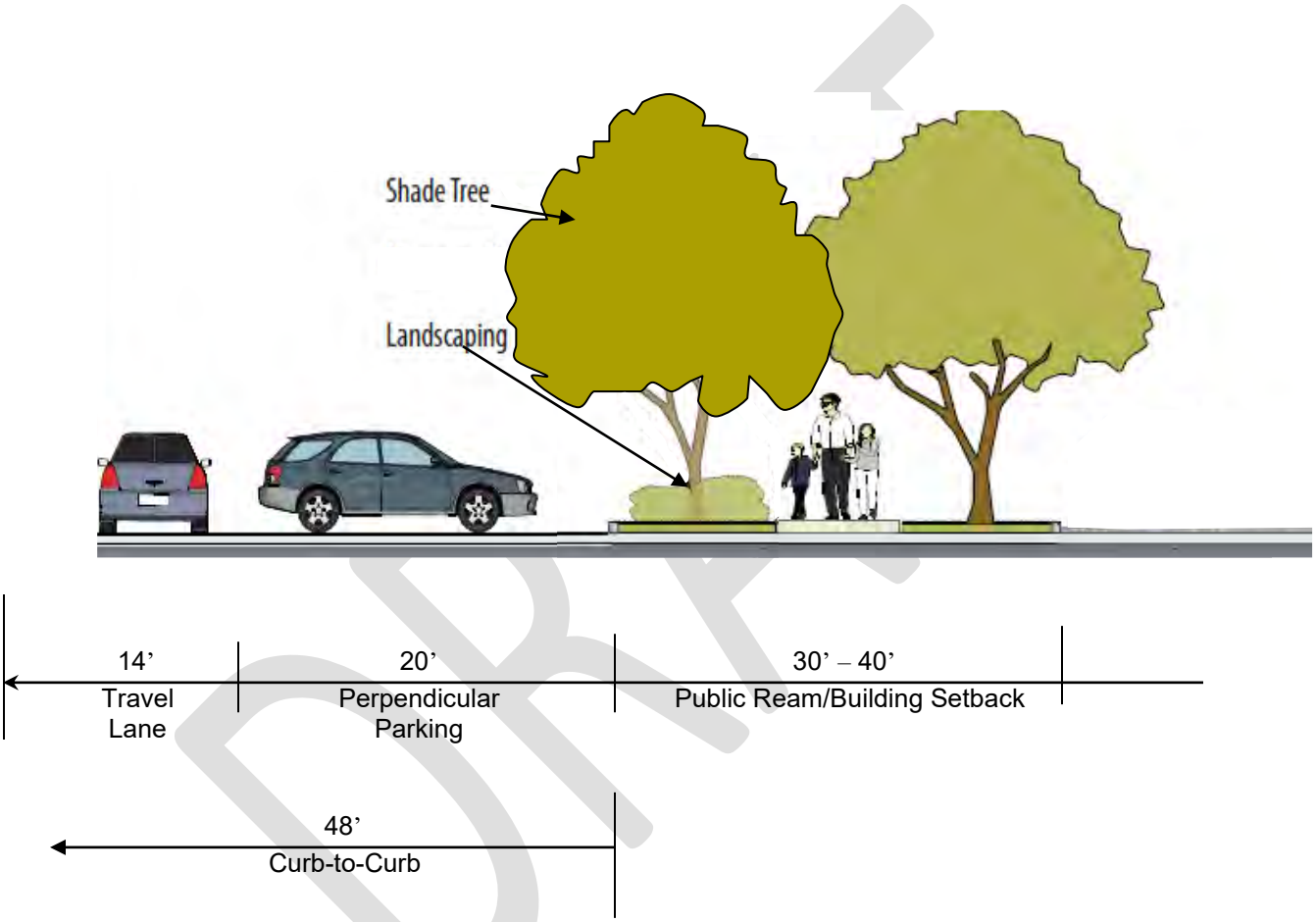
Figure 5-12 Street Layout B



Street Layout C:

Street Layout C provides one travel lane in each direction. Perpendicular on-street parking is permitted on both sides of the street. Sidewalks are provided on both sides of the street, separated from the street by landscaped parkways with street trees. All dimensions shall be as shown in Figure 5-13 below.

Figure 5-13 Street Layout C



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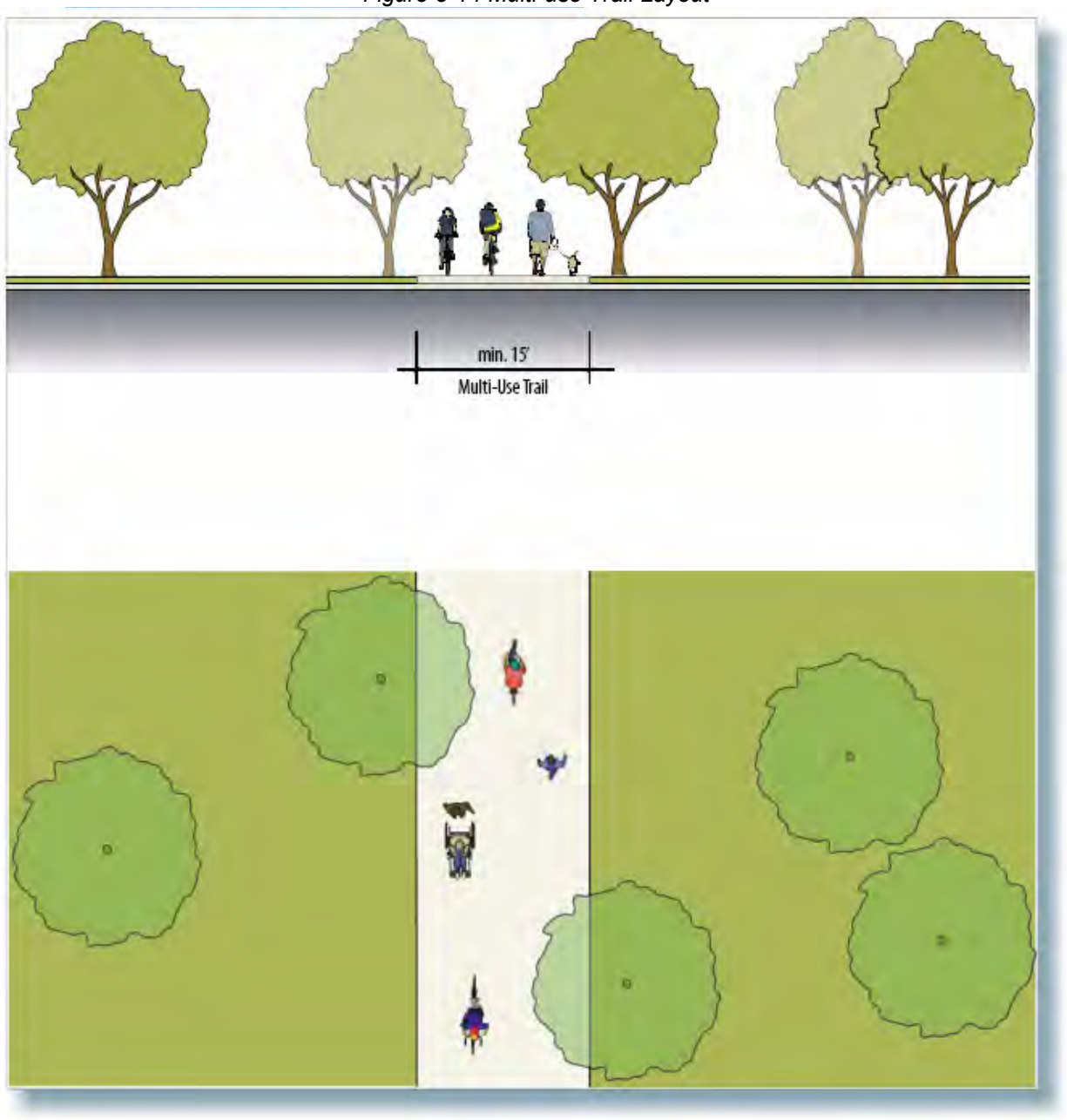
5.6.7 Multi-Use Trail Standards

Multi-Use Trails may be provided for shared use of pedestrians and bicyclists apart from the street. Multi-Use Trails shall be paved and at minimum 15 feet in width, and ADA-compliant. Multi-Use Trails are intended for recreational use in a park-like setting and shall not be meandering, as shown in Figure 5-14.

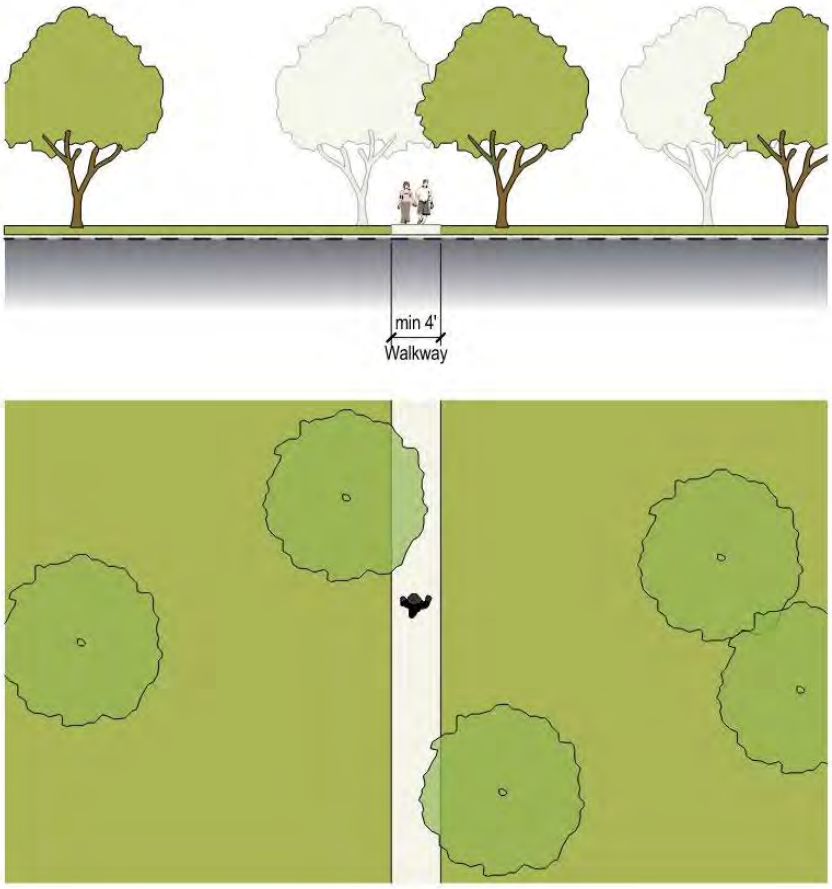
Figure 5-14 Multi-use Trail Layout



5.6.8 Pedestrian Walkway Standards

In addition to the sidewalks along the proposed Connectors, paved walkways are intended to provide access to individual building additional pedestrian routes for secondary access or recreational use. Walkways shall be made of poured concrete or pavers, and shall be at a minimum ~~six~~ four feet in width. Walkways shall be in compliance with the Americans With Disabilities Act (ADA). Walkways are intended for formal access and circulation, as illustrated in Figure 5-15; they may be straight or curved per the individual site or open space design, but shall not be meandering.

Figure 5-15 Pedestrian Walkway Layout **[UPDATED]**



5.6.9 Pedestrian Crossings

Safe and convenient pedestrian crossings are an integral element of the Project pedestrian circulation system. To ensure safety and convenience pedestrian crossings in the plan area the following standards shall apply.

 Crosswalks shall be at minimum six feet in width and perpendicular to the travel lanes.

 Crosswalks shall be located to provide convenient access between major building entrances. The spacing between crosswalks shall not exceed 300 feet.

 Curb extensions (or bulb-outs) at all crosswalks shall be required in order to:

- O improve visibility of pedestrians waiting to cross and approaching vehicles;
- O visually narrow the perceived street width to encourage slower traffic speeds; and
- O balance pedestrian safety, streetscape aesthetics, and vehicle operations.

 Curb extensions shall replace the parking lane and shall encroach into the roadway width by the parking lane width.

 All crosswalks shall comply with the Americans with Disabilities Act.

 All crosswalks shall be clearly marked to heighten driver awareness and improve visibility of both the crosswalk and pedestrians. Acceptable methods include colored pavement or pavers, and ladder pavement markings. See Figures 5-16 and 5-17.

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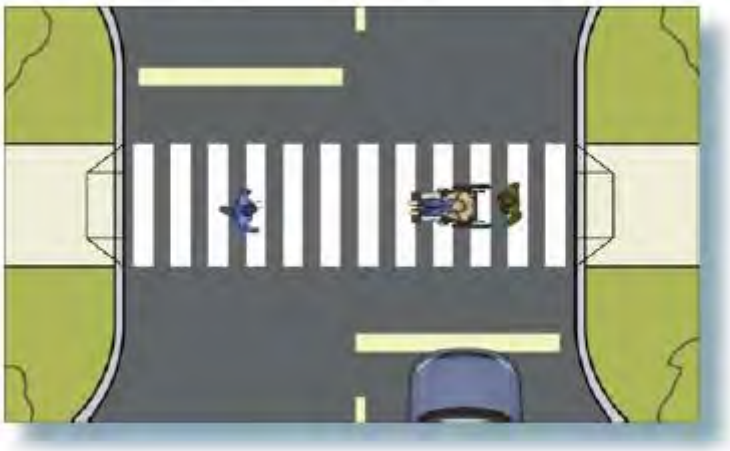
Figure 5-16 Crosswalk With Colored Pavement

Figure 5-17 Crosswalk With Ladder Pavement Marking



 All crosswalks shall be provided with signs indicating the crosswalk to drivers. Pedestrian activated signals shall be provided when required by the March JPA engineer for the promotion of public safety.

Figure 5-18 shows a typical crosswalk configuration for a Street Layout without median.

Figure 5-18 Typical Pedestrian Crossing Without Refuge

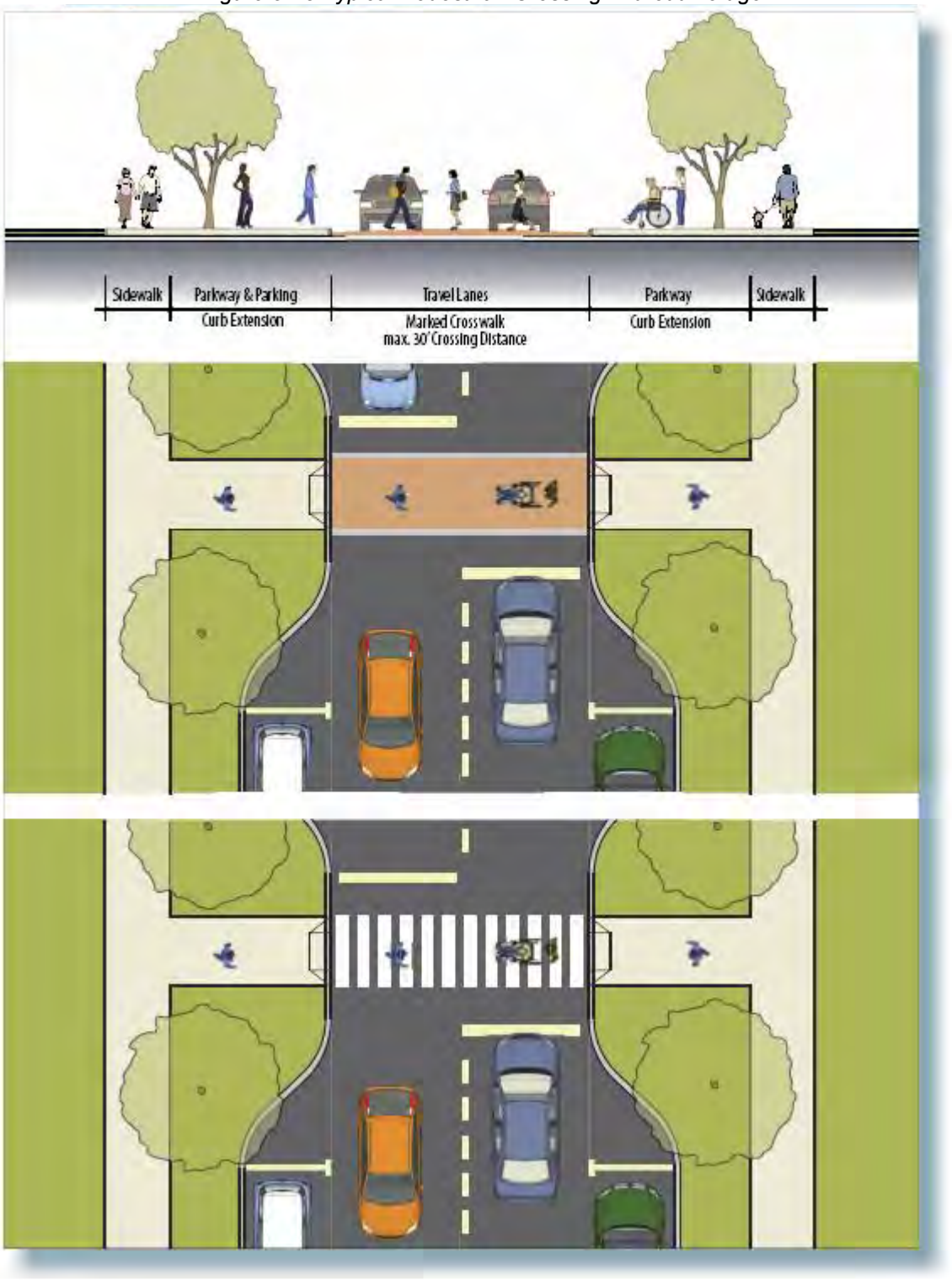
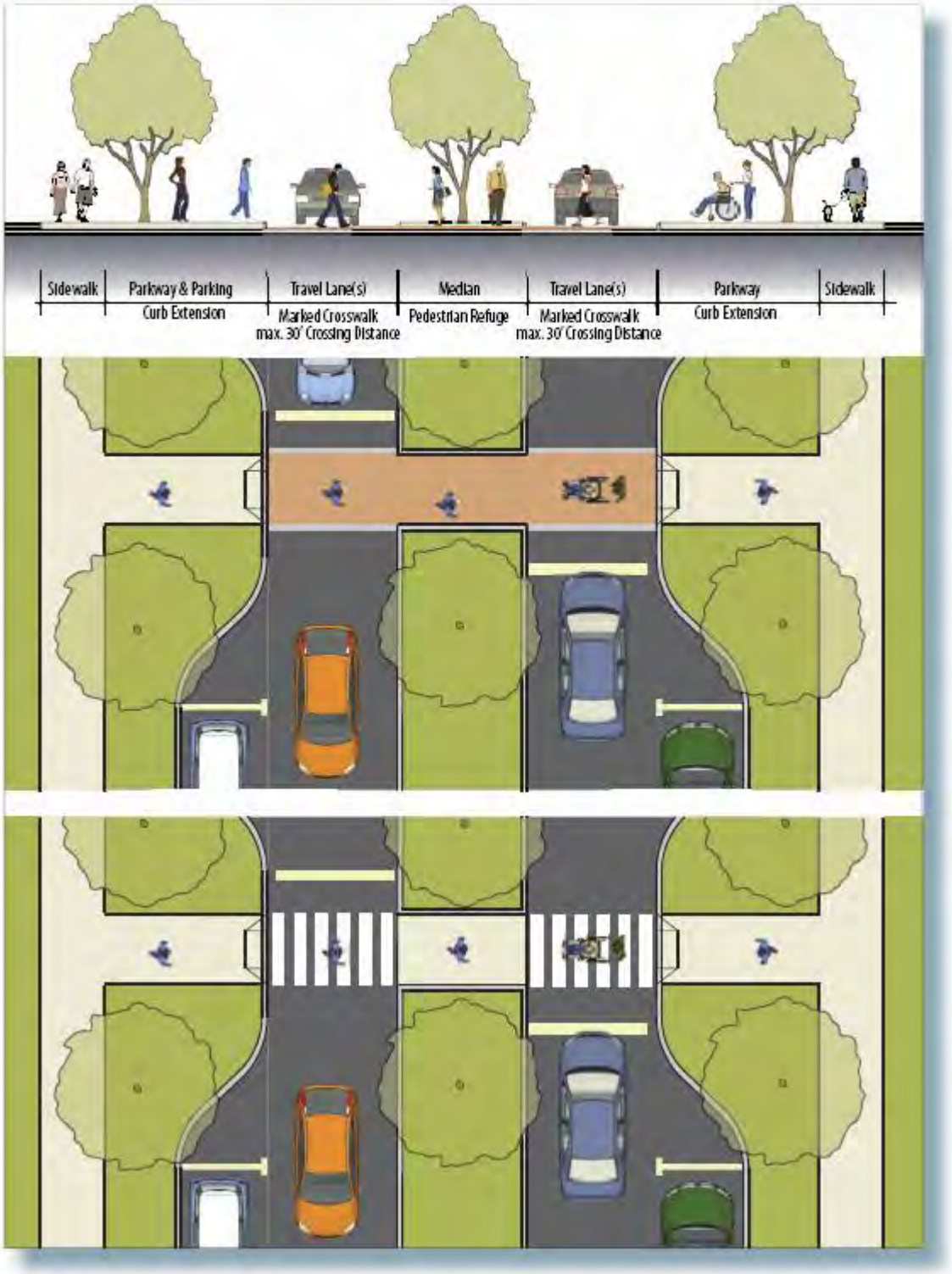


Figure 5-19 shows a typical crosswalk configuration for a Street Layout with median.

Figure 5-19 Typical Pedestrian Crossing With Refuge



Section 5.7 Parking Standards

5.7.1 Purpose and Applicability

The Parking Standards describe parking strategies for the U.S. Vets Transitional Housing Program Campus and regulate off -street parking requirements, parking location, and design aspects of parking areas.

5.7.2 Parking Requirements

The following parking standards (Table 5-4) shall apply to the Specific Plan Area:

Table 5-4. Parking Ratios

Type	Ratio	Units/Area	Stalls Req'd	Parking Added Per Phase	
Phase I				Onsite	Offsite
Residents	.5 per unit Table 4-5 Institutional Residential	128	64		
Support	1 per 400 sf Table 4-5 General Medical Office	0	0		
Parking Required			64	60	45
Type	Ratio	Units/Area	Stalls Req'd	Parking Added Per Phase	
Phase II				Onsite	Offsite
Residents	.5 per unit	105	53		
Support	1 per 400 sf	22,400 sf	56		
Parking Required			109	94	24
Type	Ratio	Units/Area	Stalls Req'd	Parking Added Per Phase	
Phase III				Onsite	Offsite
Residents		90	45		
Support		0	0		
Parking Required			45	0	23
Total Parking Required		218			
Total Parking Provided		246			
Total On-Site				154	
Total Off-Site					92

Type	Ratio	Units/Area	Stalls Required
Required			
B1, B2, B3			121
B4, B5	.89	68	61

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Support (B4)	1/1,000	+/- 1,800 SF	2
Employee (B4)		3	3
Total Required			**187**
To be Provided			**189**

Long-term parking shall be accommodated on the street and along the Public Realm area. The location of parking areas and the manner in which they are accessed are specified in the Development Standards.

The parking requirements for institutional residential uses include on-street parking.

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5.7.3 Accessible Parking Requirements:

The following requirements for handicapped accessible parking are intended to be consistent with the state law requirements at the time of the adoption of this Specific Plan. Any conflicting provisions or future changes in state or federal requirements shall preempt the standards for provision of accessible parking spaces contained in this Specific Plan.

 Each parking lot shall provide accessible parking spaces at the rates identified in Table 5-5.

Table 5-5: Accessible Parking Requirements

Total Spaces Provided	Number of Accessible Spaces Required
1-25	1
26-50	2
51-75	3
76-100	4
101-150	5
151-200	6
201-300	7
301-400	8
401-500	9
501-1,000	2 percent of total spaces
1,001 and over	20 plus 1 for each 100 spaces or fraction thereof over 1,001

 Each accessible parking space shall be 14 feet wide, striped to provide a nine-foot wide parking area and a five-foot wide loading area (access aisle) and shall be a minimum of 18 feet in length. If two accessible spaces are located adjacent to each other, they may share the five-foot wide loading area, resulting in a width of 23 feet for the two spaces.

 One in every eight handicapped spaces, but not less than one, shall be van accessible; served by a loading area not less than eight feet wide. If two van accessible parking spaces are located adjacent to each other, they may share a common eight-foot

wide loading area.

 When less than five parking spaces are provided, at least one shall be 14 feet wide, striped to provide a nine-foot parking area and a five-foot loading area. Such space shall not be required to be reserved or identified exclusively for use by persons with disabilities.

 Accessible parking spaces serving a particular building shall be located on the shortest accessible route of travel from adjacent parking to an accessible entrance. In parking facilities that do not serve a particular building, accessible parking shall be located on the shortest accessible route of travel to an accessible pedestrian entrance of the parking facility. In buildings with multiple accessible entrances with adjacent parking, accessible parking spaces shall be dispersed and located closest to the accessible entrances.

 In each parking area, a curb shall be provided and located to prevent encroachment of cars over the required width of walkways. The space shall be so located that persons with disabilities are not compelled to wheel or walk behind cars other than their own. Pedestrian ways that are accessible to people with disabilities shall be provided from each such parking space to the related facilities, including curb cuts or ramps as needed.

 Ramps shall not encroach into any parking space, with the exception that ramps located at the front of accessible parking spaces may encroach into the length of such spaces when such encroachment does not limit the capability of a person with a disability to leave or enter their vehicle, thus providing equivalent facilitation. Where the building official determines that compliance with any regulation of this subsection would create an unreasonable hardship, a waiver may be granted when equivalent facilitation is provided.

 The slope of an accessible parking stall shall be the minimum possible and shall not exceed one-quarter inch per foot in any direction.

 Notwithstanding the off -street parking requirements of this Specific Plan, the number of parking spaces that are not accessible may be reduced to the extent necessary for modification of an existing facility to comply with the requirements described in this subsection.

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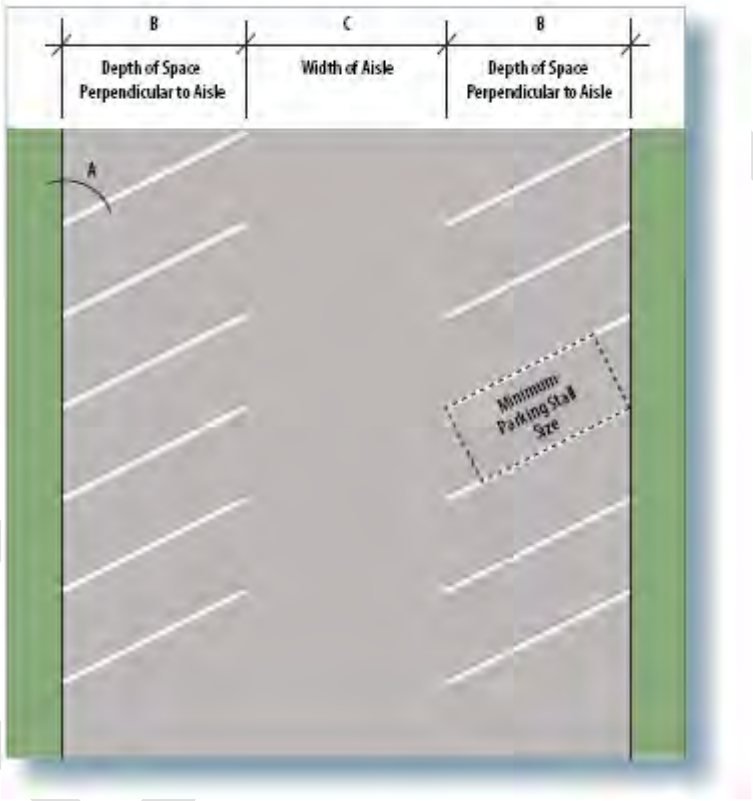
5.7.4 Parking Lot Standards

All parking lots located in the Project area shall comply with all applicable requirements contained in this Section.

 Parking spaces shall be a minimum of nine feet in width by ~~19~~ 18 feet in depth. In angled parking configurations stalls shall be large enough to fully contain a rectangle with the minimum stall dimensions, as shown in Figure 5-20. The paved parking stall depth may be decreased by up to two feet by providing an equivalent vehicle overhang into landscaped areas.

Figure 5-20: Minimum Stall Dimensions



 Pairs of on site parking spaces for use by employees of a single use may be provided in tandem configuration (one behind the other) when approved by the JPA Planning Director.

 Parking lot aisles shall not exceed five percent slope and shall have minimum dimensions as identified in Table 5-6. Figure 5-20 illustrates a basic parking lot configuration.

Table 5-6: Minimum Parking Lot Dimensions **[UPDATED]**

	A	B	C
Traffic Flow	**Angle of Parking**	**Minimum Depth of Space Perpendicular to Aisle**	**Minimum Aisle Width**
2-Way	90	18	24
2-Way	60	21	24
2-Way	45	20	24
1-Way	90	18	22
1-Way	60	21	16
1-Way	45	20	14

1 - Depth may be decreased by up to two feet by providing an equivalent vehicle overhang into landscaped areas.
2 – Limited to 30 percent of the number of spaces for each parking lot.

 All parking areas shall be permanently paved and shall be separated from landscaped areas by curbs. Concrete wheel stops shall be prohibited.

Parking Lot Access and Circulation:

 Where available, parking lots shall be accessed from a drive aisle. Additional driveway access shall be limited per applicable zone standards. Driveway curb cuts shall not be permitted within 100 feet of any intersection or curb cut.

 Driveways providing access to a parking lot shall allow for stacking distance of at least 30 feet back from the property for exiting vehicles. The stacking distance shall be clear of intersecting vehicles from parking aisles or spaces.

 The entrances to a parking lot driveways shall be detailed with enhanced pavement, such as pavers or stamped concrete. Where a driveway and a sidewalk intersect, the sidewalk shall be the dominant feature and continue without change in grade or material.

 Driveways and drive aisles may be utilized for internal circulation. Driveways and drive aisles 24 feet in width, or as required by the Fire Department.

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Parking Lot Pedestrian Access:

 Pedestrian walkways shall comply with the regulations set forth in Section 5.6.6, Street Layout. Vehicle overhangs shall not encroach into the minimum width.

 Pedestrian walkways shall be provided as follows:

O At least one walkway shall be provided for each parking lot for pedestrian circulation and building access.

O Parking lots shall comply with Uniform Federal Accessibility Standard and the Americans with Disabilities Act (see 4.8.4 Accessible Parking Requirements above).

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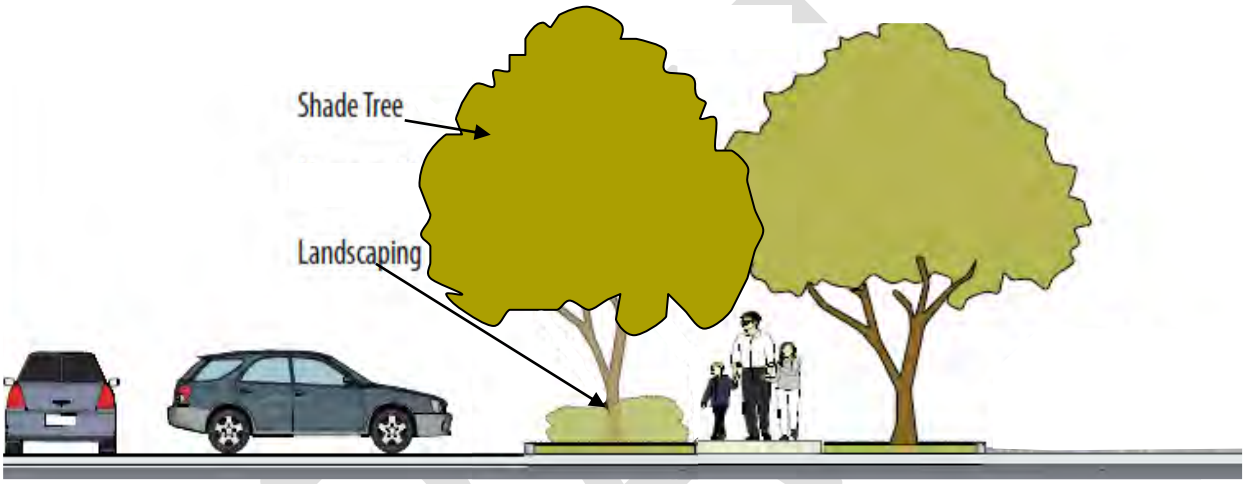
Street Parking Landscaping:

 Street parking areas where landscaped planters and tree wells are provided shall have a minimum width of not less than seven feet and shall be protected from vehicle overhang through the provision of curbs and/or car stops. Any vehicle overhang shall require the minimum planter area width to be expanded by an equivalent dimension, as shown on Figure 5-21.

Figure 5-21 Landscape Screen A



 Trees shall be planted per the applicable sections of the Landscape Standards (see Section 5.8).

 Public street parking areas shall be set back from the property line per applicable area standards. A continuous screen along public streets shall be created through a combination of public realm area landscaping and architectural building features.

 All lighting used to illuminate a parking lot shall be shaded or diffused so as to reflect the light away from the adjoining property and from public rights-of-way. Light fixtures shall match or be compatible with the street light fixtures.

 Where parking stalls directly abut sidewalks with no parkway or planter separations, car stops shall be required, as shown in Figure 5-22.

Figure 5-22 Landscape Screen B

 All parking areas shall be graded and provided with drainage facilities for the disposal of storm water without surface flow over sidewalks or walkways.

 Landscaping shall be limited to 36 inches in height, measured from top of curb within 25 feet of any driveway entrance to ensure visibility. Any trees located in these areas shall have trunks not exceeding eight inches in diameter and shall have a minimum branching height of eight feet.

 Additional standards for parking areas are included in Section 5.8 (Landscape Standards).

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Section 5.8 Landscape Standards

Landscaping will be a critically important design element in the design of the Specific Plan. It should be used to create a unifying theme throughout the Campus while providing flexibility for individual buildings and settings within the community to display their distinct identity. In the Specific Plan, landscaping should provide the common link that ties the Campus together. Through the use of attractive water efficient plants in natural settings, the landscape architecture can provide a water wise yet lush and natural environment. This section describes the minimum landscape requirements that shall be followed in the design of the improvements within the Specific Plan. The landscape should help to express Specific Plan Cutting Edge innovative design features and shall:

- Define, unify and enhance the public space.
- Enhance and define the Specific Plan entries.
- Screen views of parking, loading, and service areas and provide a buffer from adjacent areas.
- Soften uninterrupted architectural massing.
- Complement the structures and their orientation on the site.
- Help define building entries.
- Provide shelter from the environment. Development within the Specific Plan area shall comply with these landscaping and irrigation guidelines. In the event of a conflict between other agency guidelines and these guidelines, these guidelines shall govern. Unless prohibited due to difficulties on a specific site, development shall comply with the following Landscaping and Irrigation guidelines.

Drought Tolerant Plant Palette

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5.8.1 Landscape and Irrigation Guidelines

Landscaping will be the unifying element within the Specific Plan that promotes the campus character envisioned by the preceding development guidelines. The provisions of these guidelines, plans and specifications shall apply as follows:

 Landscaping shall be selected from the Plant Palette included in Appendix H.

 All areas not devoted to parking, drive aisles, walkways, building, or other operational hardscape areas shall be landscaped and permanently maintained.

 To complement building elevations, landscape areas shall be provided adjacent to all building elevations that are visible from streets or on site public use areas. The planting area dimensions shall be consistent with plant material requirements and the purpose of the plantings (i.e., aesthetics, screening, environment mitigations, air quality, wind, etc.).

 All landscaped areas shall be protected or delineated with minimum 6 inch concrete curbs, concrete mow strips or equivalent as approved by March JPA. This requirement may be waived as necessary to address water quality management requirements.

 Concrete gutters or swales shall not be used to drain landscaped areas. Underground drainage facilities shall be provided where surface conveyance of runoff would damage and/or erode planting areas or cross sidewalks.

 Permanent automatic irrigation facilities shall be provided in all landscape areas, except those planned as soft bottom swales for water quality management purposes. Smart Timer devices shall be incorporated into all irrigation systems.

 All trees will be planted and staked per March JPA standards. All trees planted in turf shall receive Arbor Guards to prevent damage from mowers and edgers, etc. Root barriers shall be required where trees are planted within six feet of hardscape or walls.

 All plant materials shall be planted in the following sizes and shall be in accordance with all March JPA standards and minimum requirements:

O Trees: 25 percent of the site trees (excluding street and screen trees) provided shall be a minimum 24 inch box; the balance of the trees shall have a minimum size of 15 gallons. Larger specimen trees are required for entry points and in gathering areas.

O Shrubs: The majority of all shrubs used shall have a minimum size of five gallons. Smaller shrubs may be used where appropriate due to plant species growth characteristics (e.g., smaller plants will be easier to establish or will result in greater plant size in a shorter period of time).

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5.8.2 Low Water Use Design Requirements Plant Requirements

The design of a planting plan for Specific Plan shall reduce Potable water consumption for irrigation by 50 percent from a calculated mid-summer baseline case. Reductions shall be attributed to any combination of the following items:

 Plant species factor

 Irrigation efficiency

 Use of captured rainwater

 Use of recycled rainwater

 Use of recycled wastewater

 Use of water treated and conveyed by a public agency specifically for non-potable uses.

 Promote water-efficient landscaping, water use management and water conservation through the wise use of turf areas and the appropriate use of
irrigation technology and management.

 Reduce water demands from landscapes without a decline in landscape quality or quantity.

 Retain flexibility and encourage creativity through appropriate design.

 Assure the attainment of water-efficient landscape goals by requiring that landscape not exceed a maximum water demand of 80 percent of its reference evapotranspiration (ETo) or any lower percentage as may be required by state legislation.

 Eliminate water waste from overspray and/or runoff .

 Group plant types together in regards to their water, soil, sun and shade requirements and in relationship to the buildings. Plants with different water needs shall be irrigated separately. Plants with the following landscape coefficients shall be (0.6-0.4), moderate (0.6-0.4) and low (0.3-0.1), low (0.3-0.1) and very low (<0.1). Whichever classification has the highest landscape coefficient in each grouping will determine the amount of water applied to that specific hydrozone. Deviations from these groupings shall not be permitted.

 Provide trees for shade which will conserve energy and water; trees may be deciduous or evergreen.

 Soil tests are required for appropriate specifications of soil amendments, and to

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facilitate selection of prescribed water efficient plant species suitable for the site. Soil amendments such as compost shall be provided to improve water holding capacity of the soil where soil conditions warrant.

 Cover all exposed surfaces of non-turf areas within the developed landscape area with a minimum three inch layer of mulch. In areas with groundcover planted from flats, the mulch depth shall be one and one half inches. The preceding does not apply to those areas where decomposed granite shall be the specified ground cover.

 Design turf areas wisely in response to functional needs and in compliance with the Riverside County Water Budget Formula. Planting plans shall identify the following:

O New and existing trees, shrubs, ground covers, and turf areas within the developed landscape area.

O Planting legend indicating all plant species by botanical name and common name, spacing, and quantities of each type of plant container size.

O Designation of hydrozones.

O Area, in square feet, devoted to landscaping and a breakdown of the total area by landscape hydrozones broken down into their respective landscape coefficients.

O Property lines, streets, and street names.

O Building locations, driveways, sidewalks, retaining walls, and other hardscape features.

O Appropriate scale and north arrow.

O Planting specifications and details, including the recommendations from the soils analysis, if applicable.

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Drought Tolerant Plant Palette

Irrigation Requirements

The design of the irrigation system for the U.S. Vets Transitional Housing Campus shall adhere to the following:

 All irrigation systems shall be designed to prevent run-off , over-spray, low-head drainage and other similar conditions where water flows off site on to adjacent property, non-irrigated areas, walk, roadways, or structures. Irrigations systems shall be designed, constructed, managed and maintained to achieve as high an overall efficiency as possible.

 All irrigation systems shall be designed and built for reclaimed water. Reclaimed water is currently not available for the site, but the systems will be designed to accommodate future conversions as required.

 All landscaped areas shall be provided with a smart irrigation controller which automatically adjusts the frequency and/or durations of irrigation events in response to changing weather conditions. The planting areas shall be grouped in relation to moisture control zones based on the similarity of water requirements (i.e. turf separate from shrub and groundcover, full sun exposure areas separate from shad areas; top of slope separate from toe of slope, etc.) Additional water conservation technology may be required; where necessary, at the discretion of the Planning Director.

 Water systems for common open space areas shall use non-potable water, if approved facilities are made available by the water purveyor. Provisions for the conversion to a non-potable water system shall be provided within the landscape plan. Water systems designed to utilize non-potable water shall be designed to meet all applicable standards of the California Regional Water Quality Control Board and the Riverside County Health Department.

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 Separate valves shall be provided for separate hydro-zones, so that plants with similar water needs are irrigated by the same irrigation valve. All installations shall rely on the latest developments in highly efficient irrigation systems to eliminate runoff and maximize irrigation efficiency.

 All irrigation systems shall be equipped with the following:

O A backflow prevention valve;

O A smart irrigation controller;

O Anti-drain check valves installed at strategic points to minimize or prevent low-head drainage; and

O A pressure regulator when the static pressure exceeds the maximum recommended operating pressure of the irrigation system.

Implementation

All landscaping and irrigation plans shall comply with the following requirements:

 Landscaping plans shall be prepared using the Water Budget Formula from the County of Riverside. In addition, landscaping plans shall provide a water budget which includes estimated annual water usage (in gallon/acre feet) and the area (in square feet/acres) to be irrigated and precipitation rates for each valve circuit. Separate valves shall be provided for separate water-use planting areas, so that plant materials with similar water needs are irrigated by the same irrigation valve. The Estimated Annual Water Use, (EAWU), shall not exceed the Maximum Applied Water Allowance, (MAWA).

 Landscape plans shall consist of separate planting and irrigation plans, both drawn at the same size and scale. Planting plans shall accurately and clearly include the following information:

O New and existing trees, shrubs, ground covers, and turf areas within the developed landscape area.

O Planting legend indicating all plant species by botanical name and common name, spacing, and quantities of each type of plant by container size.

O Designation of hydrozones.

O Property lines, streets, and street names.

O Building locations, driveways, sidewalks, retaining walls, and other hardscape features.

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O Appropriate scale and north arrow.

O Planting specifications and details, including the recommendations from the soils analysis, if applicable.

O Irrigation plans shall identify and site the following:

O Irrigation point of connection (POC) to the water system.

O Static pressure at the water system.

O Location and size of the water meter(s).

O Location, size and type of all components of the irrigation system, including smart controllers, main and lateral lines, valves, sprinkler heads, nozzles, emitters, pressure regulators, drip and low volume irrigation equipment.

O Total flow rate (gallons per minute), and design operating pressure (psi) for each overhead spray, rotor and bubbler circuit, and total flow rate (gallons per hour) and design operating pressure (psi) for each drip and low volume irrigation circuit.

O Precipitation rate (inches per hour) for each overhead spray circuit.

O Irrigation legend with manufacturer name, model number, and general description for all specified equipment, separate symbols for all irrigation equipment with different spray patterns, spray radius, and precipitation rate.

O Irrigation system details for assembly and installation.

O Calculation of the Maximum Applied Water Allowance and the Estimated Annual Water Usage using the water budget formula contained in the County of Riverside Guide to California Friendly Landscaping.

If the water purveyor for a proposed project has adopted more stringent water-efficient landscaping requirements, as determined by the Planning Director, all landscaping and irrigation plans submitted shall comply with the water purveyor's requirements. Said plans shall be accompanied by a written approved document from the water purveyor delineating each requirement.

5.8.3 Entry Monumentation

Major entrances into the Specific Plan should communicate that one is entering into a State-Of-The Art Transitional Housing Campus. Specific Plan entries shall be designed with landscaping and architectural treatments that project a high quality image for the

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Campus. Entry Monumentation shall be designed to inform, create an identity, complement each other and reinforce the Specific Plan theme. Planting plans around monuments shall identify the following:

 Monumentation Landscape will be planted with mostly drought tolerant trees, shrubs and groundcovers.

 Only two plant types require moderate water (plant factor 0.6 to 0.4), the remaining plant material have plant factors within the low range for water use, (which is 0.3 to 0.1).

 All trees shown shall be 24 inch box size. Shrubs size shall be five gallon and groundcover shall be planted from flats 12 inch on center unless otherwise stated on plans.

 In landscaped planters adjacent to the street and on those corners of entry monumentation closest to the street, ground cover shall be of a plant type.

 In non-adjacent street planters the groundcover may be decomposed granite.

 The use of turf is prohibited; attractive drought tolerant ground covers shall be used in its place.

 Enhanced paving shall consist of a combination of colored and/ or stamped concrete and colored and/or textured interlocking concrete pavers.

 The hardscape shall be designed with clean lines forming a strong, modern design.

 Low walls, bermed landscape, shrub hedges or masses shall be planted to screen parked cars.

Entry Monumentation Example

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5.8.4 Enhanced Landscaping Around Buildings

The provisions of these landscape guidelines, plans and specifications shall apply to enhanced landscaping around buildings as follows:

- All areas not devoted to parking, drive isles, walkways, building or operational areas shall be landscaped and permanently maintained.

- To complement building elevations, landscape areas shall be provided adjacent to all building elevations that are visible from streets or on site public use areas. The planting area dimensions shall be consistent with plant material requirements and the purpose of the plantings (i.e., aesthetics, screening, environment mitigations, air quality, wind, etc.) Unless a groundcover or plant material is designed to be a hedge or a massed planting for screening purposes, plants will not be placed in such a way that they will overgrow one another in their mature state.

- As an energy conservation measure, landscape plans shall include shade trees around southerly building elevations where practical, and where such landscaping will not interfere with loading dock locations or impose other operational constraints.

- All landscaped areas are to be protected or delineated with minimum 6 inch concrete curbs, concrete mow strips or equivalent as approved by March JPA. This requirement may be waived as necessary to address water quality management requirements.

- Concrete gutters or swales shall not be used to drain landscaped areas. Underground drainage facilities shall be provided where surface conveyance of runoff would damage and/or erode planting areas or cross sidewalks.

- Permanent automatic irrigation facilities shall be provided in all landscaped areas, except those planned as soft bottom swales for water quality management purposes.

All plant materials shall be planted in the following sizes and shall be in accordance with all March JPA standards and minimum requirements:

- Trees: 25 percent of the site trees (excluding street and screen trees) provided shall be a minimum 24 inch box; the balance of the trees shall have a minimum size of 15 gallons. Larger specimen trees are encouraged for entry points and in gathering areas.

- Shrubs: The majority of all shrubs used shall have a minimum size of five gallons. Smaller shrubs may be used where appropriate due to plant species

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growth characteristics (e.g. smaller plants will be easier to establish or will result in greater plant size in a shorter period of time).

Drought Tolerant Planting

The landscape design for the Specific Plan site shall include trees, shrubs, groundcovers and succulents included under the Acceptable Plant Materials list in these guidelines.

The developer shall be responsible for maintenance and upkeep of all landscaping around buildings.

Landscape coverage shall be a minimum of 10 percent of the total square footage of individual implementing development projects. Landscaping shall include a permanent automatic irrigation system controlled by a Smart Timer.

Where landscaping solutions are utilized for screening, landscaping shall be designed so that the landscape screen is full and dense within four years of the initial planting.

Trees that are utilized in the landscaping plan shall be a minimum of 15 gallon size trees.

The landscape around each building within the development is to be designed to correspond to the U.S. Vets Campus style.

Prior to the issuance of building permits, a landscape and irrigation plan in conformance with these guidelines shall be submitted to March JPA for review and approval.

All detailed landscaping plans for development around buildings shall be prepared by a qualified and licensed landscape architect for review by the JPA staff , they shall contain but are not limited to the following information:

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i. Final grading plans.

ii. Irrigation plans certified by a landscape architect or licensed landscaping consultant.

iii. Landscape plans certified by a landscape architect.

iv. Fence treatment plans.

All landscape plans shall utilize water conservation methods which may include, but are not limited to:

- Use of drought tolerant plants.

- All exposed surfaces of non-turf areas within the developed landscape area around
- buildings shall be mulched with a minimum three inch layer of material, except in areas with groundcover planted from flats where mulch depth shall be one and one half inches. (The preceding does not apply to those areas where decomposed granite will be used as the ground cover).

- Turf use shall be excluded from all areas except where needed for passive and active recreation or access (i.e., open space areas with picnic tables)

- Installation of drip irrigation systems where appropriate.

- Minimization of impervious surfaces.

- Landscaped areas designed to retain irrigation water.

- Use of Smart Timer automatic irrigation system technology.

- Grouping of plants with similar irrigation requirements to reduce over watering.

- Efficient irrigation system design that minimizes runoff and maximizes the amount of water that will reach the plant roots.

5.8.5 Parking Area Planting

The Project will provide on-street parking areas throughout the campus. Landscape planting areas can serve multiple purposes such as screening, managing traffic flows, providing protective barriers for people and property, offering shade and a cooler climate and creating aesthetic interest.

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Parking Area Planting

The following standards shall be applied to landscaping in all parking areas of over five spaces:

 Provide trees within the vehicular parking areas to attain a minimum 50 percent shade coverage of the parking area when the trees reach maturity (approximately 15 years).

 Parking lot planters shall have a minimum inside width of five feet and bounded on the outside by a 6 inch high concrete curb (or its equivalent). The requirement for an outside concrete curb may be waived for landscaped swales intended for water quality management purposes.

 End cap planters, adjacent to a parking stall, shall provide a 18 inch step-out next to the 6 inch curb. This may be concrete, decomposed granite or ground cover as determined by the March JPA.

 Parking lots adjacent to and visible from public streets shall be adequately screened from vehicle view through use of one or more of a combination of low walls, earth berms and landscape or with a 3-foot high landscape hedge of five gallon shrubs planted at 30 inches on center.

 The end of all parking rows adjacent to a drive aisle shall be protected by an end cap planter island/finger. These planters shall have a minimum inside width of 5-feet, excluding curbs and a step-out and a minimum length comparable to the abutting parking stall(s), inclusive of curbing.

 Parking areas shall be designed in a manner which links the build ing to the street-sidewalk system, creating an extension of the pedestrian environment. This can be accomplished by using design features such as walkways with enhanced paving, trellis structures, and/or landscape treatment.

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 Vegetated swales may be provided between opposing parking stalls to allow pavement runoff to infiltrate into these areas for pollutant mitigation and rainwater infiltration as a method to manage water quality.

 Square or diamond planters, with an inside width of five feet shall be allowed between opposing parking stalls for tree plantings to aid in achieving the 50 percent shade coverage of the parking area when the trees reach maturity.

 A minimum of one tree per ten parking spaces shall be provided within the parking lot and its immediate perimeter.

5.8.6 Pedestrian Circulation Landscaping

Pedestrian circulation links are required to be provided to all courtyards, plazas, break areas, and healing gardens. The theme is meant to be expressed by the use of earth tone colors, attractively finished, modern looking metals, natural materials and an inviting landscape with common elements of seating, lighting and hardscape through-out. The following describe the pedestrian areas.

Courtyards, Plazas, and Break Areas

Courtyards, plazas, break areas, and/or healing gardens will be included throughout the design of the U.S. Vets Campus as part of the Publicly Accessible Open Space and Landscaping Required in Public Realm (PR) and Building Areas. The PR area provides a 20-foot minimum area beyond roadway and parking areas for these purposes and 20 percent of the Campus is reserved for Publicly Accessible Open Space and Landscaping that would include courtyards, plazas, break areas, and open spaces. In addition, both public and private landscaped open spaces are permitted and in all other zones. The design of Publicly Accessible and Private Open Spaces, the interconnection of these areas between zones and adjacent sites, and the amount of space provided will be evaluated for consistency with the Specific Plan as part of Site Plan review.

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Courtyard with table and chairs

The administrative offices and related facilities will include colored and textured concrete paving, interlocking colored and textured concrete paving units, seating areas, theme light fixtures and trash receptacles.

All areas should be designed such that one would desire to spend some time in these spaces and where socializing and informal gathering would be encouraged.

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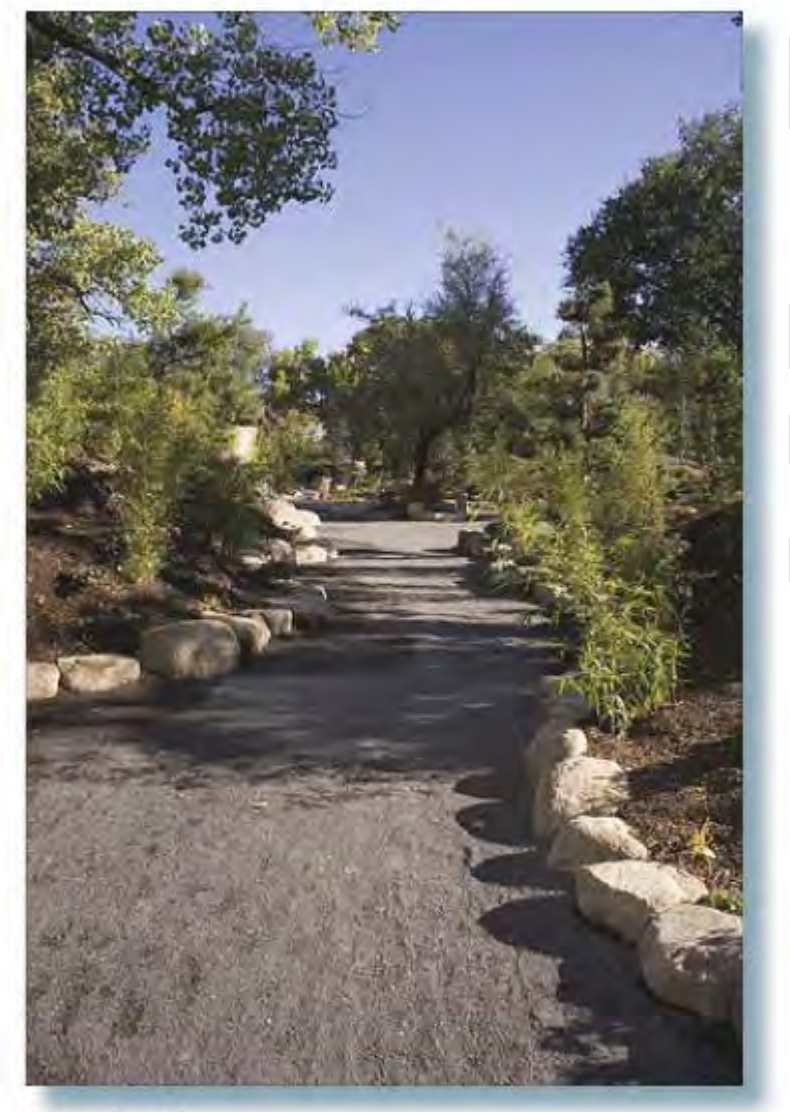
Pedestrian Links

Pedestrian links are required to connect buildings and parking areas within a Specific Plan area, and will provide links across 4th Street, 6th Street and N Street in order to connect the Specific Plan with surrounding uses. These links will consist of sidewalks, multiuse paths, and crosswalks. These walkway links are required to include a hierarchy of hardscape materials which may include broom finished natural sidewalks, colored textured concrete paving and/or interlocking concrete pavers at crosswalks.



Pedestrian Link

5.8.8 On site Lighting

The lighting plan for U.S. Vets Transitional Housing Campus requires adequate lighting levels for the safety and security of vehicular and pedestrian travel.

Outdoor Lighting Example

Outdoor Lighting Example

Uniform light standards are to be utilized with regard to style, materials, and colors in order to ensure consistent design based on the following standards and the approved master landscape plan and tentative track map. Additional lighting fixtures shall be well integrated into the visual environment and the appropriate theme.

 All street and parking lot light fixtures shall be of a compatible design. Additional lighting features for downward illumination of buildings and site features are encouraged to add interest to the site during evening hours.

 Light standards shall be located and designed to minimize direct illumination beyond the parking lot or service area.

 All exterior lighting designs shall address the issue of security. Parking lots shall be illuminated with at least five footcandles. Walkways from parking areas to building entries shall be illuminated with at least one footcandle. Building entries shall be illuminated with at least five footcandles. Light bollards shall be installed throughout the

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Specific Plan to illuminate all sidewalks and connecting walkways to at least one footcandle.

Outdoor Lighting Example

 Building-mounted lights are to be utilized solely for architectural purposes on the fronts and sides of buildings visible from the streets. Wall mounted lights are discouraged in these locations for general parking lot illumination. They are encouraged for general illumination at the section of a building facing the public right-of-way if designed to direct light downward and minimize direct illumination beyond the parking lot or service area.

 Lighting shall be directed, or shielded, to avoid intrusion into residential neighborhoods and to minimize spill light into the sky, adjacent properties and roadways. All lighting fixtures shall be manufactured of high quality materials that are compatible with Specific Plan area's design elements and adjacent architectural styles.

 Accent lighting, including spotlights, floodlights, electrical reflectors, and other means of illumination for signs, structures, landscaping, parking and similar areas shall be focused, directed and arranged to minimize glare and illumination of streets or adjoining property or into the sky. Low intensity lighting and energy conserving night lighting is preferred.

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 Accent lighting shall be required for all permanent monument or project signage, or focal features such as fountains, overhead structures, and garden art objects, and may consist of downlights, spotlights, pole lights, bollards, or bar lights. Uplights shall be used only where they can be precisely directed at the object to be illuminated and will not direct light upward into the sky.

 Service area lighting shall be contained within the service area boundaries and enclosure walls.

 LED lighting shall be required unless no suitable LED lighting fixtures are available as determined by the March JPA.

The following standard fixtures shall be used, unless otherwise approved by March JPA:

 Light Column, Oval Series, Lumec lighting

 Solstice, Oval Series, Lumec lighting

 LEN_LED, Leonis Series, Lumec lighting

5.8.9 Site Furniture

A more pedestrian-friendly campus environment is created through the use of consistent site furnishings at building entrances and other pedestrian areas. Outside furnishings include but are not limited to light fixtures, bollards, benches, bike racks, trash receptacles and signage. Site furniture shall be utilized at appropriate locations throughout the development as determined in site plan review and approval.

In locating site features, such as lighting, trash receptacles, signage, recycling receptacles, bicycle racks, planters, water fountains and benches, site plan review and approval shall assure site furniture is an integral part of the site plan and is distributed throughout the campus.

Transit shelters shall be designed to be compatible with adjacent landscape and building design.

5.8.10 Sign Design

Signage is meant to inform, to create an identity, and to complement and exhibit the theme of wellness that is implemented throughout the Specific Plan. ~~Signage shall visually reflect the practice of cutting edge medical technology practiced by caring professionals.~~ A Master Signage Plan detailing the standards of this section shall be included as part of the Master Landscape Plan. Signage will be divided into the following types:

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 Tenant Signage (Building Level Signage). This signage will be located at the individual building driveways to help direct vehicular traffic to specific areas. This level of signage will consist of four foot high by two foot wide smooth troweled, natural finished concrete monolith and a three foot high by four foot wide with brushed steel, powder coated cutout letters. The signage portion of the monument will be back lighted.

 Directional Signage. This signage may be provided at or along future intersections or internal streets to help vehicular circulation to specific addresses. This level of signage will consist of a 5 foot high x 2 foot wide smooth troweled, natural finished concrete monolith wall and a 4 foot x 3 foot wide with brushed steel, powder coated cutout letters. The signage portion of the monument will be back lighted.

 Building Signage. This signage shall be themed to follow the same context as the site signage program in compliance with applicable March JPA Ordinances. (Signs Affixed To Buildings – All Areas.)

 Special Landscape Treatments. Special landscaping treatments will be incorporated on all corners where internal streets intersect.

Section 5.9 Architectural Design Standards

5.9.1 Purpose

The standards in this section are intended to facilitate development of the architectural design within the Specific Plan in a manner that successfully creates an integrated setting which will provide a cohesive, quality architecture for the campus. Architecture designs that are consistent with these standards and in compliance with all applicable standards in these Development Regulations will ensure a cohesive and attractive campus. Building designs shall express creative features appropriate for the intended uses, and should respond to the specific conditions of the site and surroundings while adhering to the Development and Landscape Standards to create a consistent and unified campus.

This section identifies the key architectural elements that shall be incorporated into site plan applications as required by Chapter 5.0. It is the intent of these standards to establish a consistent architecture that will define the look and feel of the Specific Plan in such a way that there are positive opportunities for creative design and innovation for each building or segment. A primary goal of the Specific Plan is to create a unified character that respects the critical relationship between the various functions in the planning areas. The Specific Plan reflects a consistent expression of the key architectural elements of mass, scale, articulation, materials, and color.

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Articulated buildings are sensibly placed to create a central healing garden

Sensible placement of buildings creates a pleasant space for connection and gathering

5.9.2 Buildings

Individual buildings shall be designed to relate to neighboring structures, open spaces, and landscape and shall be designed with the following considerations:

Incorporate massing and building height that respects surrounding conditions.

 Use building massing and height that is compatible to surrounding existing and future structures.

 Use building massing and height to provide shading complementary to surrounding structures and open spaces.

 Building massing and height should not interfere with views from or toward neighboring buildings.

 Buildings all include a base at ground level, high quality materials that enhances pedestrian access, use of open spaces and visibility.

 Buildings must provide 360 degree architecture.

 Building bases shall provide pedestrian friendly scale and details commonly expressed in articulation of surface, and choice of quality materials, texture and color.

 Buildings shall be designed to maximize the effect of day-lighting.

 Buildings shall be designed to minimize the negative effects of heat reflection and the use of reflecting glass curtain walls is discouraged.

 Building locations shall reinforce the integrity and vitality of adjacent open space.

Walls, windows, doors, entries and facades shall be articulated to accentuate human scale adjacent to open spaces and throughout.

 Entries shall relate to building significance, interior function, and exterior function.

 Entries shall be easily identifiable.

 Entries shall be designed with prominence differentiated from treatment of adjoining walls and buildings.

 Entries shall be proportionate to the façade.

 Entries shall be designed to encourage people to approach, interact and linger without causing disruption to circulation.

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Building details shall be used appropriately

 Buildings terminating a visual corridor or defining a public outdoor space shall be distinctive.

 Architectural features incorporated as part of the building design shall be used to separate noisy and quiet activities or functions.

Roof top equipment and appurtenances shall be visually unobtrusive.

 Equipment shall be organized to effectively screen and present the best possible appearance.

 Equipment shall be standard color that matches the building roof color.

 Equipment screen and enclosures shall be match building and site materials and colors.

 Mechanical equipment is to be screened from view.

These factors play an important role in designing building height and mass, primary façade design and the location of primary, secondary, and service entries. Individual buildings help create an overall site context, and therefore must in their designs provide a positive contribution to the campus environment that will be evaluated in site plan review per Chapter 5.0. It is important to note that building walls often frame, accent, or punctuate views, and define public space, and a building's influence on adjoining open spaces will be closely evaluated during site plan review.

5.9.3 Architectural Palette

The goal of the Specific Plan is to create an integrated setting that provides:

 A cohesive, quality architecture for the campus that will unify individual buildings and different land uses while promoting positive creativity, diversity and flexibility in design for each building and use.

 A pedestrian friendly, walkable campus that encourages a sustainable environment.

 A sense of a healing environment throughout the Specific Plan areas, so that the Specific Plan will meet the goal of developing into a healing campus.

To achieve this goal the Specific Plan establishes an architectural palette in Sections 5.9.3 through 5.9.8 to be integrated with landscape and site planning standards that will unify diversities in design for different building types and functions in various areas throughout the campus.

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The architectural palette in Sections 5.9.3 through 5.9.8 identifies the basic, key architectural elements including materials and colors, and windows and doors that shall be incorporated into design to knit together the diverse elements of buildings and surroundings in the campus in a coherent way.

Building designs are also to demonstrate sustainable, “green” architecture that incorporates the principles of The U.S. Green Building Council. Developers are encouraged to have their buildings certified through a recognized green building program.

5.9.4 Mass and Scale

Mass and scale are two primary design elements influencing the character of a building and its surroundings lead to an overall perception and spatial experience of the building and surroundings.

The following are standards for building mass and scale:

 Building form and façade shall be segmented or articulated to minimize building bulk and to enhance human scale, where applicable.

Articulated facade minimizes building bulk and humanizes scale

 Clear expression of base, body and top of a building is required to set the building on the ground naturally and in a pedestrian-friendly manner, where applicable.

 Use of varying wall planes, articulation of surfaces through proper exterior material selection and coordinated color blocking shall be used to respond to the pedestrian and on-site views of buildings.

Building base on ground level promotes pedestrian friendly environment

 Use of off sets in wall surfaces, colors, architectural attachments such as sunscreens and different textured materials shall be required if needed to avoid large blank and flat walls.

 Design of a building base at ground level shall complement adjacent buildings, open spaces, sidewalks and pedestrian activities by creating an attractive, inviting and comfortable pedestrian space.

 The ground level building base shall provide a connecting pedestrian link connecting to adjacent buildings.

 Roof lines and building tops shall be complementary to the overall building design and allow positive integration with those of adjacent buildings.

5.9.5 Exterior Materials and Colors

Building Materials and colors are important design elements in unifying various buildings and in establishing a cohesive look and feel within the Specific Plan areas. A master materials and color palette shall be provided in the Landscape Plan and will be used along with the following standards to manage the use of materials and colors.

Different materials, colors, details, and landscape elements are integrated to create a cohesive setting

While complementary materials and colors are to be used to integrate with adjacent and surrounding buildings, it is encouraged to use appropriate materials and colors to enhance different functions and to take advantage of particular site and design opportunities.

 Building materials shall be of high quality that promotes consistent architecture throughout the campus.

 The base or buildings at the ground or pedestrian level shall be of particularly high quality and durability.

 Exterior materials and colors of a building shall complement those of adjacent buildings to maintain an integrated setting.

 Use of natural, local, and rapidly renewable materials and green materials is encouraged.

 Natural materials such as stone, brick, copper, etc. shall be left in their original color.

 Color palette shall be of warm and natural colors.

 Use of bright and obtrusive colors is discouraged; however, bold accent colors that enhance the architectural massing and theme is allowed.

5.9.6 Windows and Doors

Windows and doors through placement and configuration, create a strong visual impact on appearance and scale of a building. A special consideration and effort shall be made in designing windows and doors at the base of buildings, which directly interface with pedestrian traffic, open spaces and public spaces to create a human-scaled, pedestrian-friendly environment.

 Treatment of windows in a building shall be consistent and complement the building design.

 At the street level windows and details shall enhance pedestrian scale and provide visual interest.

 Clear glass is required on the building base or pedestrian and street levels on non-residential buildings; any glass with a value of Visible Light Transmission rate less than 70 percent is not allowed at the base of a building.

 Glazing proposed for building base or pedestrian and street levels on residential building should consider privacy for the occupants.

 Entrance doors shall be protected, clearly visible and differentiated from adjacent windows.

 Doors for emergency exit or service shall be treated to blend in with the adjacent walls.

 Insulated, Low-E glazing is required.

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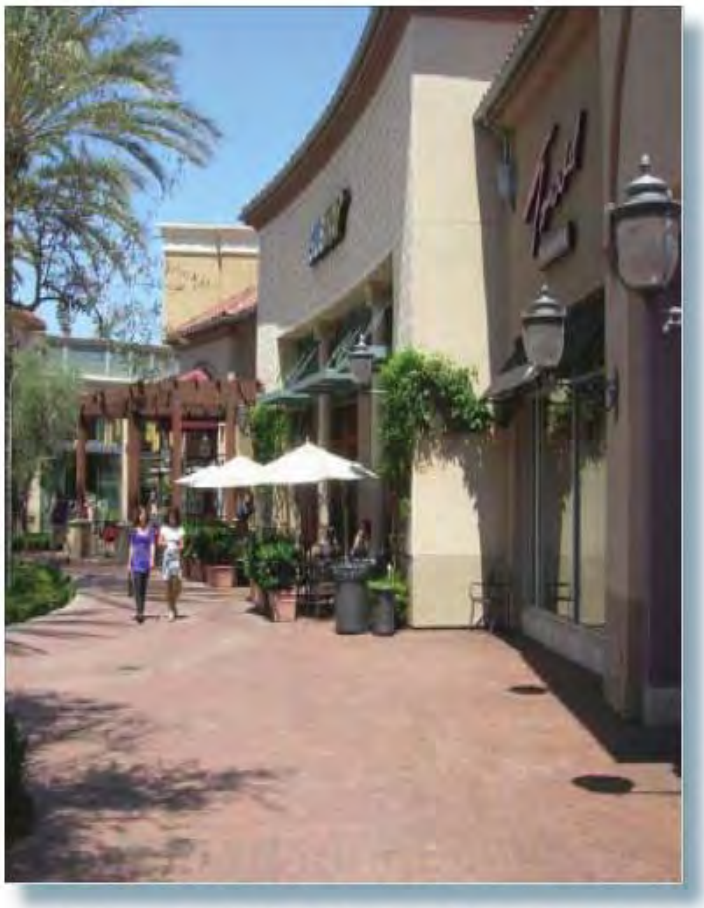
Windows should be consistent and complement building design



Building base, pedestrian, and street level windows and treatment should enhance pedestrian scale and interest

5.9.7 Visual Screening

Utility service areas and associated equipment, as well as trash and recycling areas are building features that are necessary for the buildings' function. These features shall be properly incorporated into the building design through appropriate screening.

The design of screening shall be architecturally integrated with the building it serves in terms of form, scale, materials and color. In addition to the requirements of the applicable Development Standards the following standards shall apply:

 All mechanical and utility equipment, whether on the roof, ground or side of building must be screened from view.

 The roof line of buildings shall appear clean, organized, and uncluttered. Screening of rooftop equipment shall be achieved by building parapet or some other screen wall that is consistent with the architecture of the building.

 Other components such as exhaust fans, communication dishes, downspouts, chimneys or vents, etc. shall be integrated into the building design.

 Outdoor storage and equipment shall be enclosed with screen walls of similar materials and finishes as the primary building.

 An easily accessible area that serves an entire building and is dedicated to the collection and storage of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, and metals.

 Roof access shall be provided from the interior of building.

 Exterior stairs or exit stairs shall be articulated and integrated into the building design as an integral part of the building.

 Loading docks or service yards shall be screened from direct view from pedestrian and public spaces.

 Guard rails shall complement the building design.

 All flashing and sheet metal materials shall be articulated and painted to be consistent with the building design.

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Mechanical room enclosure is complementary to the primary building design

Exterior stair is hidden behind a screen wall of the primary building

5.9.8 Building Systems

Buildings shall be designed to consider the interactions of building envelope, heating, ventilation, and air conditioning (HVAC), lighting and power systems as they impact energy performance. Refrigerants and HVAC equipment shall be selected to minimize or eliminate the emission of compounds that contribute to ozone depletion and global warming. Ventilation and HVAC systems shall be designed to meet or exceed the minimum outdoor air ventilation rates described in the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) standards, Sections 4 through 7 (62.1-2004, Ventilation for Acceptable Indoor Air Quality).

Mechanical ventilation systems shall be designed using the Ventilation Rate Procedure. Naturally ventilated buildings shall comply with ASHRAE 62.1-2004, paragraph 5.1.

Buildings shall be designed to comply with mandatory provisions and the prescriptive requirements or performance requirements of ASHRAE/Illuminating Engineering Society of North America (IESNA) Standards 90.1-2004.

New construction buildings shall adhere to a standard of zero use of Chlorofluorocarbon (CFC)- based refrigerant HVAC systems. If existing base building HVAC equipment is reused, a comprehensive CFC phase-out conversion must be created prior to project completion. Phase-out plans extending beyond the project completion date will be considered on their merits. Smoking is prohibited in all buildings.

Designated smoking areas must be located at least 25 feet away from entries, outdoor air intakes, and operable windows.

Additionally, on-site renewable energy systems are encouraged, including solar roofs on buildings and parking lots.

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CHAPTER 6. IMPLEMENTATION

California State Government Code §65451(a)(4) requires that specific plans include a program for implementation that includes regulations, conditions, programs and additional measures as necessary to implement the plan. This section sets forth the procedures needed to implement the approved Specific Plan and the procedures required for amendment of the Specific Plan.

Section 6.1 General Implementation Provisions

The adoption of this Specific Plan by the March Joint Powers Authority (JPA) is authorized by §65450 et. seq. of the California Government Code and Chapter 9.13 of the March JPA Development Code. The State Government Code authorizes legislative bodies to prepare, adopt and administer Specific Plans for portions of their jurisdictions, as a means of implementing the General Plan. The March JPA Development Code §9.13.010 through 9.13.100 specify the purpose, requirements, regulations, and procedures for preparation of a Specific Plan for use in the March JPA jurisdictional area.

All Specific Plans must be in conformance with the General Plan, as required in the March JPA Development Code Chapter 9.13, Specific Plans. Specific Plans are subject to Major Development Review, and the requirements of the underlying district. All specific plan applications shall be accompanied by a General Plan Amendment and Zone Change application requesting a change from the General Plan and underlying district designation to a specific plan designation.

Specific Plan applications shall be processed by March JPA staff who will review the information and prepare a report and recommendation to the March JPA. If approved, the Specific Plan will be adopted by the March JPA by ordinance. A Specific Plan shall be adopted, amended and repealed by ordinance and may be amended as often as deemed necessary by the March Joint Power Authority.

Section 6.2 Legal Authority and Scope

The Specific Plan has been prepared pursuant to the provisions of California Government Code Section 65450, which grants local government agencies the authority to prepare specific plans of development for any area covered by the General Plan to establish systematic methods of implementing the agency's General Plan. Thus, a Specific Plan is a comprehensive planning document for a defined geographic area designed to address site specific issues and to create a bridge between the jurisdiction's General Plan and site development plans within that area.

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Government Code Section 65451 states that a Specific Plan shall include text and graphics that discuss all of the following subjects:

 The distribution, location, and extent of the uses of land, including open space, within the area covered by the plan.

 The proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area and needed to support the land uses described in the plan.

 Any and all development and design standards, including criteria for conserving, developing, and utilizing natural resources.

 A program of implementation measures including regulations, programs, public works projects, and financing measures to implement all of the above.

 The relationship of the Specific Plan to the General Plan.

In addition to the California Government Code requirements, the March JPA addresses further requirements and standards that are deemed necessary or desirable for the implementation of the General Plan. Chapter 9.13 of the March JPA Development Code indicates that all Specific Plans shall include a table indicating how development standards contained in the Specific Plan differ from the JPA's zoning districts that most closely resemble the uses proposed in the Specific Plan, including a discussion of how the Specific Plan would result in a higher quality of development than would occur under the existing development standards contained in the March JPA zoning ordinance. This is included in the Specific Plan as Appendix B.

A statement of consistency describing the consistency of the Specific Plan with the March JPA General Plan is presented in Appendix C.

The Adopting Ordinance for this Specific Plan is included in Appendix D-1 and the Adopting Ordinance approving SP-6 is included in Appendix D-2.

Section 6.3 Applicability of Specific Plan

The requirements and guidelines of the Specific Plan apply to all proposed development, subdivisions, and land uses within the Specific Plan area.

6.3.1 Relationship of Specific Plan to Local Ordinance

This Specific Plan applies to all portions of the Specific Plan area. In the event of a conflict between the March JPA Development Code and this Specific Plan, the Specific Plan regulations will take precedence. The March JPA Planning Director or designee is authorized to provide administrative determinations regarding the Specific Plan. Such

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administrative determinations must be in writing and may be appealed in accord with the March JPA Development Code.

6.3.2 Definitions

A detailed definition list of terms and phrases used in the Specific Plan that are technical or specialized, or that may not reflect common usage is provided in Appendix I. If a definition contained in the list conflicts with a definition in another provision of the March JPA Development Code, the definitions provided in this Specific Plan control for the purposes of this document. If a word or phrase used in the Specific Plan is not defined in the appendix, or in the March JPA Development Code, the Planning Director will determine the correct definition, giving deference to common usage.

Section 6.4 Specific Plan Administration

The implementation procedures set forth in this section are intended to assure the development of the planning area in accordance with the planning and design intent of this Specific Plan, and other applicable regulations. The processing procedures set forth in this Specific Plan shall govern all development within the Specific Plan area. To the extent that specific provisions of the March JPA's Development Code or other codes are referenced, then those code sections shall also apply to development within the Specific Plan.

6.4.1 Specific Plan Amendments

Amendments to the Specific Plan shall be accomplished pursuant to the applicable provisions of state law and the March JPA Development Code. All proposed modifications and/or revisions to the Specific Plan shall be reviewed by the March Joint Powers Commission. The scope of the Planning Director's authority regarding the Specific Plan shall be limited to the interpretation of the following items:

 Interpretation of the consistency of a proposed use Permitted Land Uses.

 Interpretation of the consistency of a proposed building material with Section 5.9.5, Exterior Materials and Colors, of the Specific Plan.

 Interpretation of the consistency of a proposed alternate plant species with Appendix H, Plant Palette, of the Specific Plan.

Section 6.5 Specific Plan Buildout

Development throughout the Specific Plan area will occur in a comprehensive manner based on the buildout scenario presented in table 6-1.

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Table 6-1: Application Process and Decision-Making Bodies

	JPA Planning Director	JPA Commission
Specific Plan Amendments		X
Master Plot Plan and Associated Master Plans		X
Conditional Use Permits		X[1]
Parcel Maps / Tract Maps		X
Variances		X[2]
Plot Plan	X[3]	X[4]
Minor Land Subdivisions	X	
Administrative Variances	X[2]	

Notes

1 -Process shall be completed pursuant to Section 9.02.060 of the MJPA Development Code. Conditional Use Permits shall be required for the sale of alcoholic beverages.

2 - Process shall be completed pursuant to Sections 9.02.090 (Administrative Variances) or 9.02.100 (Variances) of the MJPA Development Code.

3 - If, after completion of an initial study, the March JPA Planning Director determines that (a) the plot plan approval is exempt from the provisions of CEQA or (b) the environmental impacts of the proposed development are within the scope of the analysis in a previously certified CEQA document prepared for the Specific Plan and/or the Master Plot Plan or (c) any changes in the proposed development from the project analyzed in the Specific Plan EIR and/or the CEQA document prepared for the Master Plot Plan can be addressed through the use of an addendum, the March JPA Planning Director shall be the decision-making body; otherwise, the Commission shall be the authorized decision-making body.

4 - Only required if the plot plan does not qualify for March JPA Planning Director approval pursuant to this Chapter.

Section 6.6 Financing of Public Infrastructure

The master-planned infrastructure and improvements necessary to serve the Specific Plan area may be financed through one or a combination of several of the following financing mechanisms, which are subject to the review and final consideration of the March JPA:

- Developer improvement with reimbursement agreement;
- Developer improvement with credits against fees;

- Special Assessment Districts;
- Landscape and Maintenance District (LMD);
- Public Enterprise Revenue bonds;
- General obligation bonds;
- Impact Fees and Exactions.

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Appendix A - Legal Description Specific Plan Boundary

Real property in the City of Moreno Valley, County of Riverside, State of California, described as
follows:
Parcel 1: (Parcel K-5D-B940)
That certain parcel of land located in the County of Riverside, State of California, and lying in Section 24, Township 3 South, Range 4 Wet, San Bernardino Meridian described as follows:
Commencing at a brass disk set in the top of a 2" iron pipe and stamped "MAR-4" as shown on plan entitled "SURVEY CONTROL POINT LOCATION PLAN", prepared by the Department of the Army, Sacramento District Corps of Engineers, Sacramento, California; from which a brass disk set in the top of curb and stamped "224-5" as shown on said plan, bears North 46º53'34" West a distance of 2188.84 feet; thence South 44º59'42" West a distance of 523.96 feet to the True Point of Beginning.
Thence North 00º23'59" East a distance of 427.00 feet to the beginning of a tangent curve concave to the Southeast and having a radius of 20.00 feet; thence along said curve an arc distance of 31.40 feet through a central angle of 89º58'12"; thence South 89º37'49" East a distance of 320.88 feet to the beginning of a tangent curve concave to the Southwest and having a radius of 20.00 fee; thence along said curve an arc distance of 31.45 feet through a central angle of 90º06'16"; thence South 0º28'27 West a distance of 415.34 feet; thence South 88º31'28" West a distance of 360.54 feet to the True Point of Beginning. Said parcel contains 3.65 net acres more or less.

Parcel 2: (Parcel K-5D - B942a)
That certain parcel of land located in the County of Riverside, State of California, and lying in Section 24, Township 3 South, Range 4 West, San Bernardino Meridian, described as follows:
Commencing at a brass disk set in the top of a 2. iron pipe and stamped .MAR-4. as shown on a plan entitled .SURVEY CONTROL POINT LOCATION PLAN., prepared by the Department of the Army, Sacramento District Corps of Engineers, Sacramento, California; from which a brass disk set in the top of curb and stamped .224-5. as shown on said plan, bears North 46°53.34. West a distance of 2188.84 feet; thence North 81°59.53. West a distance of 557.63 feet to the True Point of Beginning;
Thence North 89°38.09. West a distance of 194.60 feet to the beginning of a tangent curve concave to the Southeast and having a radius of 20.00 feet; thence along said curve an arc distance of 31.38 feet through a central angle of 89°53.39.; thence South 0°28.12. West a distance of 348.22 feet; thence South 89°45.16. East a distance of 214.60 feet; thence North 00°27.48. East a distance of 367.73, to the True Point of Beginning. Said parcel contains 1 .81 Net acres more or less.

Parcel 3: (Parcel K-5D - B942b - vacant)
That certain parcel of land located in the County of Riverside, State of California, and lying in Section 24, Township 3 South, Range 4 West, San Bernardino Meridian,

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described as follows: Commencing at a brass disk set in the top of a 2. iron pipe and stamped .MAR-4. as shown on a plan entitled .SURVEY CONTROL POINT LOCATION PLAN., prepared by the Department of the Army, Sacramento District Corps of Engineers, Sacramento, California; from which a brass disk set in the top of curb and stamped .224-5. as shown on said plan, bears North 46°53.34. West a distance of 2188.84 feet; thence North 81º 59’53. West a distance of 557.63 feet to the True Point of Beginning; Thence South 89°38.09. East a distance of 124.85 feet to the beginning of a tangent curve concave to the Southwest and having a radius of 20.00 feet; thence along said curve an arc distance of 31.43 feet through a central angle of 90º02’08"; thence South 0°23.59. West a distance of 427.61 feet; thence North 89°33.16. West a distance of 359.97 feet; thence North 0º28’12" West a distance of 78.93, feet; thence South 89°45.16. East a distance of 214.60 feet; thence North 00°27.48. East a distance of 367.73 to the True Point of Beginning. Said parcel contains 1.88 Net acres more or less.

Note: Distance shown hereon are grid distances. Ground distances may be obtained by multiplying grid distances by the combination factor of 1 .00006433 APN: Portions of 294-080-002-7

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Appendix B – Zoning Consistency Chart

Chapter 9.13 of the March Joint Powers Authority (JPA) Development Code requires that all Specific Plans shall include a table indicating how development standards contained in the Specific Plan differ from adopted zoning districts that most closely resemble the uses proposed in the Specific Plan, including a discussion of how the Specific Plan would result in a higher quality of development than would occur under the existing development standards contained in the March JPA zoning ordinance. Parcels within the Specific Plan site are former military properties that were transferred to the JPA for redevelopment and reuse. As part of the transfer process, the parcels were not zoned. In 2009 the March LifeCare Campus Specific Plan zoned 236 acres within the JPA's Northeast corner and designated the Project site with the designation of SP-7 ~~(Medical Campus)~~. The proposed U.S. Vets Transitional Housing Program Specific Plan will amend the designation to SP-6 on the Project site and refine design standards that will apply specifically to the 7.75 acre Project site.

The Specific Plan area currently falls into the Mixed Use (MU) district for the March LifeCare Campus (SP-7). The primary purpose of the MU District, as it relates to the proposed Project is "…to accommodate any relocated existing uses currently located on the campus (p. 15)."

The Specific Plan will foster an innovative campus that will remain consistent with standards under the March LifeCare Campus SP. Table B-1 illustrates the consistency of the proposed use to the previously adopted March LifeCare Campus Specific Plan Amendment (SP-7). However, a zoning designation of SP-6 is assigned to the Project in order to apply standards within this Specific Plan to the U.S. Vets Project only and not the whole of the March LifeCare Campus SP. This change has no impact to provisions within SP-7.

Table B-1: Zoning Consistency		
	Proposed Zoning	MLC SPA Zoning
	SP-6	SP–7
Relocation of Existing Institutional Residential Program	Allowed	Allowed

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Appendix C – General Plan Consistency Statement

Purpose of this Appendix

The U.S. Vets Transitional Housing Program Specific Plan is in compliance with the California Government Code and is consistent with and furthers the objectives of the March JPA General Plan. The purpose of this appendix is to identify consistency between the policies included in the U.S. Vets Transitional Housing Program Specific Plan and the goals provided in the March JPA General Plan.

Legal Framework for Consistency

A Specific Plan is a detailed land use plan that covers a selected area of a jurisdiction for the purpose of implementing a General Plan. State and local regulations require consistency between these two planning documents. Consistency is defined by the Governor's Office of Planning and Research as follows. "An action, program or project is consistent with the General Plan if, considering all its aspects; it will further the objectives and policies of the General Plan and not obstruct their attainment".

California State law authorizes cities and other jurisdictions with General Plans to prepare and adopt Specific Plans (Government Code § 65450 – § 65457). The California Government Code states, "after the legislative body has adopted a General Plan, the planning agency may, or if so directed by the legislative body, shall, prepare Specific Plans for the systematic implementation of the General Plan for all or part of the area covered by the General Plan" (§ 65450) and that "no Specific Plan may be adopted or amended unless the proposed plan or amendment is consistent with the General Plan" (§ 65454). A statement of consistency between an area's General Plan and the policies in the proposed Specific Plan is required by section 65451.(b) of the California Government Code which states, "the specific plan shall include a statement of the relationship of the Specific Plan to the General Plan".

The March JPA Development Code chapter 9.13, specify the purpose, requirements, regulations, and procedures for preparation of a Specific Plan in the March JPA planning area. Section 9.13.090 states, "No specific plan may be adopted or amended unless the proposed plan or amendment is consistent with the General Plan or any General Plan Amendment approved concurrently with the Specific Plan".

In response to government requirements, the U.S. Vets Transitional Program Specific Plan has been prepared to provide the essential link between March JPA General Plan policies and actual development in the Specific Plan area. The Specific Plan has been prepared in accordance with the provisions of California Government Code §65450 – § 65457 and the March JPA General Plan Chapter 9.13.

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APPENDIX ORGANIZATION

The following section, organized by planning element, states the goals outlined in the March JPA General Plan. Each General Plan goal is followed by a consistency statement highlighting the provisions included in the Specific Plan that support each goal in the General Plan. The Specific Plan is referred to hereafter as the "Specific Plan" or "Project".

LAND USE ELEMENT

Goal #1: The Land Use Plan provides for a balanced mix of land uses that contribute to the regional setting, and capitalizes on the assets of the Planning Area, while insuring compatibility throughout the Planning Area and with regional plans.

Consistency Statement: The Specific Plan supports logical, balanced growth by providing a state-of-the art, integrated support campus for homeless U.S. vets. This Specific Plan is consistent with the General Plan by adding service and facility diversity throughout the Project area. This Specific Plan facilitates vital community development while being sensitive to regional transportation and land use planning.

Goal #2: Locate land uses to minimize land use conflict or creating competing land uses, and achieve maximum land use compatibility while improving or maintaining the desired integrity of the Planning Area and subregion.

Consistency Statement: The Specific Plan area formerly served as a housing site for active military personnel. The existing barracks will be demolished to accommodate a more modern transitional housing facility for U.S. veterans. The Project is surrounded by former military housing to the east that will be occupied by the Path of Life Homeless Ministry, a recreational facility to the south and east, and a military Base Exchange to the north. The Project will not conflict with existing or future land uses but will improve the integrity of the Planning Area through the redevelopment and reuse of a former military site.

Goal #3: Manage growth and development to avoid adverse and fiscal effects.

Consistency Statement: The development of the Specific Plan will occur in a comprehensive manner based on square footage thresholds, not geographic or spatial limits. It is the intent of the Specific Plan to provide flexibility in the order of development to respond to market conditions. To ensure adequate infrastructure and parking is available for each increment of development, performance standards have been incorporated into the Specific Plan to ensure concurrency between the development of on site uses, infrastructure, streetscapes, pedestrian paths, and other amenities throughout the site.

Goal #4: Develop an identity and foster quality development within the planning area.

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Consistency Statement: The Specific Plan promotes a Project design that is unique to the U.S. Vets Initiative's Program and identity, it provides building and recreational features that are not only attractive but functional. More importantly, the Project boasts sustainable measures that will ensure that it exceeds incumbent Green California Building codes.

Goal #5: Maximize and enhance the tax base and generation of jobs through new, reuse and joint use opportunities.

Consistency Statement: The implementation of this Specific Plan will greatly benefit the local community and region by providing job training opportunities and health related services to homeless veterans, who can then become a healthy and productive member of their communities and workforce.

Goal #6: Support the continued Military Mission of March Air Reserve Base, and preservation of the airfield from incompatible use encroachment.

Consistency Statement: This Specific Plan has been developed under the guidance of the March JPA. The March JPA was created to guide the transition of the base from a military operation to one with more general land uses open to both military and civilian populations. A key goal of the Specific Plan is to provide for the reuse of lands within the former Air Force Base that have been declared surplus and returned to civilian use. Careful planning has resulted in the proposed Project to sensitively redevelop abandoned military facilities, and promote services that will benefit former military personnel.

Goal #7: Maximize the development potential as a regional Intermodal Transportation facility to support both passenger and freight-related air uses.

Consistency Statement: While this plan focuses on the development of a Transitional Housing facility for U.S. veterans, the use is planned in coordination with the March LifeCare Campus Project. The overall employment opportunities provided by both specific plans will help to further the goal of the area to serve as an Intermodal Transportation facility.

Goal #8: Preserve the natural beauty, minimize degradation of the March JPA Planning Area, and provide enhancement of environmental resources, and scenic vistas.

Consistency Statement: This Specific Plan promotes a sustainable development strategy toward future implementation and construction of the proposed development. The Specific Plan incorporates performance standards and sustainable design criteria that will exceed incumbent Green Code for California by a minimum of 20 percent. The Specific Plan integrates campus-specific sustainable practices into the initial development and requires subsequent development to be consistent with such criteria. The vision of the Specific Plan includes attractive streetscapes and landscaping,

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aesthetic treatments, and architectural details that will enhance the planning area and become a community asset.

Goal #9: Preserve the integrity of the historic and cultural resources of the planning area and provide for their enhancement.

Consistency Statement: An inventory of historical and archaeological resources in the Specific Plan area has been conducted. No indications of cultural resources were found. The U.S. Vets Transitional Project will be constructed in accordance with the laws designed to protect potentially significant archaeological resources discovered during its implementation. If buried cultural resources are inadvertently discovered, mitigation measures have been outlined which requires work to stop in the area within 100 feet of the find until a qualified archaeologist can arrive on site and conduct an assessment. The Specific Plan area is occupied with 2 existing structures, which are vacant. The Specific Plan will enhance the site, and rehabilitate a former developed portion of the March Air Force Base.

Goal #10: Avoid undue burdening of infrastructure, public facilities, and services by requiring new development to contribute to the improvement and development of the March JPA Planning Area.

Consistency Statement: Significant investment in infrastructure improvements will be required, as the area is currently lacking adequate facilities. Implementation of the Specific Plan will require construction of new (and/or improvement) of existing utility infrastructure, including electrical and natural gas facilities, as well as an internal roadway system to serve the Project. Further improvements to public roadways will also be necessary. All planned development is anticipated to occur incrementally. All backbone infrastructures, including internal roadway, water, sewer, and drainage facilities will be constructed and operational prior to the construction of vertical improvements.

Goal #11: Plan for the location of convenient and adequate public services to serve the existing and future development of March JPA Planning Area.

Consistency Statement: This plan specifies that adequate levels of service must be established in the Planning Area which meet performance standards, and protect public health, safety and welfare of the region. At build out, the Specific Plan will include all public and private infrastructure, public facilities and services necessary to support the development, including: water, sewer, electricity, gas, telephone, cable, solid waste, storm drainage facilities, circulation improvements, and the provision of adequate police and fire service for the Specific Plan site.

Goal #12: Ensure, plan, and provide adequate infrastructure for all facility reuse and new development, including but not limited to, integrated infrastructure planning, financing and implementation.

Consistency Statement: The development of the Specific Plan will require the extension of existing infrastructure and services into this new district as required by the California Government Code and the March JPA. The Specific Plan has developed a logical, cost-effective phasing plan which includes new and/or improvement of existing utility infrastructure with sufficient capacity to service the ultimate buildout of the ~~medical~~ campus.

Goal #13: Secure adequate water supply system capable of meeting normal and emergency demands for existing and future land uses.

Consistency Statement: The Specific Plan will include securing all infrastructure needs including water supply, necessary to support the normal and emergency activities of the campus. The Specific Plan assumes installation by the development of water main lines and distribution systems capable of providing service levels needed for full buildout of the Specific Plan The developers of the Specific Plan will work with the March JPA to guarantee adequate capacity as the Specific Plan moves forward.

Goal #14: Establish, extend, maintain and finance a safe and efficient wastewater collection, treatment and disposal system which maximizes water use, and prevents groundwater contamination.

Consistency Statement: As stated in the Specific Plan, necessary infrastructure including wastewater collection will be installed or upgraded to meet ultimate buildout needs of the facilities. As phases of the Specific Plan are constructed, wastewater needs will be reassessed and adequate capacity for treatment and disposal confirmed. All facilities will be constructed and maintained in accordance with applicable laws and standards in effect at the time of installation. The developers of the Specific Plan will work with the March JPA to guarantee adequate capacity as the Specific Plan moves forward. The Specific Plan area is not currently supplied with reclaimed water. To facilitate future use of reclaimed water, reclaimed water lines will be installed within the Specific Plan area. Once supplies become available, the intent is to use reclaimed water throughout the site.

Goal #15: In compliance with State law, ensure solid waste collection, siting and construction of transfer and/or disposal facilities, operation of waste reduction and recycling programs, and household hazardous waste disposal programs and education are consistent with the County Solid Waste Management Plan.

Consistency Statement: The Specific Plan will be supported by a comprehensive solid waste collection, recycling program, and hazardous waste disposal program that are in compliance the County Solid Waste Management Plan. Solid waste will be disposed of through contracts with Waste Management of the Inland Empire. In an effort to reduce the amount of material generated by the Specific Plan area, the Specific Plan includes provisions for compliance with the County of Riverside Source Reduction and Recycling Element.

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Goal #16: Adequate supplies of natural gas and electricity from utility purveyors and the availability of communications services shall be provided within the March JPA Planning Area.

Consistency Statement: As described in the Specific Plan, natural gas and electricity purveyors will provide service to the project site. Communication services will utilize the latest in emergency management systems in order to provide a dependable network that is critical during crisis situations. The developers of the Specific Plan will work with the March JPA and the utility purveyors to guarantee adequate capacity as development moves forward.

Goal #17: Adequate flood control facilities shall be provided prior to, or concurrent with, development in order to protect the lives and property within the Specific Plan Area.

Consistency Statement: The U.S. Vets Initiative is committed to effectively controlling flooding on the campus through the installation of appropriate facilities for both interim and ultimate conditions, and has worked with the March Joint Powers Authority to determine which facilities to use based on effectiveness.

TRANSPORTATION ELEMENT

Goal #1: Establish and provide for a comprehensive transportation system that captures the assets and opportunities of the planning area, existing transportation facilities, and planned transportation facilities for the future growth and development of the planning area and sub-region.

Consistency Statement: The Planning Area is already served by major regional freeways and surrounded by developed local streets. The Specific Plan contains features inherent within the development plan to facilitate the use of alternative modes of transportation while supporting efficient and safe vehicular and non-vehicular access to and from individual uses throughout the plan area. With the Specific Plan being constructed in sequential phases, the support facilities such as a bus stop and new roads will be constructed and operational before the facilities requiring the new infrastructure are open and operational. Infrastructure installed during each phase may be sized to accommodate future phases.

Goal #2: Build and maintain a transportation system which capitalizes on the multi-faceted elements of transportation planning and systems, designed to meet the needs of the planning area, while minimizing negative effects on air quality, the environment and adjacent land uses and jurisdictions.

Consistency Statement: The campus will facilitate the use alternative modes of transportation to reduce pollution and land development impacts associated with the use of automobiles. Sustainable transportation features within the Specific Plan include: pedestrian pathways and linkages, carpool and vanpool opportunities, and the provision of a bus stop. The Specific Plan will provide services and facilities intended for use by

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homeless and recovering U.S. veterans within the western Riverside County region. The transportation system within and around the development will benefit from and complement the alternative transportation solutions developed to service the March LifeCare Campus facility to the north.

Goal #3: Develop a transportation system that is safe, convenient, efficient, and provides adequate capacity to meet local and regional demands.

Consistency Statement: The Specific Plan circulation system provides for safe, convenient, and efficient vehicular and pedestrian access throughout the site while ensuring adequate capacity to meet the daily needs of the surrounding community and emergency services that will be on site. Each public roadway improvement will be constructed to ensure there is sufficient capacity to accommodate future traffic conditions.

Goal #4: Provide a balanced transportation system that ensures the safe and efficient movement of people and goods throughout the planning area, while minimizing the use of land for transportation facilities.

Consistency Statement: The perimeter road system around the campus already exists. As land uses and tenants are identified in each Building Zone, additional upgrades to the road system, primary access points, and driveway locations will need to be implemented as stated in the Traffic impact Analysis Report and the EIR. Efficient circulation throughout the entire campus will be provided through the Public Realm; these allow for minimal new roads and the use of land for parking structures.

Goal #5: Plan and encourage land use patterns and designs which enhance opportunities for non-vehicular circulation and improve trip reduction strategies.

Consistency Statement: The Specific Plan will offer ~~counseling, job training, and~~ transitional living facilities ~~located in close proximity to each other,~~ in a manner that successfully creates a walkable and human-scaled campus environment in accordance with the guiding principles and vision of the Specific Plan. On-site circulation will be provided through an interconnected thoroughfare that balances the needs of automobile traffic and pedestrians.

Goal #6: Establish vehicular access control policies in order to maintain and insure the effectiveness and capacity of arterial roadways.

Consistency Statement: The Development Regulations contain policies to maintain functionality of the arterial roadway system serving the campus.

Goal #7: Facilitate and develop transportation demand management and transportation systems management programs, and use of alternative transportation modes.

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Consistency Statement: Trip reduction strategies provided within the Specific Plan include: pedestrian pathways and linkages, off-street bike lanes, carpool and vanpool opportunities, and the provision of bus stops and shuttle service to the nearby Moreno/March Air Force Base Metro Station. Each of these strategies will aim to reduce the number of vehicle trips generated by the Project.

Goal #8: Adequate, affordable, equitably distributed and energy efficient public and mass transit services which promote the mobility to, from, and within the planning area shall be provided.

Consistency Statement: The Specific Plan proposes bus stops within ¼ mile of existing transit lines N Street that will include kiosks and benches with specific information for riders (bus routes and schedules).

Goal #9: Develop measures which will reduce the number of vehicle miles traveled during peak travel periods.

Consistency Statement: In addition to the trip reduction strategies described above, employees working at the Project site will be encouraged to coordinate major shift changes and utilize carpool programs with each other in an attempt to minimize the number of vehicles entering and exiting the area during the peak travel periods.

Goal #10: Regulate the travel of trucks on March JPA Planning Area streets.

Consistency Statement: In an effort to regulate the travel of trucks within the Specific Plan area, truck- routes will be identified during site plan review and signage will be posted to identify those streets as being truck friendly. Provisions to identify truck routes on affected circulation plans are included within the Specific Plan. Other measures to minimize truck traffic on interior streets would be to allow delivery trucks only during off - peak hours such as nighttime.

Goal #11: Plan for and seek to establish an area-wide system of bicycling trails, with linkages within the planning area and with adjacent jurisdictions, and in compliance with sub-regional plans.

Consistency Statement: The Project will provide walkways and multi-use trails along the enhanced parkways, public roads, and throughout the site to facilitate linkages throughout the planning area.

Goal #12: Promote, preserve and protect the joint use of the aviation field by the Air Force Reserves and civilian aviation.

Consistency Statement: The March JPA was established to guide the redevelopment and transition from military to general land uses. They are sensitive to both the need to preserve and protect the military Reserve Base as well as capitalize on the opportunity to use the airfield for general, civilian use. The goal of the JPA is to continue

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joint use of the airfield facilities. The implementation and development of the Specific Plan will further promote joint use on the site.

Goal #13: Goods movement through the San Jacinto Rail Branchline shall be capitalized.

Consistency Statement: The movement of goods through the San Jacinto Rail Branchline will be capitalized by increased activities from the development of the Specific Plan. In order for the development of the Specific Plan to be successful, appropriate goods and services that are readily available must be necessary. The San Jacinto Rail Branchline should help to provide the goods necessary for the Specific Plan.

Goal #14: In accordance with state and federal law, promote and provide mobility for the disabled.

Consistency Statement: The Specific Plan site is designed to meet state and federal mandates to promote and provide mobility for persons with disabilities.

NOISE/AIR QUALITY ELEMENT

Noise

Goal #1: Ensure that land uses are protected from excessive and unwanted noise.

Consistency Statement: Strategic site planning and building design is incorporated into the Specific Plan. Buildings will be oriented to minimize noise levels derived from building equipment, and place loading areas away from sensitive land uses to minimize unwanted noise. Standard building construction standards will further ensure that interior noise levels will not exceed the maximum acceptable condition of 45 dBA CNEL.

Goal #2: Minimize incompatible noise level exposures throughout the Planning Area, and where possible, mitigate the effect of noise incompatibilities to provide a safe and healthy environment.

Consistency Statement: Adequate amounts of landscaping including shrubs, trees, and other landscape elements will be provided to create a buffer to screen noise levels between adjacent uses. Appropriate screen walls will also be utilized to achieve a barrier to noise level exposure. Standard building construction standards will further ensure that interior noise levels will not exceed the maximum acceptable condition of 45 dBA CNEL.

Goal #3: Work toward the reduction of noise impacts from vehicular traffic, and aviation and rail operations.

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Consistency Statement: The Project site is not located near any major arterials or rail operations. The Specific Plan would have a less than significant impact on existing uses because of the buffering effects of distance, intervening structures, and elevated non background levels, such as the use of the military airstrip. Additional sound attenuation will be provided by a combination of building setbacks, building location, landscaping throughout the site and building construction standards. Stationary equipment such as emergency generators will be screened from view which will also reduce off site noise. Short-term construction noise intrusion will be limited by compliance with the JPA noise ordinance. To operate outside of these hours requires a permit from the JPA. Compliance with conditions of such a permit will regulate noise impacts to less-than-significant.

Air Quality

Goal #2: Reduce emissions associated with vehicle miles traveled by enhancing the jobs/housing balance of the sub-region of western Riverside County.

Consistency Statement: The development of this transitional housing facility will be in close proximity to the residents of southwestern Riverside County, where there has traditionally been an underserved population of veterans. This minimizes long drives and commutes to obtain counseling and other nonresident client services while generating new employment opportunities in professional and service jobs close to residential areas in the Moreno Valley area.

Goal #3: Reduce air pollution through proper land use, transportation and energy use planning.

Consistency Statement: The Specific Plan will develop a transitional veterans housing facility that is noteworthy for technological innovation in building design with regard to lighting, heating and cooling, material use, and water and energy conservation. In addition to incorporating performance standards from the LEED rating system into the Specific Plan, specific land use patterns of the campus design will further enhance opportunities for multi-modal circulation and provide for trip reduction strategies.

Goal #4: Pursue reduced emissions for stationary and mobile sources through the use and implementation of new and advancing technologies.

Consistency Statement: Buildings within the Specific Plan are designed to be 20 percent more efficient than incumbent Title 24 – CALGREEN standards.

Goal #5: Maximize the effectiveness of air quality control programs through coordination with other governmental agencies.

Consistency Statement: All required permits from the South Coast Air Quality Management District will be obtained for the development and implementation of the Specific Plan. The Specific Plan will be in compliance with the adopted clean air

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provisions of the March JPA. The Specific Plan will be developed in accordance with any mitigation requirements for the Specific Plan placed by any other governmental agency.

Goal #6: Reduce emissions associated with vehicle/engine use.

The development of this transitional housing facility will be in close proximity to the residents of southwestern Riverside County, where there has traditionally been an underserved population of veterans. This will help minimize long drives and commutes to obtain counseling and other nonresident client services.

Goal #7: Reduce emissions associated with energy consumption.

Consistency Statement: The Specific Plan incorporates performance standards and sustainable design criteria from the LEED for New Construction rating system to promote energy conservation and reduce energy consumption derived from buildings and building systems. Additionally, all buildings are required to exceed CALGREEN standards by 20 percent. The Specific Plan is consistent with this General Plan goal.

Goal #8: Reduce air pollution emissions and impacts through siting and building design.

Consistency Statement: The Project is designed to promote walkability and connectivity throughout the site and provides for multi-modal transportation options in and out of the site.

Goal #9: Reduce fugitive dust and particulate matter emissions.

Consistency Statement: The Specific Plan will comply with the South Coast Air Quality Management District policies, permits, and regulations. Further, performance standards for high efficiency ventilation and filtration systems are required within the development in order to exceed CALGREEN standards by 20 percent.

HOUSING ELEMENT

Goal #1: Promote and maintain a balance of housing types and corresponding affordability levels to provide for the community's demands for housing within all economic segments of the population, with an emphasis on lower income, senior and special needs households.

Consistency Statement: The Specific Plan will provide for Institutional Residential facilities to accommodate a full range of assistance and programs for homeless U.S. veterans.

Goal #2: Promote and preserve suitable and affordable housing for persons with special needs, including lower income households, large families, single parent households, the disabled, senior citizens and shelter for the homeless.

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Consistency Statement: The Specific Plan is for the relocation and expansion of an existing transitional home program for veterans. The Project will meet this goal by providing suitable and affordable housing for individuals who currently do not have homes.

Goal #3: Remove or mitigate constraints to the maintenance, improvement and development of affordable housing, where appropriate and legally possible.

Consistency Statement: The Specific Plan does not pose any constraints to the maintenance, improvement, or development of affordable housing. On the contrary, the Project will provide short and long-term affordable housing for U.S. veterans.

Goal #4: Provide increased opportunities for home ownership.

Consistency Statement: The General Plan designations for the Specific Plan site do not include any residential land use designations; therefore the development is in accordance with the goals and vision of the General Plan. Institutional Residential land uses are the only permitted residential facilities provided throughout the Specific Plan. The residential care facilities will not be subdivided or sold as individual properties for residential uses; the entirety of the units will be under the ownership of the residential care facility.

Goal #5: Enhance the quality of existing residential neighborhoods through maintenance and preservation, while minimizing displacement impacts.

Consistency Statement: No residential neighborhoods exist within close proximity to the Specific Plan area; as such, the Project will not cause any displacement impacts to residential tenants within or surrounding the Specific Plan site.

Goal #6: Provide equal housing opportunity for all residents regardless of race, religion, sex, sexual orientation, marital status, ancestry, national origin, color or handicap.

Consistency Statement: Development activities included in this specific plan will not discriminate in any aspects that affect the sale, rental, or occupancy of housing based on status or other arbitrary classification. This plan supports the enforcement of fair housing laws prohibiting arbitrary discrimination in the building, financing, selling and renting of housing on the basis of race, religion, family status, national origin, physical handicap, or other such circumstances.

Goal #7: Encourage energy conservation activities in all neighborhoods.
Consistency Statement: The Specific Plan incorporates performance standards and sustainable design criteria from the LEED for New Construction rating system that will assist in energy conservation on-site. In addition to incorporating sustainable green building practices into the design and envelope of the building, the Specific Plan

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promotes a variety of other sustainable implementation measures inherent within the plan that will further reduce energy consumption.

Goal #8: Improve and maintain sanitary and affordable housing for very-low income households and seniors.

Consistency Statement: The Specific Plan will provide a variety of sanitary and affordable long-term housing choices for senior citizens in assisted and independent living facilities.

Goal #9: Reduce substandard housing and health and safety violations.

Consistency Statement: The Specific Plan will provide brand new state of the art institutional residential facility. All buildings within the Specific Plan will be built in accordance with the California Building Code and will be free of any health and safety violations at the time of occupancy.

Goal #10: Improve and maintain affordable rental housing and opportunities for home ownership.

Consistency Statement: The proposed transitional veterans housing facility's program is designed to assist homeless and at risk veterans and allow the to transition back into the community at large. As part of the process, clients obtain employment and start paying a below market rent in preparation for what they will encounter as they transition back out into the community. Home ownership opportunities will not be provided within the Specific Plan area.

Goal #11: Provide livable neighborhoods evidenced by well maintained housing, ample public services, and open space which provide a high quality living environment and instill community pride.

Consistency Statement: The vision of this veterans housing facility includes attractive landscape plantings, aesthetic treatments, architectural details, and open spaces that will become a community asset. This area will be provided with social gathering areas to create a beautiful atmosphere for both residents and visitors of the campus.

Goal #12: Encourage economic development and sustainability and promote an inclusive community.

Consistency Statement: The implementation of this Specific Plan will help recapture the economic loss attributed to base realignment by providing an employment-generating sustainable development that will help develop quality employees and strengthen economic opportunities for the region. The Specific Plan will provide pleasant and appealing vehicular and non-vehicular connections from the former March Air Force Base to the neighboring jurisdiction of Moreno Valley.

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Goal #13: Establish adequate planning, administrative and fiscal tools to implement housing policies.

Consistency Statement: This Specific Plan will act as the governing document that is intended to provide for the orderly and efficient development of the proposed Project in accordance with the provisions of the March JPA General Plan. This Specific Plan establishes the Campus Vision (Chapter 2), Development Plan (Chapter 3), Development Regulations and Design Guidelines (Chapter 4), and Administrative Procedures and Implementation (Chapter 5) necessary to achieve a high quality healthcare campus in southwest Riverside County that helps create a balanced community, strengthens the economic opportunities in the area, and implements the policies set forth in the General Plan.

RESOURCE MANAGEMENT ELEMENT

Goal #1: Conserve and protect surface water, ground water, and imported water resources.

Consistency Statement: The Specific Plan will be constructed to minimize impacts to the existing surface water, ground water and imported water resources. The use of drought-tolerate landscaping and water-efficient irrigation systems will be implemented wherever possible. Irrigation will be sensitive to changing climatic conditions so that irrigation will be limited during times of heavy rain. Additionally, the Project will use water-efficient technologies and fixtures to the extent practicable.

Goal #2: Control flooding to reduce major losses of life and property.

Consistency Statement: The Specific Plan has incorporated adequate flood mitigation measures and drainage improvements for both the interim and ultimate conditions for the site.

Goal #3: Conserve and protect significant land forms, important watershed areas, mineral resources and soil conditions.

Consistency Statement: The Specific Plan will preserve the integrity of existing cultural and historic resources,
hillsides, open space and neighborhoods, and provide for their enhancement. The existing drainage easements along the boundary of the site will be utilized for pedestrian trails and enhanced parkways along the streetscapes.

Goal #4: Conserve energy resources through use of available energy technology and conservation practices.

Consistency Statement: The Specific Plan is dedicated to creating a positive community image through environmental performance standards and sustainable development. The Specific Plan incorporates performance standards and sustainable design criteria

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from the LEED for New Construction rating system that promotes energy technology and conservation practices. By incorporating LEED standards into the development plan, both water and energy consumption will be minimized.

Goal #5: Conserve and protect significant stands of mature trees, native vegetation, and habitat within the planning area.

Consistency Statement: One of the environmental goals of the Specific Plan is to preserve the natural beauty, minimize degradation of the March JPA Planning Area, and provide enhancement of environmental resources, and scenic vistas. Development regulations have been formulated to preserve existing mature trees and vegetation wherever possible.

Goal #6: Provide an effective and efficient waste management system for solid and hazardous wastes that is financially and environmentally responsible.

Consistency Statement: The Specific Plan will be supported by a comprehensive solid waste collection, recycling program, and hazardous waste disposal program that are in compliance with the County Solid Waste Management Plan. Solid waste will be disposed of through contracts with Waste Management of the Inland Empire. In an effort to reduce the amount of material generated, the Specific Plan includes provisions for compliance with the County of Riverside Source Reduction and Recycling Element.

Goal #7: Promote cultural awareness through preservation of the planning area's historic, archeological and paleontological resources.

Consistency Statement: The Specific Plan developer understands the importance of documenting, maintaining, preserving and conserving any archeological, historical and paleontological sites or artifacts that are discovered during construction of this new healthcare campus. The Specific Plan will follow all required mitigation measures to ensure that any archeological, historical and paleontological artifacts are recovered and cared for properly.

Goal #8: Develop and maintain recreational facilities as economically feasible, and that meet the needs of the community for recreational activities, relaxation and social interaction.

Consistency Statement: The Specific Plan will provide for recreational and other open space areas throughout the Specific Plan. The open space areas provided will create a pleasant and appealing atmosphere for walking and jogging, with relaxation and social interaction nodes within and around the campus.

Goal #9: Create a network of open space areas and linkages throughout the Planning Area that serves to preserve natural resources, protect health and safety, contributes to the character of the community; provide active and passive recreational use, as well as visual and physical relief from urban development.

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Consistency Statement: The Project design includes a network of open spaces that will provide distinct opportunities for community gathering, active and passive recreation and reflection. These linkages will provide passive open space areas that offer community recreation and support existing recreation facilities south of the Project site, and The paths and trails will be clearly designated for pedestrian safety and will serve as buffers between the buildings and parking areas. Furthermore, the Landscape Plan includes cutting edge innovative design and an attractive water efficient landscape palette that will be utilized throughout the campus.

Goal #10: Establish standards for scenic corridors, trails and vistas that contribute to the quality of the planning area.

Consistency Statement: Development Regulations and Guidelines are included in the Specific Plan to promote a high standard of design for each different aspect or location of the site. The Specific Plan includes development standards and landscape architecture design standards that create a unifying theme throughout the campus while providing for flexibility for individual settings within the community to display their distinct character that contributes to the quality of the planning area.

SAFETY/ RISK MANAGEMENT ELEMENT

Goal #1: Minimize injury and loss of life, property damage, and other impacts caused by seismic shaking, fault rupture, ground failure, and landslides.

Goal #2: Minimize grading and otherwise changing the natural topography, while protecting the public safety and property from geologic hazards.

Goal #3: Minimize injury, loss of life, property damage, and economic and social disruption caused by flood hazards.

Goal #4: Reduce threats to public safety and protect property from wildland and urban fire hazards.

Goal #5: Reduce the potential for hazardous material exposure or contamination in the Planning Area.

Goal #6: Ensure to the fullest extent practical that, in the event of a major disaster, critical structures and facilities remain safe and functional.

Goal #7: Reduce the possible risk of upset, injury and loss of life, property damage, and other impacts associated with an aviation facility.

Goal #8: Plan for emergency response and recovery from natural and urban disasters.

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Consistency Statement for Safety and Risk Management goals 1-8: The Specific Plan will incorporate appropriate grading and development design standards to protect the community from seismic, flood and geological hazards by minimizing impacts to the existing topography. The Specific Plan will be developed in accordance with the Uniform Fire Code for new construction in fire hazard areas. The circulation system for the Specific Plan has been designed to facilitate emergency access consistent with the JPA Public Services requirements. Adequate police and fire protection will be available to the site, consistent with JPA requirements. Also buildings will be equipped with emergency sprinkler systems. The Project will be developed in accordance with JPA regulations and guidelines related to hazardous contamination prevention.

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Appendix D – Specific Plan Ordinance

ORDINANCE #JPA 11-05

AN ORDINANCE OF THE JOINT POWERS COMMISSION OF THE MARCH JOINT POWERS AUTHORITY ADOPTING THE U.S. VETS TRANSITIONAL HOUSING PROGRAM SPECIFIC PLAN AND CONDITIONS OF APPROVAL

WHEREAS, the March Joint Powers Authority ("March JPA") is a joint powers agency created by a joint powers agreement dated September 7, 1993 pursuant to Article 1, Chapter 5, Division 7, Title 1 (commencing with section 6500) of the Government Code; and

WHEREAS, the March JPA is comprised of the member entities of the County of Riverside, the City of Riverside, the City of Moreno Valley, and the City of Perris; and

WHEREAS, the approximately 6,500 acres formerly known as the March Air Force Base were placed under the jurisdiction of the March JPA pursuant to the Retrocession of Legislative Jurisdiction from the United States, recorded in the County of Riverside on May 17, 1996, and Chapter 663 of the Statutes of 1996 of the State of California, effective on September 19, 1996; and

WHEREAS, pursuant to Government Code section 6502 and section 1 of the joint powers agreement, as amended, the member entities have delegated to the March JPA the power and authority to create a joint planning agency pursuant to Government Code section 65101 to exercise the powers and perform the duties set forth in Division 1 of Title 7 (commencing with section 65000) of the Government Code for the March Air Force Base ("MJPA Planning Area"); and

WHEREAS, the U.S. Vets Transitional Housing Program Specific Plan ("Specific Plan") proposes a comprehensive approach to the planning development of a sustainable and integrated transitional housing campus (approximately 269,000 square feet of buildings to include occupiable buildings and support facilities, 246 on-street parking, and about 97,200 square feet of landscaped open space) on a 7.75-acre portion of the MJPA Planning Area within a site situated east of Interstate 215 (I-215) in the northeast portion of the MJPA Planning Area, adjacent to the City of Moreno Valley to the south, and March LifeCare Campus SP-7 to the north, and generally bounded by N Street to the north, 4th Street to the west and 6th Street to the east ("Specific Plan Area"). A legal description of the Specific Plan Area boundaries is attached hereto as Exhibit "A" to this Ordinance; and

WHEREAS, the Specific Plan was reviewed, studied, and found to comply with the California Environmental Quality Act ("CEQA") as more fully described below; and

WHEREAS, an Addendum to the Certified Program Environmental Impact Report SCH#2008071021 ("Addendum") was prepared to analyze the potential adverse environmental impacts of implementation of the Specific Plan in compliance with CEQA and was approved, along with the adoption of Findings of Fact by the Joint Powers Commission of the March Joint Powers Authority through Resolution No. 09-32; and

WHEREAS, on October 19, 2011, the Planning Commission of the March JPA ("Planning Commission") conducted a duly noticed public hearing on the Specific Plan at which time all persons wishing to testify in connection with the Specific Plan were heard and the Specific Plan was comprehensively reviewed; and

WHEREAS, all other legal prerequisites to the adoption of this Ordinance and the Specific Plan have occurred.

NOW, THEREFORE, THE JOINT POWERS COMMISSION OF THE MARCH JOINT POWERS AUTHORITY DOES ORDAIN AS FOLLOWS:

SECTION 1. The U.S. Vets Transitional Housing Program Specific Plan, hereinafter referred to as "SP-6", is hereby adopted as set forth in the attached Exhibit "B," which is incorporated by this reference, subject to the conditions of approval in the attached Exhibit "C," which is incorporated by this reference and which is hereby made a part of SP-6 as though fully set forth therein.

SECTION 2. SP-6 shall govern and control the planning, zoning, land use, development, and development approval process for improvements for all real property delineated in the legal description set forth in the attached Exhibit "A" ("Specific Plan Area"). To the extent other planning, zoning, land use, development, and development approval process regulations adopted by the March JPA are applicable and not inconsistent or in conflict with the provisions of SP-6, such regulations shall apply to the Specific Plan Area and shall not be deemed pre-empted by the adoption of SP-6. The governance and control of planning, zoning, land use, development and development approval process for improvements of real property shall be further defined as identified by the attached Exhibit "C" (Project Conditions of Approval). All prior zoning and land use restrictions for the Specific Plan Area in conflict or inconsistent with the provisions of SP-6 are hereby repealed as of the effective date of this Ordinance, and the Planning Director of the March JPA is hereby delegated the authority to modify the Official Zoning Map of the March JPA in accordance with this Ordinance to indicate the Specific Plan Area is governed by SP-6.

SECTION 3. All provisions of SP-6 are deemed separate, distinct, and severable. In the event any one or more provisions of SP-6 are rendered invalid or unenforceable by a court of competent jurisdiction, the remaining provisions shall not be affected and shall remain valid and enforceable.

SECTION 4. Based on the entire record before the Joint Powers Commission of the March Joint Powers Authority ("Commission") and all written and oral evidence presented to the Commission, the Commission finds that SP-6 was prepared, and its contents are, in accordance with Chapter 9.13 of the March JPA Development Code and California Government Code Sections 65450 et seq.

SECTION 5. Pursuant to Section 9.13.090 of the March JPA Development Code and Section 65454 of the California Government Code, and based on the entire record before the Commission and all written and oral evidence presented to the Commission, the Joint Powers Commission hereby finds that SP-6 is consistent with the General Plan of the March JPA ("General Plan") and systematically implements the goals and objectives of the General Plan for the reasons set forth in Appendix C (pp. 127) of the Specific Plan. Said reasons are hereby adopted as the findings of the Joint Powers Commission as though fully set forth in this Ordinance.

Appendix E – Current Buildings on Specific Plan Area

2009 Use	Former Air Force Use	Building Number	Year of Construction	Square Footage	2011 Status
Vacant	Three-Story Dormitory	940	1989	25,608	No Change
Vacant	Burger King / AAFES	942	1976	3,523	Vacant

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Appendix F – LEED Checklist

Sustainable Sites	Yes/No/Optional	Intent/Comments	Credit Name	Possible Points	Credit Language	Submittal Documentation	Specific Plan Location	Actual Points
Prereq 1	Y	Create an Erosion and Sedimentation Control Plan during the design phase of the project. Consider employing strategies such as temporary and permanent seeding, mulching, earth dikes, silt fencing, sediment traps and sediment basins.	**Construction Activity Pollution Prevention**	Required	Use most stringent erosion and sedimentation control requirements to create and implement an Erosion and Sedimentation Control Plan(ECP). Prevent loss of soil during construction by wind or rain, prevent sedimentation of storm sewer or receiving waters, prevent dust and particulate matter from entering the air.	A construction submittal, project drawings of ECP, proof of NPDES compliance or local reviewed SWPPP, ECP narrative.	3.13	1
Credit 1	Y	An individual building is eligible for this credit if it can be demonstrated that the area disturbed by the building's construction activity complies with credit requirements and this is demonstrated within the LEED application submittal. This approach is expected to be most useful when buildings are being constructed at different times	**Site Selection**	1	Avoid developing on portions of sites that meet any of the following criteria: Farmland. Land within 5 feet of 100-year flood level as defined by FEMA. Specifically defined Habitat for threatened or endangered species. Land within 100 feet of any wetland as defined by the most stringent federal, state, or local agency. Greenfield within 50 feet of a defined water body. Parkland	A Design submittal, provide conformation that the site does not meet any of the prohibited requirements. For special circumstances a narrative can included.	EIR / Appendix H	1
Credit 2	Y	"Channel development to urban areas with existing infrastructure and preserve habitat and natural resources." March Lifecare Campus is designed to be a pedestrian oriented campus. Existing infrastructure will be upgraded as part of the development, and neighboring habitat directly north of the site would be preserved as part of the project.	**Development Density & Community Connectivity**	1	**Option 1**. Construct on previously developed site **AND** in a community with a minimum density of 60,000 sq. ft. per acre net.(see reference guide pages 35-42 for specific form of calculations) **OR Option 2**. Construct on previously developed site **AND** within ½ mile of a residential zone or neighborhood with an average destiny of 10 units per acre net **AND** within 1/2 mile of 10 basic services.	A Design submittal, provide data and calculations to document credit compliance. Submittal varies per compliance route review reference guide.	1.3.2	1
Credit 3	N		**Brownfield Redevelopment**		n/a	n/a	n/a	0
Credit 4.1	Y	"Reduce pollution and land development impacts from automobile use." The project is designed to be a	**Alternative Transportation**, Public Transportation	1	Locate project within 1/2 mile of existing or planned & funded commuter rail, light rail	A Design submittal. For rail provide a vicinity drawing showing the project site and the	3.4.5	1

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		pedestrian oriented campus with an emphasis on public transportation. RTA provides two bus stops in the project area and would increase services to the campus project at build-out. Additionally, a shuttle service is planned to connect to a future metrolink station west of the 215 freeway within the MJPA.	Access		or subway station **OR** Locate project within 1/4 mile of one or more stops for 2 or more public or campus bus lines	location of all (existing and propose) fixed rail station within ½ mile. A listing of each fixed rail station and the distance form the station to the project site in miles. For bus provide a vicinity drawing showing the project site and the location of all bus stops within 1/4 mile. A listing of each bus line and the distance form the station to the project site in mile		
Credit 4.2		For institutional buildings, provide secure bicycle racks and/or storage, AND provide shower and changing facilities in the building or nearby.	**Alternative Transportation**, Bicycle Storage & Changing Rooms		For commercial or institutional buildings, provide secure bicycle racks and or storage within 200 yards of building entrance for 5% or more of all building users measured at peak period. **AND** provide shower and changing facilities in the building or within 200 yards of a building entrance for 0.5% of Full-Time Equivalent occupants. (see reference guide pages 55-58 for specific form of calculations)	A Design submittal. Provide FTE occupancy and transient occupancy for the project. Provide project drawings to show the locations of the secure bicycle storage areas and shower/changing facilities.	3.4.6	1
Credit 4.3		Where the campus has a central fleet operation or motor pool, at least 50% of the vehicles available must be alternative fuel vehicles (as defined above). Bi-fuel vehicles must utilize the alternative fuel option. In the case of centralized parking, accommodations for alternative-fuel vehicles may be made at the central facilities, providing that those accommodations are credited cumulatively to each building's need based on the preceding criteria. The centralized parking must be within ¼ mile of the building(s) or serviced by a campus shuttle.	**Alternative Transportation**, Low-Emitting and Fuel-Efficient Vehicles	**1**	**Option 1**. Provide low-emitting and fuel-efficient vehicles for 3% of FTE occupants AND provide preferred parking for these vehicles. **OR Option 2**. Provide preferred parking for low-emitting and fuel-efficient vehicles for 5% of the parking provided on the site.	A Design submittal. Provide FTE occupancy for the project. Provide the total parking capacity of the site. **Option 1** provide project drawings to show the location of the preferred parking spaces for the low-emitting and fuel-efficient vehicles. Confirm quantity of low-emitting and fuel-efficient vehicles provided and their make, model and manufacturer. Confirm whether each vehicle is a zero-emission vehicle or enter each vehicle's ACEEE score. **Option 2** provide project drawings to show the location of the preferred parking spaces for the low-emitting and fuel-efficient vehicles. Confirm the number of preferred parking spaces provided.	3.4.4	1
Credit	Y	"Reduce pollution and land	**Alternative**	**1**	**Option 1**. Size parking	Design Submittal.	4.8.3	1

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4.4		development impacts from single occupancy vehicle use." Size parking capacity to not exceed minimum local zoning requirements, AND, provide preferred parking for carpools or vanpools.	**Transportation**, Parking Capacity		to not exceed minimum local zoning AND provide preferred parking for carpools or vanpools for 5% of the total provided parking.**OR Option 2**. Provide parking for less than 5% of FTE building occupants, parking that is provided is for carpool or vanpool **OR Option 4** Provide no new parking.	Provide FTE occupancy for the project. Provide total parking capacity of the site. Confirm the appropriate project compliance path.		
Credit 5.1	N		**Site Development,** Protect of Restore Habitat	**1**	**N/A**	N/A	N/A	0
Credit 5.2	N		**Site Development,** Maximize Open Space	**1**	**N/A**	N/A	N/A	0
Credit 6.1	Y	The Project will limit disruption of natural hydrology by reducing impervious cover, increasing on-site infiltration, and managing Stormwater runoff	**Stormwater Design,** Quantity Control	**1**	**Option 1.** (existing impervious is ≤50%) Implement a stormwater management plan that prevents the post-development peak discharge rate and quantity from exceeding the pre-development peak discharge rate and quantity for the one- and two-year, 24-hour design storms. **OR** Implement a stormwater management plan that protects receiving stream channels from excessive erosion by implementing a stream channel protection strategy and quantity controls strategies.**OR Option 2.** (existing impervious is ≥50%) Implement a stormwater management plan that results in a 25% decrease in the volume of stormwater runoff from the two-year, 24-hour design storm.	Design Submittal. Provide the pre-development site run-off rate (cfs). Provide the pre-development site run-off quantity (qf). Provide the post-development site run-off rate (cfs). Provide the post-development site run-off quantity (qf). **OR** Provide a narrative describing the project site conditions, measure taken, and controls implemented to prevent excessive stream velocities and associated erosion.	3.8.2	1
Credit 6.2	Y	The Project will reduce or eliminate water pollution by reducing impervious cover, increasing on-site infiltration, eliminating sources of contaminants, and removing pollutants	impervious cover, increasing on-site infiltration, eliminating sources of contaminants, and removing	**1**	Implement a stormwater management plan that reduces impervious cover, promotes infiltration, and captures and treats the	Design Submittal. For Non-structural BMP's- Provide a list of BMP's including a description of the function of each BMP and the percent annual rainfall treated.	3.8.3	1

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		from Stormwater runoff.	pollutants from Stormwater runoff. **Stormwater Design,** Quality Control		stormwater runoff from 90% of the average annual rainfall using acceptable BMP's. BMP's used must be capable of removing 80% of the average annual post development TSS load based on existing monitoring reports.	Fro Structural Controls- Provide a list of structural controls, including a description of the pollutant removal of each control and the percent of annual rainfall treated. **AND** Provide an optional narrative.		
Credit 7.1	Y	The Project will provide any combination of the following strategies for 50% of the site hardscape (roads, sidewalks, courtyards and parking lots) - Use paving materials with a Solar Refectance Index (SRI) of at least 29. Place a minimum of 50% of parking spaces under cover. Any roof used to shade or cover parking must have an SRI of at least 29.	**Heat Island Effect,** Non-Roof	**1**	**Option 1.** Provide any combination of the following strategies for 50% of the site hardscape (including roads, sidewalks, courtyards and parking lots) Shade within 5 years of occupancy, Paving materials with a Solar Reflectance Index (SRI) of at least 29, Open grid pavement system **OR Option 2**. Place a minimum of 50% of parking spaces under cover (defined as underground, under deck, under roof or under a building) Any roof used to shade or cover parking must have an SRI of at least 29.	Construction Submittal. Provide project site drawings high-lighting the location of specific paving materials, landscape shading, and/or underground or covered parking. **AND Option 1**. Provide the measured reflectance and emittance of each paving material installed on site, the total area of hardscape, total area of hardscape to be shaded within 5 years, total area of installed SRI compliant hardscape materials. **OR Option 2**. Total number of parking spaces provided on-site, total number of covered parking spaces provided on-site, **AND** (for either compliance option) Provide an optional narrative, confirm that the roof material covering or shading the parking has an SRI of at least 29.	4.4.7	1
Credit 7.2	O	An average of compliance for building roof areas may be used to meet these requirements when more than one building is on the site. For each building or for the group of buildings, combinations of high albedo and vegetated roof must collectively cover 75% of the roof area.	**Heat Island Effect,** Roof	**1**	**Option 1**. Use roofing materials having a SRI ≥78 for low sloped roof, SRI ≥29 for steep-sloped roof **OR Option 2**. Install a vegetated roof for at least 50% of the roof area. **OR Option 3**. Install a combination of the two (see reference guide)	Design Submittal. **Option 1** Provide total area of installed SRI compliant roofing materials, Provide a listing of installed roofing materials and their SRI values. **OR** Option 2 Provide total area of installed green roof systems. **OR Option 3**. Provide total area of installed green roof system, total area of installed SRI compliant roofing materials, provide a listing of installed roofing materials and their SRI values. **AND** Optional narrative.	Optional	0
Credit 8	Y	"Minimize light trespass from the building and the site, reduce sky-glow to	**Light Pollution Reduction**	**1**	For exterior lighting: Only light as required for safety and comfort.	Design Submittal. Provide copies of the project lighting	4.9.9	1

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		increase night sky access, improve nighttime visibility through glare reduction, and reduce development impact nocturnal environments."			Do not exceed 80% of the lighting power densities for exterior areas and 50% for building facades and landscape features as defined in ASHRAE / IESNA Standard 90.1-2004, Exterior Lighting Section, without amendments. All projects shall be classified under one of the following zones, as defined in IESNA RP-33, and shall follow all of the requirements for that specific zone: LZ1-Dark (park and rural settings), LZ2-Low (Residential Areas), LZ3-Medium (Commercial/Industrial, High-Density Residential), LZ4-High (Major City Centers, Entertainment Districts)	drawings to document the location and type of fixtures installed. **AND** Complete the lighting power density tables on the submittal template; location and ID of each installed exterior luminaire; site area to be illuminated by the luminaire; installed LPD and ASHRAE-allowable LPD. Confirm the site zone classification for the project. Complete the site Lumen Calculation on the submittal template, type, ID, quantity installed, initial lamp lumens above 90 degrees from nadir. **AND** Provide a narrative that includes specific information regarding the light trespass analysis conducted to determined compliance.		
Credit 1.1	Y	Limit or eliminate the use of potable water, or other natural surface or subsurface water recourses available on or near the project site, for landscape irrigation.	**Water Efficient Landscaping**, Reduce by 50%	**1**	Reduce Potable water consumption for irrigation by 50% from a calculated mid-summer baseline case. Reductions shall be attributed to any combination of the following items: Plant species factor, Irrigation efficiency, use of captured rainwater, use of recycled rainwater, use of recycled wastewater, use of water treated and conveyed by a public agency specifically for non-potable uses.	Design Submittal. Provide the project's calculated baseline Total Water Applied (TWA)(gal), The project's calculated design case TWA, total non-potable water supply available for irrigation purposes, narrative	4.9.1	1
Credit 1.2	N	Eliminate the use of potable water, or other natural surface or subsurface water resources available on or near the project site, for landscape irrigation.	**Water Efficient Landscaping**, No Potable Use or No Irrigation	**1**	Achieve Credit 1.1 **AND** Use only captured rainwater, recycled wastewater, recycled greywater, or water treated and conveyed by a public agency specifically for non-potable uses for irrigation.		4.9.1	1
Credit 2	N	Reduce generation of wastewater and potable water demand, while increasing the local aquifer recharge.	**Innovative Wastewater Technologies**	**1**	N/A	N/A	N/A	0
Credit 3.1	O	Incorporate Savings By Design Measures. Because of the varying occupant numbers in some types of	**Water Use Reduction**, 20% Reduction	**1**	Employ strategies that in aggregate use 20% less water than the water use baseline	Design Submittal. Provide the project's calculated occupants, the project's calculated	Optional	0

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		campus buildings (including students, staff, and visitors) an alternative method of calculating this credit may be used. Rather than basing the calculations on the number of occupants, the water use may be based on the total number of each type of applicable fixtures in the building and the estimated number of uses for each of these. For example, for public water closets a sample calculation is as follows: Total Daily Water Use (Public WC) = Total Number Of Fixtures x Estimated Daily Uses x Flow Rate(GPF) x Duration. The calculations should use the same fixture count and daily use numbers for the base and proposed case. This provides a reasonable representation of base and proposed case water use. Calculations should include all flush fixtures and the following flow fixtures: public and private lavatories, public and private showers, kitchen faucets, and laboratory and service lavatories. The following as process loads may be excluded: eyewash fountains, emergency showers, water coolers, and water fountains.			calculated for the building (not including irrigation) after meeting the Energy Policy Act of 1992 fixture performance requirements. Calculations are based on estimated occupant usage and shall include only the following fixtures: water closets, urinals, lavatory faucets, showers and kitchen sinks.	design case water usage, the project's calculated baseline water usage, for projects using non-potable water for sewage conveyance, provide total non-potable water supply (gal) available for sewage conveyance, narrative		
Credit 3.2	O	Individual users may attempt to achieve this requirement on their own but it will not be required as part of the Specific Plan.	**Water Use Reduction**, 30% Reduction	**1**	Employ strategies that in aggregate use 30% less water than the water use baseline calculated for the building (not including irrigation) after meeting the Energy Policy Act of 1992 fixture performance requirements. Calculations are based on estimated occupant usage and shall include only the following fixtures: water closets, urinals, lavatory faucets, showers and kitchen sinks.	Design Submittal. Provide the project's calculated occupants, the project's calculated design case water usage, the project's calculated baseline water usage, for projects using non-potable water for sewage conveyance, provide total non-potable water supply (gal) available for sewage conveyance, narrative	Optional	0
Prereq 1	y	Verify that the building's energy related systems are installed, calibrated and perform according to the owner's project requirements(OPR), basis of design(BOD), and	**Fundamental Commissioning of the Building Energy Systems**	Required	1) Designate an individual as the Commissioning Authority (CxA) to lead, review and oversee the completion of the commissioning	Construction Submittal. Provide name and company information for the CxA. Confirm that the 6 tasks have been completed. Provide a narrative.	4.10.8	1

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		construction documents. Systems to be commissioned: Heating, ventilating, air conditioning, and refrigeration systems (HVAC&R) and associated controls, lighting and daylighting controls and domestic hot water systems			process activities. a) The CxA shall have documented commissioning authority experience in at least two building projects. b) The individual serving as the CxA shall be independent of the project's design and construction management, though they may be employees of the firms providing those services. The CxA may be a qualified employee or consultant of the owner. c) The CxA shall report results, findings and recommendations directly to the owner. d) For projects smaller than 50,000 gross sq. ft., the CxA may include qualified persons on the design or construction teams who have the required experience. 2) The owner shall document the OPR. The design team shall develop the BOD. The CxA shall review these documents for clarity and completeness. 3) Develop and incorporate commissioning requirements into the construction documents. 4) Develop and implement a commissioning plan. 5) Verify the installation and performance of the systems to be commissioned. 6) Complete a summary commissioning report. (review reference guide)			
Prereq 2	y	Design the building envelope, HVAC, lighting, and other systems to maximize energy performance. The ASHRAE 90.1-2004 User's Manual contains worksheets that can be used to document compliance with this prerequisite. For projects pursuing points under EA Credit 1, the computer	**Minimum Energy Performance**	Required	Design building to comply with mandatory provisions of ASHRAE/IESNA Standard 90.1-2004; **and** the prescriptive requirements or performance requirements of ASHRAE/IESNA Standard 90.1-2004.	Design Submittal. Confirm that the project meets The requirements of the ASHRAE 90.1-2004, Provide an optional narrative	4.10.8	1

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		simulation model may be used to confirm satisfaction of this prerequisite. If a local code has demonstrated quantitative and textual equivalence following, at a minimum, the U.S. Department of Energy standard process for commercial energy code determination, then it may be used to satisfy this prerequisite in lieu of ASHRAE 90.1-2004. Details on the DOE process for commercial energy code determination can be found at www.energycodes.gov/implement/determinations_com.stm.						
Prereq 3	y	Reduce ozone depletion.	**Fundamental Refrigerant Management**	Required	Zero use of CFC-based refrigerants in new base building HVAC&R systems. When reusing existing base building HVAC equipment, complete a comprehensive CFC phase-out conversion prior to project completion. Phase-out plans extending beyond the project completion date will be considered on their merits.	Design Submittal. Confirm that the project does not use CFC refrigerants.**OR** Confirm that the project has a phase out plan for any existing CFC-based equipment. Provide a narrative.	4.10.8	1
Credit 1		Achieve increasing levels of energy performance above the baseline in the prerequisite standard to reduce environmental and economic impacts associated with excessive energy use. Requirements for 20% more efficiency thanTitle 24 in the Specific Plan will allow buildings in to qualifiy for 4 LEED points under this section. Taking advantage of Savings By Design with Edison could also increase users' potential to qualify for additional points.	**Optimize Energy Performance**	1 to 10	Option 1 Whole Building Energy Simulation (for options 2 & 3 (4 points, 2-5 points) see reference manual). 2 points on this scale are required as of June, 2007. Demonstrate a percentage improvement in the proposed building performance rating compared to the baseline building performance rating per ASHRAE/IESNA Standard 90.1-2004. Proposed design must comply with the mandatory provisions in Standard 90.1-2004; must include all the energy costs within and associated with the building project; **AND** project must be compared against a	Design Submittal. The EA Credit 1 Submittal Template (on USGBC website) provides detailed tables and calculations to assist with the completion of this credit	Title 24 Requirements, 2007 Savings by Design Healthcare modeling Procedures	4

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					baseline building that complies with Appendix G, Standard 90.1-2004.			
Credit 2	y	Encourage and recognize increasing levels of on-site renewable energy self-supply in order. Implementing a solar roof program for proposed buildings and parking lots would allow the project to qualify for these points.	**On-Site Renewable Energy**	1 to 3	Calculate project performance by expressing the energy produced by the renewable systems as a percentage of the building annual energy cost. Use the building annual energy cost calculated in EA Credit 1 or use the Department of Energy (DOE) Commercial Buildings Energy Consumption Survey (CBECS) database to determine the estimated electricity use.	Design Submittal. The EA Credit 2 Submittal Template (on USGBC website) provides detailed tables and calculations to assist with the completion of this credit. Provide on-site renewable energy source, annual energy generated for each source, backup fuel for each source, Describe the source of annual energy cost information	4.10.8	1
Credit 3	O	Begin the commissioning process early during the design process and execute additional activities after systems performance verification is completed	**Enhanced Commissioning**	**1**	1. Prior to the start of the construction documents phase, designate an independent Commissioning Authority (CxA) to lead, review, and oversee the completion of all Cx process activities. The CxA shall, at a minimum, perform Tasks 2, 3 and 6. Other team members may perform Tasks 4 and 5.a. The CxA shall have documented CxA experience in at least two building projects. b. The individual serving as the CxA shall be- i. independent of the work of design and construction; ii. not an employee of the design firm, though they may be contracted through them; iii. not an employee of, or contracted through, a contractor or construction manager holding construction contracts; iv. (can be) a qualified employee or consultant of the owner. c. The CxA shall report results, findings and recommendations directly to the owner. d. This requirement	Construction Submittal. The following project data and calculation information is required to document credit compliance. Provide the name, firm and experience information for the CxA, confirm that the 6 required tasks have been completed, provide a narrative description of the results of the commissioning design review, implementation of the systems manual and training, and the plan for the review of building operation at 8 to 10 months.	Optional	0

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					has no deviation for project size. 2. The CxA shall conduct, at a minimum, one Cx design review of the OPR, BOD, and design documents prior to mid-construction documents phase and back-check the review comments in the subsequent design submission. 3. The CxA shall review contractor submittals applicable to systems being commissioned for compliance with the OPR and BOD. This review shall be concurrent with A/E reviews and submitted to the design team and the owner. 4. Develop a systems manual that provides future operating staff the information needed to understand and optimally operate the commissioned systems. 5. Verify that the requirements for training operating personnel and building occupants are completed. 6. Assure the involvement by the CxA in reviewing building operation within 10 months after substantial completion with O&M staff and occupants. Include a plan for resolution of outstanding commissioning-related issues.			
Credit 4	Y	Reduce ozone depletion and support early compliance with the Montreal Protocol while minimizing direct contributions to global warming.	**Enhanced Refrigerant Management**	**1**	**OPTION 1** Do not use refrigerants. **OR OPTION 2** Select refrigerants and HVAC&R that minimize or eliminate the emission of compounds that contribute to ozone depletion and global warming. The base building HVAC&R equipment shall comply with the following formula, which sets a maximum threshold for the	Design Submittal. Using the online Submittal Templates: provide the HVAC&R equipment types, including number, size (tons), refrigerant, and refrigerant charge, provide a narrative describing any special circumstances or calculation explanations.	4.10.8	1

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					combined contributions to ozone depletion and global warming potential **AND** Do not install fire suppression systems that contain ozone-depleting substances (CFCs, HCFCs or Halons).			
Credit 5	O	Provide for the ongoing accountability of building energy consumption over time	**Measurement & Verification**	**1**	Develop and implement a Measurement & Verification (M&V) Plan consistent with Option D or Option B, (see reference guide), The M&V period shall cover a period of no less than one year of post-construction occupancy.	Construction Submittal. Confirm IPMVP Option pursued by the project, Upload copy of M&B plan, provide a narrative for special circumstances	Optional	0
Credit 6	O	Encourage the development and use of grid-source, renewable energy technologies on a net zero pollution basis.	**Green Power**	**1**	Provide at least 35% of the building's electricity from renewable sources by engaging in at least a two-year renewable energy contract. Renewable sources are as defined by the Center for Resource Solutions (CRS) Green-e products certification requirements. Determine baseline electricity use: Use the annual electricity consumption from the results of EA Credit 1. **OR** Use the Department of Energy (DOE) Commercial Buildings Energy Consumption Survey (CBECS) database to determine the estimated electricity use.	Construction Submittal. OPTION 1 Provide the name of the green power provider and contract term. Provide total annual electricity consumption (kWh) and total annual green power purchase (kWh). OPTION 2 Provide the name of the renewable energy certificate vendor. Provide total annual electricity consumption (kWh). Provide the value of the green tags purchased (kWh).	Optional	0
Atmosphere & Energy Totals			**9 (yes) - 0 (no) - 2 (optional)**					

Materials & Resources	**Yes/No/ Optional**	**Intent / Comments**	**Credit Name**	**Possible Points**	**Credit Language**	**Submittal Documentation**	**Specific Plan Location**	**Actual Points**
Prereq 1	Y	Facilitate the reduction of waste generated by building occupants that is hauled to and disposed of in landfills.	**Storage & Collection of Recyclables**	Required	Provide an easily accessible area that serves the entire building and is dedicated to the collection and storage of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics and metals. *A guide for the recycle area size is provided on Page 240,*	Design Submittal. Confirm that recycling collection areas have been provided, per requirements, to meet the needs of the project. Confirm the types of materials that are being collected for recycling. Provide an optional narrative describing any special circumstances or considerations regarding the	3.8, 4.4.5, and 4.4.6	1

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					table 1 Recycling Area Guidelines of the Reference Guide.	project's prerequisite approach.		
Credit 1.1	N	Extend the life cycle of existing building stock, conserve resources, retain cultural resources, reduce waste and reduce environmental impacts of new buildings as they relate to materials manufacturing and transport.	**Building Reuse**, Maintain 75% of Existing Walls, Floors & Roof	**1**	N/A	N/A	N/A	0
Credit 1.2	N	Extend the life cycle of existing building stock, conserve resources, retain cultural resources, reduce waste and reduce environmental impacts of new buildings as they relate to materials manufacturing and transport.	**Building Reuse**, Maintain 100% of Existing Walls, Floors & Roof	**1**	N/A	N/A	N/A	0
Credit 1.3	N	Extend the life cycle of existing building stock, conserve resources, retain cultural resources, reduce waste and reduce environmental impacts of new buildings as they relate to materials manufacturing and transport.	**Building Reuse**, Maintain 50% of Interior Non-Structural Elements	**1**	N/A	N/A	N/A	0
Credit 2.1	O	Divert construction and demolition debris from disposal in landfills and incinerators. Redirect recyclable recovered resources back to the manufacturing process. Redirect reusable materials to appropriate sites.	**Construction Waste Management**, Divert 50% from Disposal	**1**	Recycle and/or salvage at least 50% of non-hazardous construction and demolition debris. Develop and implement a construction waste management plan that, at a minimum, identifies the materials to be diverted from disposal and whether the materials will be sorted on-site or co-mingled. Excavated soil and land-clearing debris do not	Construction Submittal. Complete the construction waste calculation tables in the Submittal Template. The following information will be required to fill in these tables: general description of each type/category of waste generated; location of receiving agent (recycler/landfill) for waste; quantity of waste diverted (by category) in tons, or cubic yards, Provide a narrative describing the	3.8	1

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					contribute to this credit. Calculations can be done by weight or volume, but must be consistent throughout.	project's construction waste management approach. The narrative should include the project's Construction Waste Management Plan.		
Credit 2.2	O	Divert construction and demolition debris from disposal in landfills and incinerators. Redirect recyclable recovered resources back to the manufacturing process. Redirect reusable materials to appropriate sites.	**Construction Waste Management**, Divert 75% from Disposal	**1**	Recycle and/or salvage an additional 25% beyond MR Credit 2.1 (75% total) of nonhazardous construction and demolition debris. Excavated soil and land-clearing debris does not contribute to this credit. Calculations can be done by weight or volume, but must be consistent throughout.		Optional	0
Credit 3.1	O	Reuse building materials and products in order to reduce demand for virgin materials and to reduce waste, thereby reducing impacts associated with the extraction and processing of virgin resources. Identify opportunities to incorporate salvaged materials into building design and research potential material suppliers. Consider salvaged materials such as beams and posts, flooring, paneling, doors and frames, cabinetry and furniture, brick and decorative items.	**Materials Reuse**, 5%	**1**	Use salvaged, refurbished or reused materials such that the sum of these materials constitutes at least **5%**, based on cost, of the total value of materials on the project. *Mechanical, electrical and plumbing components and specialty items such as elevators and equipment shall not be included in this calculation. Only include materials permanently installed in the project. Furniture may be included, providing it is included consistently in MR Credits 3–7*	Construction Submittal. Provide the total project materials cost (Divisions 2–10) or provide the total project cost for Divisions 2–10 to apply the 45% default materials value. Provide a tabulation of each salvaged/ reused material used on the project. The tabulation must include a description of the material, the source/vendor for the material and the product cost. Provide a narrative describing the materials reuse strategy implemented by the project. Include specific information about reused/salvaged materials used on the project.	Optional	0
Credit 3.2	O	Reuse building materials and products in order to reduce demand for virgin materials and to reduce waste, thereby reducing impacts associated with the extraction and processing of virgin resources.	**Materials Reuse**,10%	**1**	Use salvaged, refurbished or reused materials such that the sum of these materials constitutes at least **10%**, based on cost, of the total value of materials on the project. *Mechanical, electrical and plumbing components and specialty items such as elevators and equipment shall not be*		Optional	0

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					included in this calculation. Only include materials permanently installed in the project. Furniture may be included, providing it is included consistently in MR Credits 3–7			
Credit 4.1	Y	Increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from extraction and processing of virgin materials.	**Recycled Content**, 10% (post-consumer + ½ pre-consumer)	**1**	Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes at least **10%** *(based on cost)* of the total value of the materials in the project. The recycled content value of a material assembly shall be determined by weight. The recycled fraction of the assembly is then multiplied by the cost of assembly to determine the recycled content value. *Mechanical, electrical and plumbing components and specialty items such as elevators shall not be included in this calculation. Only include materials permanently installed in the project. Furniture may be included, providing it is included consistently in MR Credits 3–7.* (See reference guide pages 265-271 for specific definitions of post-consumer content and pre-consumer content)	Construction Submittal. Provide the total project materials cost (Divisions 2–10) or provide the total project cost for Divisions 2–10 to apply the 45% default materials value, Provide a tabulation of each material used on the project that is being tracked for recycled content, The tabulation must include a description of the material, the manufacturer of the material, the product cost, the pre-consumer and/or post-consumer recycled content percentage, and the source of the recycled content data, Provide an optional narrative	4.10.5	1
Credit 4.2	O	Increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from extraction and processing of virgin materials.	**Recycled Content**, 20% (post-consumer + ½ pre-consumer)	**1**	Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes at least **20%** *(based on cost)* of the total value of the materials in the project. The recycled content value of a material assembly shall be determined by weight. The recycled fraction of the assembly is then	Construction Submittal. Provide the total project materials cost (Divisions 2–10) or provide the total project cost for Divisions 2–10 to apply the 45% default materials value, Provide a tabulation of each material used on the project that is being tracked for recycled content, The tabulation must include a description of the material, the manufacturer	Optional	0

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					multiplied by the cost of assembly to determine the recycled content value. *Mechanical, electrical and plumbing components and specialty items such as elevators shall not be included in this calculation. Only include materials permanently installed in the project. Furniture may be included, providing it is included consistently in MR Credits 3–7.* (See reference guide pages 265-271 for specific definitions of post-consumer content and pre-consumer content)	of the material, the product cost, the pre-consumer and/or post-consumer recycled content percentage, and the source of the recycled content data, Provide an optional narrative		
Credit 5.1	Y	Increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the use of indigenous resources and reducing the environmental impacts resulting from transportation.	**Regional Materials**, 10% Extracted, Processed & Manufactured Regionally	**1**	Use building materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site for a minimum of **10%** *(based on cost)* of the total materials value. If only a fraction of a product or material is extracted / harvested / recovered and manufactured locally, then only that percentage *(by weight)* shall contribute to the regional value. *Mechanical, electrical and plumbing components and specialty items such as elevators and equipment shall not be included in this calculation. Only include materials permanently installed in the project. Furniture may be included, providing it is included consistently in MR Credits 3–7.*	Construction Submittal. Provide the project's total project cost (for application of 45% default factor) or total materials cost. Note this reported value must be consistent across all MR credits. Complete the regional materials calculation table in the Submittal Template. The following information will be required to fill in this table: product name for each tracked material; material manufacturer; total product cost for each tracked material; percentage of product, by weight, that meets both the extraction and manufacture criteria; distance between the project site and extraction / harvest / recovery site; distance between the project site and the final manufacturing location. Provide an optional narrative.	4.10.5	1
Credit 5.2	O	Increase demand for building materials and products that are extracted And manufactured within the region, thereby supporting the use of indigenous	**Regional Materials**, 20% Extracted, Processed & Manufactured Regionally	**1**	Use building materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site for an additional 10% beyond MR Credit 5.1 (total of **20%**, *based on cost*)		Optional	0

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		resources and reducing the environmental impacts resulting from transportation.			of the total materials value. If only a fraction of the material is extracted/harvested/recovered and manufactured locally, then only that percentage (by weight) shall contribute to the regional value.			
Credit 6	Y	Reduce the use and depletion of finite raw materials and long-cycle renewable materials by replacing them with rapidly renewable materials. *Establish a project goal for rapidly renewable materials and identify products and suppliers that can support achievement of this goal. Consider materials such as bamboo, wool, cotton insulation, agrifiber, linoleum, wheatboard, strawboard and cork. During construction, ensure that the specified renewable materials are installed.*	**Rapidly Renewable Materials**	**1**	Use rapidly renewable building materials and products (made from plants that are typically harvested within a ten-year cycle or shorter) for 2.5% of the total value of all building materials and products used in the project, based on cost.	Construction Submittal. Provide the project's total project cost (for application of 45% default factor) or total materials cost. Note this reported value must be consistent across all MR credits. Complete the rapidly renewable materials calculation table in the Submittal Template. The following information will be required to fill in this table: product name for each tracked material; material manufacturer; total product cost for each tracked material; percentage of product, by weight, for each material that meets the rapidly renewable criteria. Provide an optional narrative.	4.10.5	1
Credit 7	N	Use a minimum of 50% of wood-based materials and products, which are certified in accordance with the Forest Stewardship Council's (FSC) Principles and Criteria, for wood building components. These components include, but are not limited to, structural framing and general dimensional framing, flooring, sub-flooring, wood doors and finishes. Only	**Certified Wood**	**1**	N/A	N/A	N/A	0

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		include materials permanently installed in the project. Furniture may be included, providing it is included consistently in MR Credits 3–7.						
Indoor Environmental Quality	**Yes/No/ Optional**	**Intent / Comments**	**Credit Name**	**Possible Points**	**Credit Language**	**Submittal Documentation**	**Specific Plan Location**	**Actual Points**

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Appendix G – Plant Palette

TREES:
Botanical name (Common name)

Acacia species (Acacia)
Agonis flexuosa (Peppermint Tree)
Albizia julibrissin (Silk Tree)
Arbutus unedo (Strawberry Tree)
Bauhinia variegata –purpurea (Purple Orchid Tree)
Bauhinia X blakeana (Hong Kong Orchid Tree)
Brachychiton populneus (Bottle Tree)
Brahea armata (Blue Hesper Palm)
Callistemon citrinus (Lemon Bottlebrush)
Calocedrus decurrens (Incense Cedar)
Cedrus deodara (Deodar Cedar)
Cercidium floridum (Blue Palo Verde)
Cercis occidentalis (Western Redbud)
Chilopsis linearis (Desert Willow)
Chitalpa tashkentensis (Chitalpa)
Chorisia speciosa (Floss Silk Tree)
Cinnamomum camphora (Camphor Tree)
Cupaniopsis anacardioides (Carrot Wood)
Cupressus sempervirens (Italian Cypress)
Dracaena draco (Dragon Tree)
Elaeocarpus decipiens (Japanese Blueberry Tree)
Eriobotrya deflexa (Bronze Loquat)
Erythrina americana (Naked Coral Tree)
Ficus microcarpa (Indian Laurel Fig)
Fraxinus uhdei (Shamel Ash)
Geijera parviflora (Australian Willow)
Jacaranda mimosifolia (Jacaranda)
Juglans californica (S. Califonia Black Walnut)
Koelreuteria bipinatta (Chinese Flame Tree)
Koelreuteria paniculata (Golden Rain Tree)
Lagerstroemia indica (Crape Myrtle)
Laurus nobilis 'Saratoga' (Sweet Bay)
Lophostemon conferta (Brisbane Box)
Magnolia grandiflora (Magnolia Species)
Melaleuca nesophila (Pink Melaleuca)
Olea europaea 'Swan Hill' (Fruitless Olive)
Phoenix canariensis (Canary Island Date Palm)
Phoenix dactylifera (Date Palm)
Pinus canariensis (Canary Island Pine)
Pinus halepensis (Aleppo Pine)
Pistacia chinensis (Chinese Pistache)

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Platanus acerifolia (London Plane Tree)
Platanus racemosa (California Sycamore)
Podocarpus gracilior (Fern Pine)
Podocarpus henkelii (Long Leafed Yellow Wood)
Podocarpus macrophyllus (Yew Pine)
Populus fremontii (Fremont Cottonwood)
Prosopis Species (Mesquite)
Prunus caroliana (Carolina Laurel Cherry)
Prunus cerasifera 'Krauter Vesuvius' (Purple Leaf Plum)
Pyrus C. 'Bradford' (Bradford Pear)
Quercus agrifolia (Coast Live Oak)
Quercus engelmanii (Mesa Oak)
Quercus ilex (Holly Oak)
Quercus virginiana (Southern Live Oak)
Rhus lancea (African Sumac)
Schinus molle (California Pepper Tree)
Washingtonia robusta (Mexican Fan Palm)

SHRUBS:

Botanical name (Common name)
Abelia 'Edward Goucher' (Glossy Abelia)
Acacia craspedocarpa (Leather Leaf Acacia)
Agapanthus species (Lily of the Nile)
Agave Americana (Century Plant)
Agave desmettiana (Desmettiana Agave)
Aloe species (Aloe)
Anigozanthos cultivars (Kangaroo Paw)
Anisacanthus spp. (Desert Honeysuckle)
Artemisia californica (California Sagebrush)
Baccharis pilularis (Coyote Brush)
Berberis thunbergii (Japanese Barberry)
Bougainvillea spp. (Bougainvillea)
Buxus microphylla japonica (Japanese Boxwood)
Carissa macrocarpa 'Boxwood Beauty' (Boxwood Beauty Natal Plum)
Ceanothus spp. (California Wild Lilac)
Cistus spp. (Rockrose)
Convolvulus cneorum (Bush Morning Glory)
Correa spp. (Austrailian Fuchsia)
Cotoneaster apiculatus (Cranberry Cotoneaster)
Cycas revoluta (Sago Palm)
Dietes bicolor (Fortnight Lily)
Dodonaea viscosa 'Purpurea' (Purple Hopbush)
Echeveria elegans (Hens and Chickens)
Echium fastuosum (Pride of Madeira)
Elaeagnus pungens (Silverberry)
Eriogonum fasciculatum (California Buckwheat)
Escallonia 'fradesii' (Escallonia)

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Euonymus japonicus spp. (Euonymous)
Feijoa sellowiana (Pineapple Guava)
Festuca glauca (Blue Fescue)
Grevellia 'Noellii' (Noel's Grevellia)
Hemerocallis hybrids (Day Lily)
Heuchera sanguinea (Coral Bells)
Ilex cornuta 'Burfordii' (Burford Holly)
Juniperus chinensis spp (Juniper)
Justicia spicigera (Mexican Honeysuckle)
Lantana camara (Bush Lantana)
Leptospermum laevigatum (Australian Tea Tree)
Ligustrum japonicum 'Texanum' (Texas Privet)
Liriope muscari (Big Blue Lilyturf)
Lonicera nitida (Box Honeysuckle)
Mimulus aurantiacus (Sticky Monkey Flower)
Muhlenbergia rigens (Deer Grass)
Myrsine Africana (African Boxwood)
Nandina domestica species (Heavenly Bamboo)
Phormium tenax (New Zealand Flax)
Photinia x fraseri (Fraser's Photinia)
Prunus caroliniana 'Bright 'n Tight' (Dwarf Caroliana Laurel Cherry)
Pyracantha species (Firethorn)
Rhaphiolepis indica species (Indian Hawthorn)
Rhus integrifolia (Lemonade Berry)
Ribes speciousum (Fuchsia Flowering Gooseberry)
Rosa banksiae (Lady Bank's Rose)
Salvia greggii & hybrids (Autumn Sage)
Salvia leucantha (Mexican Bush Sage)
Tecoma stans (Yellow Trumpet Flower)
Viburnum suspensum (Sandankwa Viburnum)

GROUNDCOVER
Botanical name (Common name)
Aptenia 'Red Apple' (Red Apple)
Baccharis pilularis 'Pigeon Point' (Dwarf Coyote Bush)
Carissa macrocarpa 'Prostrata' (Prostrate Natal Plum)
Drosanthemum floribundum (Rosea Ice Plant)
Lonicera japonica 'Halliana' (Hall's Japanese Honeysuckle)
Myoporum 'Pacificum' (Pacific Myoporum)
Trachelospermum jasminoides (Star Jasmine)

VINES:
Botanical name (Common name)
Bougainvillea species (Bougainvillea)
Distictis buccinatoria (Blood Red Trumpet Vine)
Rosa banksiae (Lady Bank's Rose)
Wisteria sinensis (Chinese Wisteria)

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Appendix H – List of Definitions

Purpose

The purpose of this section is to promote consistency and precision in the application and interpretation of development and zoning terms and definitions. The meaning and construction of words and phrases defined in this section shall apply in regards to all development within the Specific Plan area, except where the context and usage of such words or phrases clearly indicates a different meaning or construction intended in that particular case.

Definitions

The following definitions shall apply to the U.S. Vets Transitional Housing Program Specific Plan.

Abutting - having lot lines or zone boundaries in common.

Access road - a graded road with such improvements and of such width, as required in this Specific Plan, which provides access from a division of land to an existing maintained street or highway.

Addition - any construction that is attached to an existing building and which increases the size of a building or facility in terms of site coverage, height, length, width, or gross floor area.

Adjoining - means district boundaries or lot lines in common.

Advertising Sign – Those which direct attention to the goods and services sold, leased, or otherwise provided and made available, which shall include the name of the leasehold premises and may include names or sub-tenancies located thereon.

Airport - any area which is used or intended to be used for the taking off and landing of aircraft, including helicopters, and any appurtenant areas which are used or are intended go be used for airport buildings or facilities, including open spaces, taxiways and tie-down areas.

Ancillary Use - a use that is in addition and subordinate to the primary use.

Antenna – means a device used to transmit and/or receive radio or electromagnetic waves between terrestrially and orbitally based structures.

Antenna, Noncommercial - “Noncommercial antenna” means an antenna or satellite dish not used in conjunction with a business, or commercial enterprise.

Antenna, Satellite Dish - “Satellite dish antenna” means a transmitting and receiving antenna, typically parabolic, disc or double convex shaped with an active element

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external to the disc that communicates by line of sight with another similar antenna or an orbiting satellite.

Antenna (transmission) - any system of wires, poles, pods, towers, whips, reflecting discs, or similar devices for transmission of electromagnetic waves.

Architectural features - any portion of the outer surface of a structure, including, but not limited to, the kind, color and texture of the building material, the type and style of all windows, doors, lights, signs, walls, fences, awnings and canopies, screens, sculptures, decoration, roof shape and materials, and other fixtures appurtenant to a structure.

Architectural control - public regulation of the design of private buildings to develop, preserve, or enhance the attractiveness or character of a particular area or individual building.

Awning Sign – a message integrated into the surface of an architectural awning structure mounted parallel to the building façade.

Berm - a mound of earth of varying height.

Blade Sign – a wall-mounted projecting or canopy-suspended sign at the pedestrian level adjacent to a building entry.

Block - a unit of land bounded by streets or by a combination of streets and public land, railroad rights-of-way, waterways or any other barrier to the continuity to development.

Buffer areas - an area of land used to visibly separate one use from another or to shield noise, lights or other possible nuisances.

Building - any structure built for the support, shelter, or enclosure of persons or personal property of any kind.

Building coverage - the relationship between the ground floor area (footprint) of the building(s) and the net lot area.

Building height - the vertical distance from the grade to the highest point of the coping of a flat roof or to the deck line of a mansard roof or to the highest point of the highest gable of a pitch or hip roof, but exclusive of vents, air conditioners, chimneys or other such incidental appurtenances.

Building, main - a building within which is conducted the principal use permitted on the lot as provided by this chapter.

Building, public - an institution such as a library, public school, hospital, or public owned or operated building, structure or land used for public purpose.

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Building site - a lot, or contiguous lots of land in single, multiple, or joint ownership (exclusive of all rights-of way and all easements, except open space easements, that prohibit the surface use of the property by its owner), which provides the area and open spaces required by this chapter for construction of a building or buildings, and which abuts a public or private street or alley, or easement.

Centerline - the centerline of a street as referred to in this code shall mean the right-of-way centerline as established by the county engineer of the county, by the city engineer of any city within the county, by the Division of Highways of the State of California, or if no such centerline has been established and in any base in which foregoing definition is not applicable.

Certificate of occupancy - a document issued by the March JPA allowing the occupancy or use of a building and certifying that the structure or use has been constructed or will be used in compliance with all the applicable municipal codes and ordinances.

Chemical/substance abuse facility - any facility which provides medical or non-medical care and supervision in a group setting to adults recovering from the effects of controlled substances or chemicals.

Clinic - an establishment where patients are admitted for examination and treatment by one or more physicians, dentists, psychologists or social workers and where patients are not lodged overnight.

Comfort Home - An individual dwelling unit, approximately 500 sq.ft., that includes a bedroom, bathroom, kitchen and living area.

Common area - land in a residential development held in common and/or single ownership and not reserved for the exclusive use or benefit of an individual tenants or owner.

Community care facilities - any facility, place or building where non-medical care and supervision are provided for seven or more persons (does not include the licensee or members of the licensee's family or persons employed as facility staff). Term does not include recovery houses or other similar facilities providing group living arrangements for persons recently released from a penal or corrective institution.

Community center - a facility operated in the Senior Continuum which provides recreational, cultural or other similar activities.

Community noise equivalent level - a cumulative measure of noise for a 24-hour day, weighted to noise occurring during the evening and nighttime periods.

Decibel or db - a unit of sound pressure level.

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Defensible space - a physical space which is made usable and safe by a design encouraging pedestrian circulation, visual access and the elimination of visually obstructed areas.

Density - the number of dwelling units, or housing structures per net acre of land.

Detention basin - a storage facility for the temporary storage of storm water runoff .

Developer - the person or firm who prepares acreage for development and installs sufficient improvements to facilitate further subdivision of the property and construction of authorized uses. In the case of larger acreage there may be a master developer who sells property to several builders. With smaller acreage, the developer may be the original land owner or an individual builder.

Development - the division of a parcel of land into two or more parcels; the construction, reconstruction, conversion, structural alteration, relocation or enlargement of any structure; any mining, excavation, landfill or land disturbance, and any use or extension of the use of land.

Development agreement - a legally binding instrument executed between two or more parties which sets forth the specific criteria under which a certain development project may proceed. Modifications to the terms and conditions of the agreement require the mutual written consent of all parties entering into the agreement.

Development plan - a map or maps, along with supporting text and data, statistics or tables which describe the entitlement to use and associated conditions thereto authorized for a described parcel of land, approved in accordance with the requirements of this Specific Plan.

Drive approach - the portion of a driveway, typically within the public right-of-way, which fl airs out for vehicle maneuvering.

Driveway - an access leading from a public street or right-of-way or a private street to a parking area, or from one parking area to another, but shall not be defined to include any ramp, aisle, or maneuvering area.

Driveway corner cut-off shall mean a safety area, clear of any visual obstructions measuring over 30 inches from street level and which would constitute a traffic or pedestrian hazard, as the triangular area created by a line between two points measured ten feet from, and along the axis of, the intersecting point of a street property line and the edge of a driveway nearest a side property line.

Dwelling - a structure or portion thereof which is used exclusively for permanent human habitation.

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Dwelling group - a group of two or more detached buildings used as dwelling units located on a single lot, together with all of the open spaces required by this Specific Plan but not including tourist courts, motor courts, or motels or any other commercial uses.

Dwelling unit - one or more rooms designed, occupied or intended for occupancy as separate living quarters, with cooking, sleeping and sanitary facilities provided within the dwelling unit for the exclusive use of a single person or persons within the Senior Continuum.

Easement - a grant of one or more of the property rights by the property owner to and/or for the use by the public, a corporation or another person or entity.

Employees' quarters - quarters for the housing of domestic employees when such quarters are located upon the same land occupied by their employer.

Environmental impact report (EIR) - a detailed statement setting forth the environmental effects and considerations pertaining to a project as specified in Section 21100 of the California Public Resources Code (California Environmental Quality Act), and may mean either a draft or a final EIR.

Existing use - the use of a lot or structure at the time of the enactment of this Specific Plan.

Façade – The exterior wall of a building exclusive of projecting signs, columns, pilasters, canopies, marquees, decorations, or the like.

Fence - a solid or open barrier intended to enclose or mark an area.

Fire access road - a minimum 20-foot wide access road paved with asphalt or concrete for emergency use approved by the local fire agency.

Floor area, gross – the area within the perimeter of the outside walls of a building as measured from the inside surface of the exterior walls.

Floor Area, net - the total building floor area excluding garages, hallways, lobbies, elevators and other common spaces.

Floor Area Ratio this calculation determines the maximum square footage of a building on an individual parcel. A .50 FAR for a 10,000 square foot lot would allow a 5,000 square foot building. This total could be a single story building that is 5,000 square feet or a two story building with each floor being 2,500 square feet.

Frontage - the length of that portion of a lot abutting a street.

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General plan - the adopted general plan of the March JPA which is the official statement of policy relative to physical development within the jurisdiction.

Grade (adjacent ground elevation) - the lowest point of elevation of the finished surface of the ground, paving or sidewalk within the area between the building and the property line or, when the property line is more than five feet from the building, between the building and a line five feet from the building.

Grade, finished - the final elevation of the ground surface after development.

Grade, natural - the elevation of the ground surface in its natural state, before man-made alterations.

Grading, contour - a grading concept designed to result in earth forms and contours which resemble natural terrain characteristics, with generally curving, nonlinear slope banks having variations in the slope ratios of the horizontal and vertical curves.

Greenbelt - an open area which may be cultivated or maintained in a natural state surrounding development or used as a buffer between land use or to mark the edge of an urban or developed area.

Hazardous substance - any of the following or combinations thereof as noted in the Riverside County Hazardous Waste Management Plan:
(1) Any substance designated pursuant to Section 1321(b)(2)(A) of Title 33 of the United States Code.
(2) Any element, compound, mixture, solution, or substance designated pursuant to Section 102 of the Federal Act, 42 U.S.C. 9602.
(3) Any hazardous waste having the characteristics identified under or listed pursuant to section 6921 of Title 42 of the United States Code, but not including any waste the regulation of which under the Solid Waste Disposal Act has been suspended by act of Congress.
(4) Any toxic pollutant listed under Section 1317(a) of Title 33 of the United States Code.
(5) Any hazardous air pollutant listed under Section 7412 of Title 42 of the United States Code.
(6) Any imminently hazardous chemical substance or mixture with respect to which the Administrator of the United States Environmental Protection Agency has taken action pursuant to Section 2606 of Title 15 of the United States Code.
(7) Any hazardous waste or extremely hazardous waste as defined by Sections 25-117 and 25-115, respectively, unless expressly excluded (California Health and Safety Code Section 25316).

Improvement - any street work surveys and monuments and utilities to be installed, or agreed to be installed, by the developer for public or private streets, highways, and easements as are necessary for the general use of the lot owners in the Specific Plan and local neighborhood traffic and drainage needs as a condition precedent to the

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approval and acceptance of the final map thereof. Improvement also means such other specific improvements or types of improvements, the installation of which, either by the land divider, public agencies, private utilities, by any other entity approved by the March JPA or its designated officer or entity, or by any combination thereof, is necessary to insure consistency with, or implementation of, the Specific Plan.

Improvement standards - the standards set forth in this Specific Plan as it relates to the development of land within the Specific Plan.

Incidental Storage - a maximum of 10percent of the site can be used for incidental material storage associated with the primary use of the business.

Infrastructure - basic facilities and services needed to sustain development activities.

Institutional Residential – institutional housing associated with independent living facilities, where a resident is self-sufficient but requires help with services such as laundry, meals, job training and transportation. The other end of the spectrum would offer hospice care to residents that are in the last phases of incurable disease so that they may live as fully and comfortably as possible. This term may also apply to transitional housing programs for the homeless that currently exist within the March JPA.

Institutional use - a nonprofit or quasi-public use institution such as a church, library, public, or private school, hospital, or municipally owned or operated building, structure or land, used for public purpose.

Land use plan - a plan showing the existing and proposed location, extent and intensity of development of land.

Landscaping plans - a plan designed and prepared by a landscape designer or a landscape architect, who indicates the type, size and location of vegetative and accent material proposed for the landscaping of a site including all irrigation and other devices necessary to maintain such landscaping.

Landscaping - an area devoted to or developed and maintained predominately with native or exotic plant materials including lawn, ground cover, trees, shrubs, and other plant materials; and also including accessory decorative outdoor landscape elements such as pools, fountains, paved or decorated surfaces (excluding driveways, parking, loading, or storage areas).

Landscape setback - the required distance between a property line and a building, structure or parking lot.

Line of sight - point of visibility from one point to another.

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Loading space - an accessible "off -street" space or berth on the same site as a structure, or within a structure, for the exclusive use of the loading or unloading of goods or materials.

Loading zone - an approved off -street space or berth on the same lot with a building or contiguous to a group of buildings for the temporary parking of vehicles while loading or unloading merchandise or materials and which abuts upon a street, alley, or other appropriate access point.

Lot has the following meanings:

(1) A parcel of land with a separate and distinct number or other designation shown on a plat recorded in the office of the county recorder; or

(2) A parcel of land delineated on an approved record of survey, lot split or sub-parceling map as filed in the office of the county recorder, which abuts at least one public street or right-of-way, or easement determined by the March JPA to be adequate for the purpose of access; or

(3) A parcel of land containing not less than the area required by the zone in which it is located, abutting at least one public street or right-of-way, and held under separate ownership from adjacent property.

Lot area, net – the area within the lot lines after dedication. See “Acreage (adjusted net).”

Lot coverage – the ratio between the ground floor area of the building or buildings and the lot area. Lot coverage shall be exclusive of steps, chimneys, unenclosed and unroofed terraces and patios.

Lot depth – the horizontal distance between the midpoint of the front lot line and midpoint of the rear lot line.

Lot frontage - the length of the defined front lot line measured at the street right-of-way line.

Lot line - the lines bounding a lot as defined herein.

Lot line, front - the line separating the narrowest street frontage of the lot from the street right-of-way.

Lot line, rear – any lot line that is not a front lot line or a side lot line.

Lot line, side - any lot lines other than the front or rear lot lines.

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Lot width - the average linear distance between side lot lines when measured at a 90 degree angle to the front lot line.

Lot, corner - a lot or parcel of land abutting upon two or more streets at their intersection, or upon two parts of the same street forming an interior angle of less than 135 degrees.

Lot, interior - a lot other than a corner lot.

Lot, reversed corner - a corner lot in which the side lot line is substantially a continuation of the front lot line of the nearest lot to its rear.

Lot, substandard - any lot which does not meet the minimum dimensions, the area of any easement which restricts the normal usage of the lot may be excluded.

Lot, through - a lot which fronts upon two streets which do not intersect at the boundaries of the lot.

Marquee – a rigid canopy extending outwards from the building façade, generally over the main entrance or along a principal façade.

Maximum lot (building) coverage - the maximum area of the lot that may be covered by buildings and roofed structures. This may be expressed in square footage or as a percentage of the minimum lot area.

Minimum lot area - the amount of land that must be contained in a lot for each building to be built on that lot.

Minor modification - a method whereby minor changes may be made to preexisting or previously approved use or structure without any additional impact or expansion of the use or structure.

Monument Sign – signs which are horizontally freestanding, integrated into the landscape, providing primary or secondary identification of single tenants.

Multi-Face Sign – signs having more than one face, each of which fronts on a different direction.

Natural grade - the elevation of the ground surface in its natural state before man-made alterations.

Noise, ambient - the all-encompassing noise level associated with a given environment, being a composite of sounds from all sources, excluding the alleged offensive noise, at the location and approximate time at which a comparison with the alleged offensive noise is to be made.

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Noise, basic level - the acceptable noise level within a given district.

Noise, level - the "A" weighted sound pressure level in decibels obtained by using a sound level meter at slow response with a reference pressure of 20 micropascals. The unit of measurement shall be designated as dBA.

Noise, mobile source - any noise source other than a fixed noise source.

Noise, zone - any defined area or region of a generally consistent land use.

Nonconforming lot - a lot, the area, dimensions or location of which was lawful prior to the adoption, revision or amendment of this Specific Plan, but which fails by reason of such adoption, revision or amendment to conform to the present requirements of the Specific Plan.

Nonconforming structure - a structure or building size, dimensions or location of which was lawful prior to the adoption, revision or amendment to this Specific Plan, but which fails by reason of such adoption, revision or amendment, to conform to the present requirements of the current zoning district.

Nonconforming use - a use or activity which was lawful prior to the adoption, revision or amendment to this Specific Plan, but which fails, by reason of such adoption, revision or amendment, to conform to the present requirements of the current zoning district.

Off -street loading facilities - a site or portion of a site devoted to the loading or unloading of motor vehicles or trailers, including loading berths, aisles, access drives and landscaped areas.

Off -street parking facilities - site or portion of a site devoted to the off -street parking of motor vehicles, including parking spaces, aisles, access drives and landscaped areas.

Open space, active - any parcel or area of land or water designated or reserved for public or private use or enjoyment. An active open space contains recreational facilities such as pools and swimming areas, court and other game areas, playing fields and equipment required for recreational activities. Active open space shall not include any curb side parking.

Open space, common – “common open space” means usable open space within the Senior Continuum reserved for the exclusive use of residents of the development.

Open space, passive - any parcel or area of land or water essentially unimproved and set aside, dedicated, designated or reserved for public or private use or enjoyment, or for the use and enjoyment of owners and occupants of land adjoining or neighboring such open space which is established in order to preserve the natural and aesthetic qualities of the area and may be used for non-structured recreational activities. Passive open space shall not include any curb side parking.

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Open space, private – “private open space” means a usable open space adjoining and directly accessible to a dwelling unit, reserved for the exclusive use of Project residents.

Open space, public - open space owned by a public agency and maintained by it for the use and enjoyment of the general public. Public open space shall not include any curb side parking.

Outdoor advertising structure - a sign that directs attention to a business, profession, product, commodity, or service that is not the primary business, profession, product, commodity, or service sold, manufactured, or conducted, is offered on the site on which the sign is located.

Parapet – That portion of the exterior wall of a building occurring above the roof.

Parking area, private - an area, other than a street, designed or used primarily for the parking of vehicles and not open to general public use.

Parking area, public - an area, other than a private parking area or street, used for the parking of vehicles and available for general public use.

Parking space - an area with minimum dimensions as established in the parking standards for a district, which is accessible and available for the parking of one vehicle.

Parking structure - a structure used for the parking of vehicles where parking is accommodated on two or more levels.

Parkway - the area adjoining the outer edge of the roadbed, extending to the right-of-way line in which sidewalks, plantings, utilities, bank slopes and related facilities may be located.

Paseo - a public or private walk or boulevard designed primarily to provide pedestrian connectivity within the Specific Plan or as access to adjacent communities while providing for the following: enhanced and/or decorative hardscape, water features, enhanced landscape (including trees, shrubs and ground cover), pedestrian amenities such as benches and low level lighting and similar features designed specifically to enhance the pedestrian experience. Generally, paseos are to be considered an amenity over and above sidewalks and parkways required as part of a public right-of-way cross section.

Pedestrian traffic sign - a sign other than the main business identification sign and which is oriented to pedestrian traffic. Such sign shall not include any business related advertising information.

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Pedestrian way or sidewalk - a right-of-way designed for use by pedestrians and not intended for use by motor vehicles. A pedestrian way or sidewalk may be located within or outside a street right-of-way, at grade, or grade separated from vehicular traffic.

Performance standards - a set of minimum criteria or minimum limits for a particular use or process.

Permanent sign – signs of substantial, durable materials and finishes intended for long-term use.

Permitted use - any use allowed in a zoning district by right and subject to the restrictions applicable to that zoning district.

Phase - any contiguous part or portion of a project which is developed as a part of a total project.

Pilaster - an upright architectural member that is structurally a pier, but architecturally is treated as a column.

Plot plan - a diagram of a lot, as seen from above, showing the outline of all structures and other significant features on the lot and indicating the distance of the structures and other significant features from the borders of the lot and from each other.

Plot - a single unit parcel of land.

Preliminary site plan - a preliminary plan developed to identify the location and general relationships between: land uses, improvements, structures, circulation systems, landscaping and design elements.

Primary/Principal Use - a use which acts as the main function of a site as it relates to intensity, square footage, activity and/or traffic generation.

Project - the total development within the boundaries of the Specific Plan.

Public facility - a use established primarily for the benefit and enjoyment of the community in which it is located,
including a library, post office, neighborhood center, and similar facilities.

Public use - a use operated or maintained exclusively by a public body for the benefit of the public, such use having the purpose of serving the public health, safety or general welfare; this term includes uses by or for the benefit of the public such as (but not limited to) public schools, open spaces, streets and ways, playgrounds, hospitals, and administrative and service facilities.

Public utility structures - a structure that provides a service (such as light, power, or water) to the general public. Included in this term are electric substations, water

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reservoirs, etc. Waste-to-energy facilities are not considered as public utility structures for these purposes.

Pylon sign – signs which are vertically freestanding. Providing site and major tenant identification oriented to principal vehicle thoroughfares and entries.

Quasi-public - a use owned or operated by a nonprofit, religious or charitable institution and providing education, cultural, recreational, religious or similar types of public programs.

Ramp - an access driveway from one parking level to another.

Recorder - means the recorder of Riverside County.

Screen check plan - a draft development plan prepared with sufficient scope and detail (1) to enable City staff to review the plan, and (2) to provide direction to guide the preparation of a development plan complete and accurate enough to schedule it for required public hearings.

Screening - a method of visually shielding or obscuring one abutting or nearby structure or use from another by fencing, walls, berms or densely planted vegetation.

Secondary Use - a use that is secondary to the primary/principal use and located on the same lot with such principal use. A secondary use shall generally be considered less intense as it relates to intensity, square footage, activity and traffic generation.

Senior citizen - any person age 55 or older pursuant to the guidelines of the United States Social Security Administration.

Senior citizen housing - senior citizen housing for persons 55 years of age or older or otherwise provided in the Development Standards.

Senior citizen housing, congregate care - senior citizen housing which provides meal service at a central dining facility but does not provide 24-hour services or supervision.

Setback area - the minimum distance required by zoning to be maintained between two structures or between a structure and a property line.

Setback line - a line within a lot parallel to and measured from a corresponding lot line, forming the boundary of a required yard and governing the placement of structures and uses on the lot.

Sewer treatment plant - a facility for the treatment and disposal of sewage matter.

Shared parking - a situation where the same parking spaces can be utilized by two or more different uses.

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Shed - an accessory structure or building used primarily for storage purposes which is less than 120 square feet and does not require a building permit.

Tower – a tall architectural element giving prominence to an entry, doorway, or portal.

Sign – a device, fixture, surface or structure of any kind or character, made of any material whatsoever, displaying letters, numbers, words, text, illustrations, symbols, forms, patterns, colors, textures, shadows or lights; or any other illustrative or graphic display designed, constructed or placed on the ground, on a building, canopy, wall, post or structure of any kind, in a window, or on any other object for the purpose of advertising, identifying or calling visual attention to any place, structure, firm, enterprise, profession, business, service, product, commodity, person, idea, activity or other message. “Sign” shall include any portable sign. The term does not include a religious symbol on a church or other place of worship.

Sign Area – The area of a sign shall be the entire area that encloses the outside limits of the sign, including the sign copy area and any frame, border, background area, structural trim, or other material forming an integral part of the sign.

Sign Copy Area – The area that encloses the extreme limits of the area available for displaying the desired message. The sign copy area includes both the written message and the background against which the message can be displayed.

Site – a lot or group of contiguous lots not divided by an alley, street, other right-of-way or city boundary line that is proposed for development in accordance with the provisions of this Specific Plan, and is in a single ownership or has multiple owners, all of whom join in an application for development.

Site plan - a plan drawn to scale showing uses and structures proposed for a parcel of land as required by the applicable regulations including lot lines, streets, building sites, reserved open space and other specific development proposals.

Slope - the degree of deviation of a surface from the horizontal, usually expressed in percent or degrees.

Slope bank - a slope steeper than 15 percent.

Solar access - a property owner’s right to have the sunlight shine on his land.

Solar energy systems - a complete design or assembly consisting of a solar energy collector, and energy storage facility, and components for the distribution of transformed energy.

Specific plan - a fully planned development, with all design controls, servicing requirements and financing techniques incorporated into the plan, which is adopted with

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a self-contained regulatory text and serves to implement the general plan in more detail. References in this document refer to the U.S. Vets Transitional Housing Program Specific Plan.

Standards, development - the physical design and development portion of the development code controlling such items as building coverage, setback areas, and height of structures or floor area ratios.

Street corner cut-off shall mean a safety area, clear of any visual obstructions measuring 30 inches above ground level and which would constitute a traffic or pedestrian hazard, as the area defined by a 45 degree cut-off line between two points each measured thirty feet along the property lines from the intersecting point at the street corner.

Structure - anything constructed or built. An edifice or building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner.

Temporary Sign – signs intended for short duration, normally during the planning and construction phase of development.

Temporary structure - a structure without any foundation or footings and which is removed within a designated time period, or when the activity or use for which the temporary structure was erected has ceased.

Temporary use - a use established for a fixed period of time with the intent to discontinue such use upon the expiration of the time period.

Terracing - an erosion control method that uses small hills and contours on the land surface to control flooding and runoff .

Topography - the configuration of a surface area showing relative elevations.

Trail - a trail generally 10-15 feet in width, which is a segment of a pedestrian walkway, intended to link local feeder trails with the regional trail system, designed and improved for bicycle, walking, and jogging use.

Trailer, construction - a trailer, the use of which is incidental to new construction on a site, including but not limited to temporary office space for the direction of on-site construction activities.

Transitional area - an area which acts as a buffer between two land uses of different intensity.

Transitional use - a land use between a more or less intensive uses.

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Use - the purpose for which land or a building is occupied, arranged, designed or intended, or for which either land or building is, or may be, occupied or maintained.

Vacant parcel - a parcel void of any structures (including footings and/or foundations).

Vested right - a right which has been legally established and cannot be revoked by subsequent conditions or changes in law without due process of the law.

Visible - means likely to be noticed by a person of average height walking on an adjacent street or sidewalk or traveling in a vehicle on an adjacent street or highway two years after installation of any planting screening material intended to screen a view.

Wall - a substantial solid barrier intended to enclose, separate or surround.

Wall, community theme - a solid wall used to establish a community architectural identity or theme, often used to link diverse project neighborhoods and facilities together into an identifiable community.

Wholesaling - a use engaged primarily in the selling of any type of goods for purpose of resale, including incidental storage and distribution.

Window Sign - any sign, exposed to public view, which is attached, painted, or pasted, or is located within three feet, either permanently or temporarily, on or of the interior or exterior of a window.

Wing wall - an extension of a wall of a building beyond that enclosing the space within the building.

Xeriscape - landscaping characterized by the use of vegetation which is drought resistant or low water use in character.

Yard area - as defined in the UBC, yard is an open, unoccupied space, other than a court, unobstructed from the ground to the sky, except where specifically provided by this Specific Plan, on the lot on which a building is situated.

Yard, corner - a side yard which faces a public street on a corner lot and extending from the front yard to the rear yard.

Yard, front - a yard extending the full width of the lot between the front lot line and a line parallel thereto and passing through the nearest point of the building; provided that, if a future street right-of-way has been established, such measurement shall be from the future street right-of-way line.

Yard, rear - a yard extending the full width of the lot between the rear lot line and a line parallel thereto. For through lots, if a future street right-of-way has been established, such measurement shall be from the future street right-of-way line.

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Yard, side - a yard between the side lot line and a line parallel thereto and extending from the front yard to the rear yard.

Zero lot line - the location of a building on a lot in such a manned that one or more of the building's sides rest directly on a lot line.

Zoning district - a specifically delineated area within the Specific Plan which regulations and requirements uniformly govern the use, placement, spacing and size of land and buildings.

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Appendix I – California Environmental Quality Act (CEQA) Compliance

Addendum to the Program Environmental Impact Report

Overview: Under CEQA, the Lead Agency is required to prepare an Addendum to a previously-certified EIR if minor changes or additions are necessary to a prior certified EIR, but none of the conditions calling for preparation of a subsequent or supplemental EIR have occurred (*CEQA Guidelines* Section 15164). CEQA recommends that a brief explanation of the decision to prepare an Addendum rather than a subsequent or supplemental EIR be included in the record for a proposed project (*CEQA Guidelines* Section 15164(e)). Once an EIR has been certified, a subsequent or supplemental EIR is only required when the Lead Agency determines that one of the following conditions has been met (*CEQA Guidelines* Section 15162(a)):

(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time of the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:

A. The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

B. Significant effects previously examined will be substantially more severe than shown in the previous EIR;

C. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

D. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

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This Addendum has been prepared because the proposed Project is consistent with the overall Project evaluated in the Final EIR, and major changes to that Project are not proposed. The Addendum finds that the proposed Project does not require major revisions to the Final EIR due to new significant impacts or substantial increases in the severity of previously identified significant impacts. The anticipated environmental impacts of the proposed Project, as explained in detail in the attached initial study, have been analyzed and mitigated accordingly in the Final EIR, and there have been no new circumstances since that time that would result in new or more severe significant environmental impacts. Lastly, as evaluated in the supporting analysis of this Addendum, mitigation measures that have been previously identified would adequately reduce impacts to less than significant levels. Those mitigation measures that have been identified in the Final EIR and are applicable to the proposed Project are identified within this analysis.

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Appendix J – Project Preparation Team

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213.327.3600
Attn: James Kelly

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Appendix K - References

March Joint Powers Authority. 1999. General Plan of the March Joint Powers Authority. Prepared for and by the March Joint Powers Authority. Riverside County, California.

March Joint Powers Authority. 1997. Development Code. Adopted by March Joint Powers Authority Ordinance Number 97-07.

March Healthcare Development. 2011. March LifeCare Campus Specific Plan (SP-7). Prepared by Albert A. Webb & Associates in August of 2011.

Geotechnical Investigation, March Air Force Base Development, 4th Street and N Street, Riverside County, California, prepared by Southern California Soil and Testing, Inc. dated September 17, 2010, SCS&T 1031003F-1.

Infiltration Rate, March Air Force Base Development, 4th Street and N Street, Riverside County, California, prepared by Southern California Soil and Testing, Inc., dated November 18, 2010. SCS&T 1031003F-2.

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Appendix L – Phasing Plans

Overall Phasing Plan

Phase 1 Improvements

Phase 2 Improvements

Phase 3 Improvements

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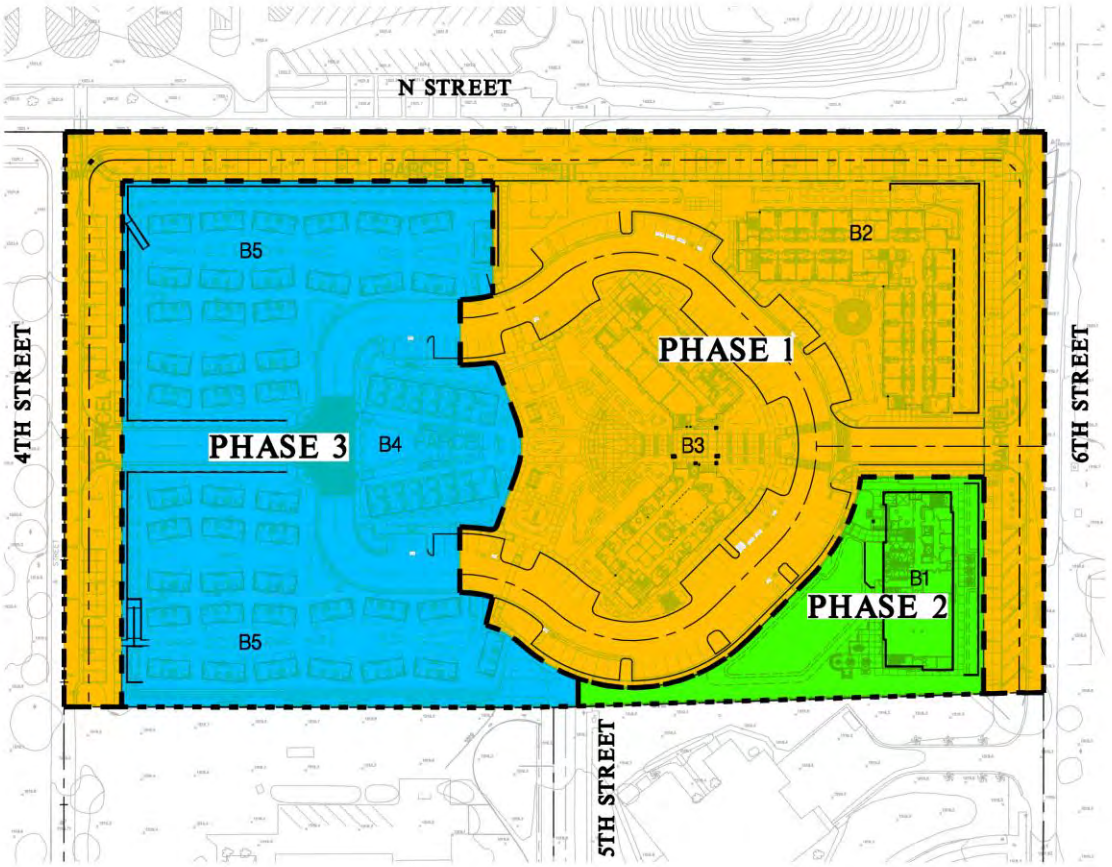


OVERALL PHASING PLAN [UPDATED]

NORTH

GRAPHIC SCALE

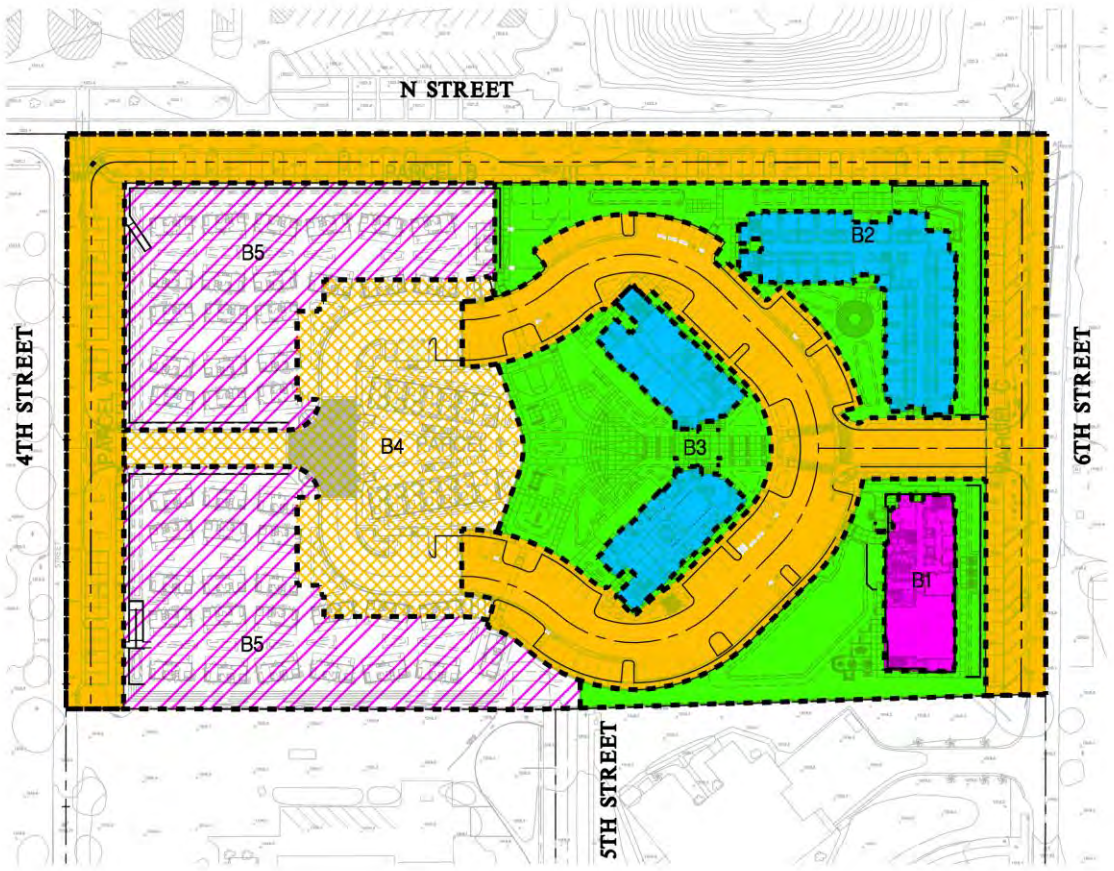
60 0 30 60 120

(IN FEET)

1 inch = 120 feet

LEGEND

PHASE BOUNDARY



PHASE 1 IMPROVEMENTS [UPDATED]

NORTH

GRAPHIC SCALE

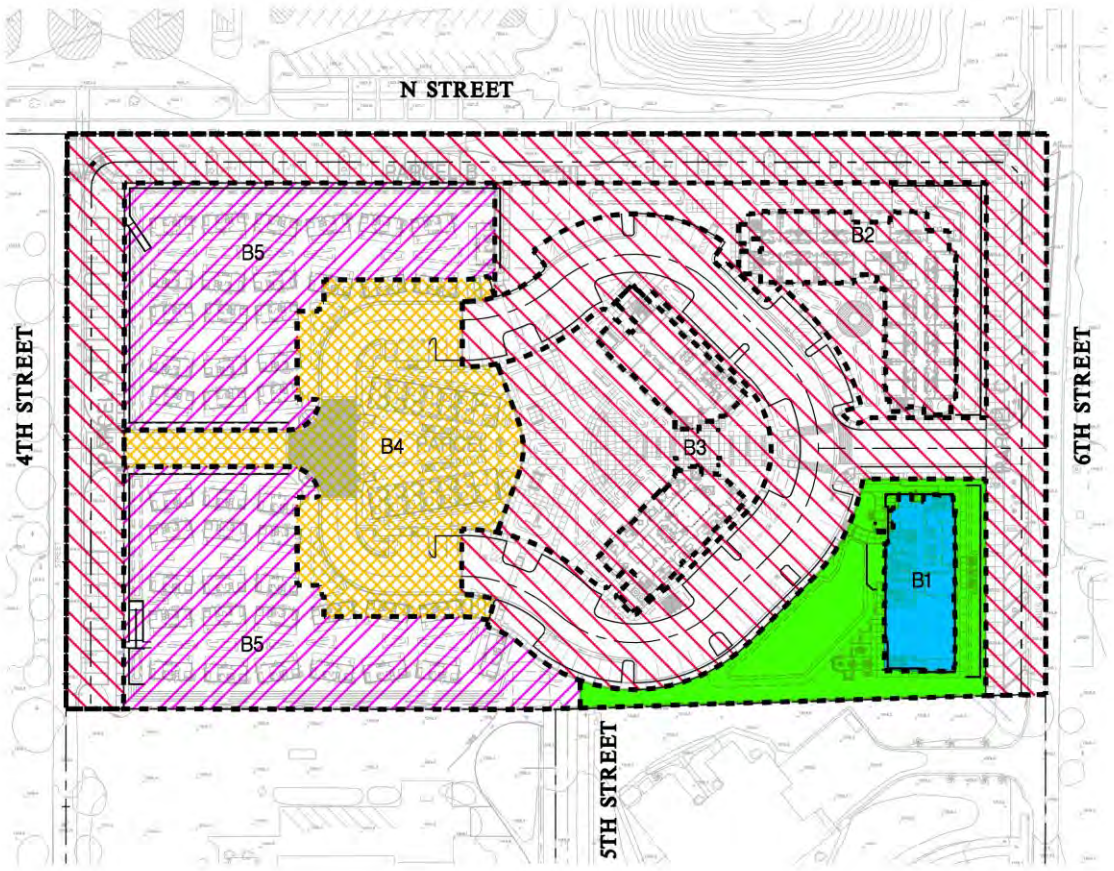
60 0 30 60 120

(IN FEET)

1 inch = 120 feet

LEGEND

- IMPROVEMENTS BOUNDARY
- STREET IMPROVEMENTS
- BUILDING IMPROVEMENTS
- LANDSCAPE IMPROVEMENTS
- BUILDING PAD
- UNDEVELOPED / MASS GRADED PAD
- TEMPORARY / INTERIM STREET IMPROVEMENTS



PHASE 2 IMPROVEMENTS [UPDATED]

NORTH

GRAPHIC SCALE

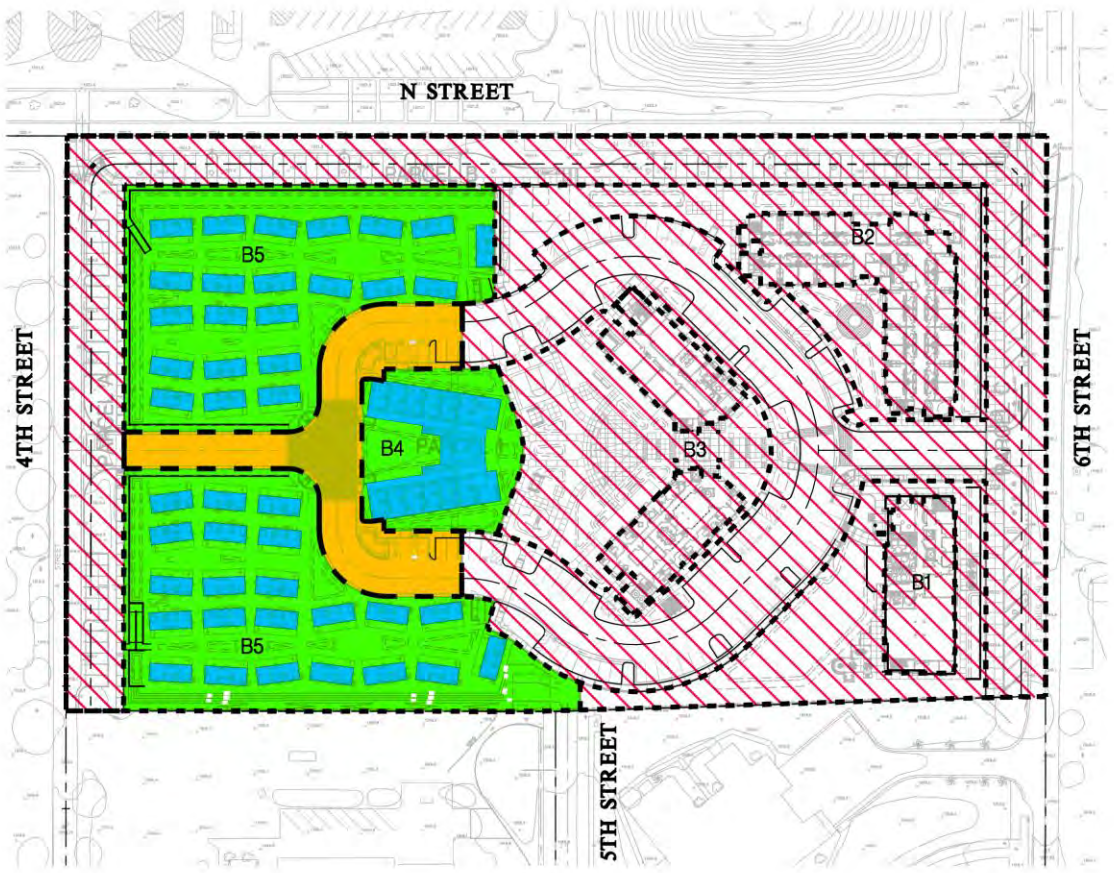
60 0 30 60 120

(IN FEET)

1 inch = 120 feet

LEGEND

- IMPROVEMENTS BOUNDARY
- STREET IMPROVEMENTS
- BUILDING IMPROVEMENTS
- LANDSCAPE IMPROVEMENTS
- BUILDING PAD
- TEMPORARY / INTERIM STREET IMPROVEMENTS
- DEVELOPED SITE
- UNDEVELOPED / MASS GRADED PAD



PHASE 3 IMPROVEMENTS [UPDATED]

NORTH

GRAPHIC SCALE

60 0 30 60 120

(IN FEET)

1 inch = 120 feet

LEGEND

- IMPROVEMENTS BOUNDARY
- STREET IMPROVEMENTS
- BUILDING IMPROVEMENTS
- LANDSCAPE IMPROVEMENTS
- DEVELOPED SITE

NOTICE OF PUBLIC HEARING

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

www.rcaluc.org

A PUBLIC HEARING has been scheduled before the Riverside County Airport Land Use Commission (ALUC) to consider the applications described below.

Any person may submit written comments to the ALUC before the hearing or may appear and be heard in support of or opposition to the project at the time of hearing. **Information on how to participate in the hearing will be available on the ALUC website at www.rcaluc.org.** The ALUC holds hearings for local discretionary permits within the Airport Influence Area, reviewing for aeronautical safety, noise and obstructions. ALUC reviews a proposed plan or project solely to determine whether it is consistent with the applicable Airport Land Use Compatibility Plan. For more information please contact **ALUC Planner Jackie Vega at (951) 955-0982**.

The March Joint Powers Authority Planning Department should be contacted on non-ALUC issues. For more information, please contact March Joint Powers Authority Planner Jeffrey Smith at 951-656-7000.

The proposed project application may be viewed by a prescheduled appointment and on the ALUC website www.rcaluc.org. Written comments may be submitted at the Riverside County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, California 92501, Monday through Friday from 8:00 a.m. to 3:30 p.m., or by e-mail to javega@rivco.org. Individuals with disabilities requiring reasonable modifications or accommodations, please contact Barbara Santos at (951) 955-5132.

PLACE OF HEARING:	**Riverside County Administration Center** **4080 Lemon Street, 1st Floor Board Chambers** **Riverside California**
DATE OF HEARING:	**July 13, 2023**
TIME OF HEARING:	**9:30 A.M.**

CASE DESCRIPTION:

ZAP1573MA23 – U.S. Vets Housing Corporation (Representative: The Trimble Company) – March Joint Powers Authority Case Nos. SP-6 (Specific Plan Amendment), PP10-02 (Plot Plan). A proposal to construct a two-story 24-unit transitional housing building with office space totaling 11,850 square feet and 44 permanent supportive housing units totaling 22,150 square feet, located southerly of N street, easterly of 4th street, and westerly of 6th street. The applicant also proposes to amend the U.S. Vets Transitional Program Specific Plan to reduce the number of housing units from 323 to 222 and eliminate buildings 4 through 8. (Compatibility Zone D of the March Air Reserve Base/Inland Port Airport Influence Area).

RIVERSIDE COUNTY
AIRPORT LAND USE COMMISSION

APPLICATION FOR MAJOR LAND USE ACTION REVIEW

ALUC STAFF ONLY

ALUC Case Number: ZAP1573MA23 Date Submitted: 5/11/23

AIA: March Zone: D Public Hearing ☑ Staff Review ☐

Applicant

Applicant Full Name: US Vets Housing Corporation

Applicant Address: 800 W 6th Street, Los Angeles, CA 90017

Phone: 213-610-7649 **Email:** lallgood@usvets.org

Representative/ Property Owner Contact Information

Representative: Kent Trimble **Email:** ktrimble@msn.com

The Trimble Company Phone: 619-851-3628

Address: 2302 San Juan Road, San Diego, CA 92103

Property Owner: March Joint Powers Authority **Email:** smith@marchjpa.com

Attn: Jeff Smith Phone: 951-656-7000

Address: 14205 Meridian Parkway, Suite 140, Riverside, CA 92518

Local Jurisdiction Agency

Agency Name: March Joint Powers Authority Phone: 951-656-7000

Staff Contact: Jeff Smith **Email:** smith@marchjpa.com

Address: 14205 Meridian Parkway, Suite 140, Riverside, CA 92518

Local Agency Case No.: ~~SP-6 (Specific Plan Amendment), PP10-02 (Plot Plan)~~

Project Location

Street Address: 15301 6th Street, Riverside, CA 92518 Gross Parcel Size.: 132,354 sf

Assessor's Parcel No.: 294-080-016

Solar

Is the project proposing solar Panels? Yes ☑ No ☐ If yes, please provide solar glare study. (Only for zone C or higher.)

Data

Site Elevation:(above mean sea level) 1524'

Height of Building or structures: 40'

What type of drainage basins are being proposed and the square footage: we are proposing bioretention basins to satisfy water quality requirements and the approximate square footage of these basins is 7100sf.

Notice

A. NOTICE: Failure of an applicant to submit complete or adequate information pursuant to Sections 65940 to 65948 inclusive of the California Government Code, MAY constitute grounds for disapproval of actions, regulations, or permits.

B. REVIEW TIME: Estimated time for "staff level review" is approximately 30 days from date of submittal. Estimated time for "commission level review" is approximately 45 days from date of a complete application submittal to the next available commission hearing meeting.

C. SUBMISSION PACKAGE:

Please submit all application items DIGITALLY via USB or CD:

- Completed ALUC Application Form
- Plans Package: site plans, floor plans, building elevations, grading plans, subdivision maps
- Exhibits of change of zone, general plan amendment, specific plan amendment
- Project description of current and proposed use

Additionally, please provide:

- ALUC fee payment (Checks made out to Riverside County ALUC)
- Gummed address labels of all surrounding property owners within a 300-foot radius of project site. (Only required if the project is scheduled for a public hearing)

RIVERSIDE COUNTY
AIRPORT LAND USE COMMISSION

STAFF REPORT

AGENDA ITEM:	3.10
HEARING DATE:	July 13, 2023
CASE NUMBER:	ZAP1028PV23 – Landstar Companies (Representative: Johnson Aviation)
APPROVING JURISDICTION:	City of Perris
JURISDICTION CASE NOS:	PLN22-05046 (DPR22-00005 [Development Plan Review], TPM38412 [Tentative Parcel Map])
LAND USE PLAN:	2011 Perris Valley Airport Land Use Compatibility Plan; 2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan
Airport Influence Area:	Perris Valley Airport; March Air Reserve Base/Inland Port Airport
Land Use Policy:	Zones A, B1, B2, C and D (Perris Valley); Zone E (March)
Noise Levels:	Between 55 - 65 CNEL range from Perris Valley aircraft; Below 60 CNEL from March aircraft

MAJOR ISSUES: Between February 16 through May 9, 2023, ALUC staff received comments from the Perris Valley Airport Manager Pat Conaster, and from Skydive Perris representatives Dan Brodsky-Chenfeld and Andy Witcomb in opposition to the project. They expressed concerns such as mechanical turbulence and windsheer created by the project impacting the existing airport operations flights and parachuting, a reduction in available area for parachutists to land, and impacts to Code of Federal Regulations (14 CFR) Part 105 regarding sport parachuting.

It was previously determined (under nearby case ZAP1026PV22) that the ALUC does not have the jurisdiction to deal with these issues as set forth by the FAA, CALTRANS, and the 2011 Perris Valley Airport Land Use Compatibility Plan (PVALUCP). Although the proposed project is consistent with the standards and policies as identified in the PVALUCP, and that the airport manager/airport operator comments are outside of the purview of the plan, ALUC staff agrees that the safety issues regarding impacts to operations should be further analyzed and evaluated in the project's CEQA process as performed and adopted by the City of Perris.

Lastly, the FAA OES issued their Determinations of No Hazard to Air Navigation letters for the project, identifying that the buildings would not be an impact to air navigation provided that they were appropriately marked/lighted, which is part of the ALUC conditions of approval.

RECOMMENDATION: Staff recommends that the Development Plan Review and Tentative Parcel Map be found CONSISTENT with the 2011 Perris Valley Airport Land Use Compatibility Plan and the 2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, subject to the conditions included herein. It is also advised that the local jurisdiction during the CEQA process analyze and evaluate the project's impacts on the safety of the existing skydiving/parachuting operations.

PROJECT DESCRIPTION: A proposal to construct two industrial warehouse buildings with mezzanines totaling 867,070 square feet and a 343 tractor-trailer truck yard (on a separate 22.88 acre parcel) on a total 82.83 acres. The applicant also proposes a tentative parcel map merging the site into two parcels.

PROJECT LOCATION: The site is located southerly of Ellis Avenue, westerly of Case Road, easterly of Goetz Road, within the City of Perris, approximately 280 feet easterly and westerly of the northwest terminus of Runway 15-33 at Perris Valley Airport.

BACKGROUND:

Non-Residential Average Land Use Intensity: Pursuant to the Perris Valley Airport Land Use Compatibility Plan, the project boundary is located within Zones A (8.92 acres), B1 (17.49 acres), B2 (30.44 acres), C (14.00 acres), and D (19.09 acres), which limits average intensity to 25 people per acre in Zone B1, 100 people per acre in Zone B2, 75 people per acre in Zone C, and 100 people per acre in Zone D. No development is proposed in Zone A. The project is also located in Zone E of the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, which does not restrict non-residential intensity.

Pursuant to Appendix C, Table C-1, of the Riverside County Airport Land Use Compatibility Plan, the following rates were used to calculate the occupancy for the proposed buildings:

- Office – 1 person per 200 square feet
- Warehouse – 1 person per 500 square feet

The project proposes to construct two industrial warehouse buildings with mezzanines totaling 867,070 square feet on a 59.95 acre proposed parcel, as well as a 343 tractor-trailer truck yard with a security booth on a separate 22.88 acre parcel which will not generate significant intensity. Therefore, the main intensity analysis will consist of the two industrial buildings on one parcel based on the underlying compatibility zones as indicated below:

- Within Zone B1 (17.49 acres) the project includes from Building 1 16,197 square feet of warehouse area and 1,500 square feet of office area, accommodating an occupancy of 40 people, resulting in an average intensity of 2 people per acre, which is consistent with the Compatibility Zone B1 average intensity criterion of 25 people per acre.

- Within Zone B2 (30.44 acres) the project includes from Building 1 389,919 square feet of warehouse area, and from Building 2 60,315 square feet of warehouse area, accommodating an occupancy of 901 people, resulting in an average intensity of 30 people per acre, which is consistent with the Compatibility Zone B2 average intensity criterion of 100 people per acre.

- Within Zone C (14.00 acres) the project includes from Building 1 169,786 square feet of warehouse area, 10,000 square feet of first floor office area, and 10,000 square feet of second floor office mezzanine area, accommodating an occupancy of 440 people, resulting in an average intensity of 31 people per acre, which is consistent with the Compatibility Zone C average intensity criterion of 75 people per acre.

- Within Zone D (19.09 acres) the project includes from Building 1 127,989 square feet of warehouse area, and from Building 2 5,146 square feet of warehouse area and 6,500 square feet of office area, accommodating an occupancy of 299 people, resulting in an average intensity of 16 people per acre, which is consistent with the Compatibility Zone D average intensity criterion of 100 people per acre.

A second method for determining total occupancy involves multiplying the number of parking spaces provided or required (whichever is greater) by average vehicle occupancy (assumed to be 1.5 persons per vehicle and 1.0 persons per trailer truck space). An individual lot-by-lot analysis is included below:

- Parcel 1 includes 530 standard vehicles and 338 trailer spaces, accommodating a total occupancy of 1,133 people, resulting in an average intensity of 19 people per acre, which is consistent with the Compatibility Zones B1, B2, C and D average intensity criterion of 25 people per acre in Zone B1, 100 people per acre in Zone B2, 75 people per acre in Zone C, and 100 people per acre in Zone D.

- Parcel 2 includes 343 trailer spaces, accommodating a total occupancy of 343 people, resulting in an average intensity of 15 people per acre, which is consistent with the Compatibility Zones B1, B2, C and D average intensity criterion of 25 people per acre in Zone B1, 100 people per acre in Zone B2, 75 people per acre in Zone C, and 100 people per acre in Zone D.

Non-Residential Single-Acre Intensity: Pursuant to the Perris Valley Airport Land Use Compatibility Plan, the project boundary is located within Zones A (8.92 acres), B1 (17.49 acres), B2 (30.44 acres), C (14.00 acres), and D (19.09 acres), which limits single acre intensity to 50 people in Zone B1, 200 people in Zone B2, 150 people in Zone C, and 300 people in Zone D. The project is also located in Zone E of the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, which does not restrict non-residential intensity. No development is proposed in Zone A. The project is also located within March Air Reserve Base/Inland Port Airport Zone E, which does not restrict non-residential intensity.

Based on the site plan provided and the occupancies as previously noted, the maximum single-acre area for each of the buildings in each airport zone are as follows:

- Within Zone B1 the single acre intensity includes Building 1 16,917 square feet of warehouse area and 1,500 square feet of office area, resulting in a single acre intensity of 40 people, which is consistent with the Compatibility Zone B1 single acre intensity criterion maximum of 50 people.

- Within Zone B2 the single acre intensity includes Building 1 43,560 square feet of warehouse area, resulting in a single acre intensity of 87 people, which is consistent with the Compatibility Zone B2 single acre intensity criterion maximum of 200 people.

- Within Zone C the single acre intensity includes Building 1 23,644 square feet of warehouse area, 10,000 square feet of first floor office mezzanine area, and 10,000 square feet second floor office mezzanine area, resulting in a single acre intensity of 147 people, which is consistent with Zone C single acre intensity criterion maximum of 150 people (9,916 square feet of floor area inhabitable).

- Within Zone D the single acre intensity includes Building 1 43,560 square feet of warehouse area, resulting in a single acre intensity of 87 people, which is consistent with Zone D single acre intensity criterion maximum of 300 people.

Prohibited and Discouraged Uses: The applicant does not propose any uses prohibited or discouraged in Compatibility Zones A, B1, B2, C or D.

Noise: The March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan depicts the site as being in an area below the 60 CNEL range from aircraft noise. The Perris Valley Airport Land Use Compatibility Plan depicts the site as being affected by aircraft noise of 55 - 65 CNEL. Warehouse uses are identified as 'clearly acceptable' and 'normally acceptable' within this range. As a primarily industrial use not sensitive to noise (and considering typical anticipated building construction noise attenuation of approximately 20 dBA), the warehouse area would not require special measures to mitigate aircraft-generated noise. However, a condition is included to provide for adequate noise attenuation within the office areas of the buildings.

Part 77: The elevation of Perris Valley Airport's Runway 15-33 at its northwesterly terminus is 1,417 feet above mean sea level (AMSL). At a distance of approximately 280 feet from the runway to the site, Federal Aviation Administration (FAA) review would be required for any structures with top of roof exceeding 1,420 feet above mean sea level (AMSL). The site's maximum finished floor elevation is 1,424 feet AMSL and the maximum building height is 50 feet, resulting in a top point elevation of 1,474 feet AMSL. Therefore, review of the buildings by the FAA Obstruction Evaluation Service (FAA OES) was required. The applicant has submitted Form 7460-1, and the FAA OES has assigned Aeronautical Study Nos. 2023-AWP-1817-OE thru 2023-AWP-1828-OE to this project.

Determinations of No Hazard to Air Navigation letters were issued by the FAA OES on April 19, 2023, and it was determined that the buildings would not result in an impact to air navigation as long as the buildings were appropriately marked/lighted. The FAA OES conditions have been incorporated into ALUC's conditions.

Hazards to Flight: Land use practices that attract or sustain hazardous wildlife populations on or near airports significantly increase the potential of Bird Aircraft Strike Hazards (BASH). The FAA strongly recommends that storm water management systems located within 5,000 or 10,000 feet of the Airport Operations Area, depending on the type of aircraft, be designed and operated so as not to create above-ground standing water. To facilitate the control of hazardous wildlife, the FAA recommends the use of steep-sided, rip-rap lined, narrow, linearly shaped water detention basins. All vegetation in and around detention basins that provide food or cover for hazardous wildlife should be eliminated. (FAA Advisory Circular 5200-33C). The project is located 280 feet from the runway, and therefore would be subject to the above requirement.

The project includes two bioretention basins totaling 250,000 square feet located in Zones B1, B2, C and D and therefore has the potential to provide food, water, and shelter for hazardous wildlife. Pursuant to the study "Wildlife Hazard Management at Riverside County Airports: Background and Policy", October 2018, by Mead & Hunt, which is the basis of the brochure titled "Airports, Wildlife

and Stormwater Management", such limited basins are permissible in Zones B1, C, and D when used in in conjunction with appropriate landscaping for such uses as adjacent to structures, parking islands, medians, site entrances, planter boxes, and that vegetation is selected so as not to provide food, shelter, nesting, roosting, or water for wildlife. The project has been conditioned to be consistent with the basin criteria (as well as providing 48-hour draw down of the basin).

Open Area: The project site is split between Compatibility Zones A (8.92 acres), B1 (17.49 acres), B2 (30.44 acres), C (14.00 acres), and D (19.09 acres). Compatibility Zones B1 requires 30% (5.25 acres), C requires 20% (2.80 acres), and D requires 10% (1.91 acres) for a total of 9.96 acres of the land area within major projects (10 acres or larger) be set aside as open area that could potentially serve as emergency landing areas (Zone A requires all land to remain open area and Zone B2 does not require open area).

The project provides 25 acres of ALUC eligible open areas consisting of driveway aisles and parking lot areas within the proposed development. The project is conditioned to maintain these areas consistent with ALUC open area requirements of 300 feet by 75 feet minimum shape and prohibit obstructions greater than 4 feet in height that are at least 4 inches in diameter.

Perris Valley Airport Manager Opposition Comments: On February 16, 2023, ALUC staff received comments from the Perris Valley Airport Manager Pat Conaster in opposition to the project citing the following safety concerns (shown in direct quotes, with follow-up ALUC response):

1. "First safety of aircraft landing and departing with such a Large wall of building adjacent to the runway causing potential mechanical turbulence. This mechanical turbulence effecting not only airplanes but parachutists landing in adjacent field drop zone landing areas. Mechanical turbulence causes not only airplanes to crash but parachutes to collapse and potentially kill people".

The 2011 Perris Valley Airport Land Use Compatibility Plan (PVALUCP) identifies runway 15-33 as the officially recognized and designated runway, which is where the noise and safety zones are based on and created. The PVALUCP includes a reference that the "airport serves as a departure point for jump aircraft and a landing spot for skydivers". However, the PVALUCP does not contain any specific criteria or policies that deals directly with skydiving/parachuting operations other than "hazards to flight" which is a prohibited use, which is defined as: "hazards to flight include physical (e.g. tall objects), visual, and electronic forms of interference with the safety of aircraft operations". The proposed building heights were reviewed by the FAA OES and Determination of No Hazard letters were issued identifying that the buildings would not be an impact to air navigation as long as they were appropriately marked/lighted.

2. "Second this proposed building or buildings are located directly in the world's largest parachute drop zone. Persons and property being dropped day and night directly over, potentially causing damage or injury/fatalities to persons within these structures. 120,000 to 130,000 drops annually on an average".

See response to #1 above. Also, the 2011 State Airport Land Use Planning Handbook does not provide any guidance on skydiving/parachuting operations. The FAA also has Circular 105-2D, which identifies basic safety requirements for skydiving/parachuting, set forth by the United States Parachute Association. It identifies drop zone requirements as "areas used for skydiving should be unobstructed, with the following radial distances to the nearest obstacle: solo students and A-license holders – 330 feet; B and C license holders and all tandem skydives – 165 feet; and D license holders – 40 feet. The Airport Diagram exhibit within the PVALUCP identifies the "main

parachute landing area (lawn)" as being located on airport property just east of the runway.

3. "Third it appears from the site plan that the RPZ for runway 15 is encroached with parking and potentially lighting and light poles. Based upon uses his project will have parked truck and trailers that will end up close to 14' high".

The site has been redesigned to relocate the driveaisle completely out of Compatibility Zone A (Runway Protection Zone). The project does not propose any development in Zone A.

4. "Fourth and I'm sure not last is the basins located adjacent to the runway, we already have a bird problem and I'm thinking this will make it worse".

The ALUC wildlife hazard analysis (provided above) indicates that the proposed bioretention basins are permissible in Zones B1, B2, C, and D when used in conjunction with appropriate landscaping for such uses as adjacent to structures, parking islands, medians, site entrances, planter boxes, and that vegetation is selected so as not to provide food, shelter, nesting, roosting, or water for wildlife. The project has been conditioned to be consistent with the basin criteria (as well as providing 48-hour draw down of the basin), thus reducing the potential for wildlife attractant.

5. "In a nutshell it's the sheer size of the project with heights close to 50' changing historic wind and thermal patterns that really scare me. I'm sure you have heard these concerns from me on other projects but this one is literally on the airport. I also know you are aware we are The Perris Valley Public Airport and are open to the public and licensed as such although privately owned".

Although it has been demonstrated in the above responses that ALUC lacks the jurisdiction to address these issues, it is recommended that the City of Perris, through the California Environmental Quality Act (CEQA) process, has the jurisdiction to further assess the project for these safety hazards as raised by the airport manager. The CEQA process that applies to this project is required to analyze and evaluate safety impacts by the local jurisdiction. Staff recommends that a wind analysis be performed to assess the safety impacts to parachute operations. Therefore, it is reasonable to assume that with the cooperation of the applicant, airport manager, and the City of Perris, that these issues expressed by the airport manager will be analyzed and evaluated during the CEQA process.

On May 9, 2023, Pat Conaster submitted new comments questioning the findings of the project's FAA OES Aeronautical studies (2023-AWP-1817-OE thru 2023-AWP-1828-OE) which determined that the project's buildings would not result in an impact to air navigation, as long as they were appropriated marked/lighted (the FAA OES conditions have been incorporated into ALUC's conditions). The FAA OES reviewed the project's building top point elevation and determined that the heights of buildings would not penetrate into the navigable airspace at the airport that would result in an impact to air navigation, as long as the buildings were marked/lighted appropriately to FAA OES standards, for the purpose of providing a warning to the pilots of the building's presence.

Skydive Perris Opposition Comments: On March 6 and March 7, 2023, ALUC staff received comments from Skydive Perris representatives Dan Brodsky-Chenfeld and Andy Witcomb in opposition to the project. They also expressed concerns regarding the project's impact on mechanical turbulence and windsheer on existing airport operations and parachuting, as well as a reduction in available area for parachutists to land, and impacts to Code of Federal Regulations (14 CFR) Part 105 regarding sport parachuting (which the FAA has issued Advisory Circular 105-2E providing suggestions for safe sport parachuting).

In 2013, the FAA issued Advisory Circular 105-2E providing suggestions for safe parachuting in compliance with 14 CFR, which the "FAA's primary responsibility with respect to skydiving is the protection of air traffic and persons and property on the ground", which Part 105 was developed to accomplish this task. The FAA recognizes sport parachuting as an aeronautical activity, and regulations requiring airports that have received FAA funding to accommodate this activity. Perris Valley airport is not FAA funded.

The FAA circular references in Section 6.c.2. Parachute Operations Onto Airports, that:

> "Airports may designate suitable parachute landing areas. While skydivers attempt to land in such areas, at times there may be inadvertent landings in other grass or hard-surfaced areas. This could include landings on runways, taxiways, and other hard-surfaced areas. Areas such as runways, taxiways, clearways, and Obstacle Free Zones (OFZ) are not prohibited areas but should not be designated as a primary landing area and should be vacated as soon as practical".

The circular identifies inadvertent landings could occur on runways, taxiways, clearways, and obstacle free zones located on the airport itself, which according to the 2011 PVALUCP, the main parachute landing area is also located on just east of the runway. The circular does not identify appropriate parachute landing area outside of the airport property as it is private property and not required by the 2011 PVALUCP to provide parachute landing area. However, the 2011 PVALUCP does require certain amount of the project area to be designated as ALUC open area to serve as an aircraft emergency landing area. The project provides 25 acres of ALUC eligible open area (which is defined as 300 feet by 75 feet minimum shape and prohibit obstructions greater than 4 feet in height that are at least 4 inches in diameter) in driveway aisles and parking lot areas which could be utilized by the parachutists in an emergency.

14 CFR Part 105, Section 105.5 (General) specifically states that "no person may conduct a parachute operation, and no pilot in command of an aircraft may allow a parachute operation to be conducted from an aircraft, if that operation creates a hazard to air traffic or to persons or property on the surface". The 2011 PVALUCP identifies the main parachute landing area as located on the east side of the runway and on airport property. The proposed project is located on private property outside of the airport fence line, and north/northwest of the main parachute landing designated area. The project has been designed to be consistent with the 2011 PVALUCP, and is not required to provide any parachute landing areas.

Lastly, as indicated in the applicant's technical memo, the project has been designed to comply with the FAA Airport Design standards with building setbacks, entrance road locations, truck parking, trailer storage, fence lines, storm water quality basins, and security lighting. In addition, the project facilities are also positioned to exceed FAA and United State Parachute Association landing zone setback guidelines to avoid conflicts with parachute operations and parachute landing zones associated with Skydive Perris operation.

As outlined above, the ALUC lacks the jurisdiction to address these issues, and it is recommended that the City of Perris, through the CEQA process, has the jurisdiction to further assess the project for these safety hazards.

CONDITIONS:

1. Any outdoor lighting installed shall be hooded or shielded to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.

2. The following uses shall be prohibited:

   (a) Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.

   (b) Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.

   (c) Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses include landscaping utilizing water features, aquaculture, outdoor production of cereal grains, sunflower, and row crops, composting operations, wastewater management facilities, artificial marshes, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, and incinerators.)

   (d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.

   (e) Children's schools, day care centers, libraries, hospitals, nursing homes, places of worship, buildings with more than two aboveground habitable floors, critical community infrastructure facilities, and aboveground bulk storage of 6,000 gallons or more of flammable or hazardous materials.

   (f) Highly noise-sensitive outdoor nonresidential uses.

   (g) Any use which results in a hazard to flight, including physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations.

3. Prior to issuance of building permits, the property owner shall convey an avigation easement to the Perris Valley Airport. Copies of the recorded avigation easement shall be forwarded to the Airport Land Use Commission and to the City of Perris.

4. The attached "Notice of Airport in Vicinity" shall be provided to all prospective purchasers and occupants of the property and be recorded as a deed notice.

5. Any proposed stormwater basins or facilities shall be designed and maintained to provide for a maximum 48-hour detention period following the design storm, and remain totally dry between rainfalls. Vegetation in and around the basins that would provide food or cover for birds would be incompatible with airport operations and shall not be utilized in project landscaping. Trees shall be spaced so as to prevent large expanses of contiguous canopy, when mature. Landscaping in and around the basin(s) shall not include trees or shrubs that produce seeds, fruits, or berries.

Landscaping in the stormwater basin, if not rip-rap, should be in accordance with the guidance provided in ALUC "LANDSCAPING NEAR AIRPORTS" brochure, and the "AIRPORTS, WILDLIFE AND STORMWATER MANAGEMENT" brochure available at RCALUC.ORG which list acceptable plants from Riverside County Landscaping Guide or other alternative landscaping as may be recommended by a qualified wildlife hazard biologist.

A notice sign, in a form similar to that attached hereto, shall be permanently affixed to the stormwater basin with the following language: "There is an airport nearby. This stormwater basin is designed to hold stormwater for only 48 hours and not attract birds. Proper maintenance is necessary to avoid bird strikes". The sign will also include the name, telephone number or other contact information of the person or entity responsible to monitor the stormwater basin.

6. This project has been evaluated as a two industrial warehouse buildings with mezzanines totaling 867,070 square feet on a 59.95 acre proposed parcel, as well as a 343 tractor-trailer truck yard. Any increase in building area, height, change in use to any higher intensity use, change in building location or modification of the tentative parcel map lot lines and areas will require an amended review to evaluate consistency with the ALUCP compatibility criteria, at the discretion of the ALUC Director.

7. Noise attenuation measures shall be incorporated into the design of the office area, to the extent such measures are necessary to ensure that interior noise levels from aircraft operations are at or below 45 CNEL.

8. At least 9.96 acres of ALUC-eligible open areas (at least 75 feet in width and 300 feet in length), as depicted on the Open Space exhibit, shall be kept obstacle and obstruction free per ALUC open area definition (no objects greater than four feet in height with a diameter of four inches or greater).

9. The project does not propose rooftop solar panels at this time. However, if the project were to propose solar rooftop panels in the future, the applicant/developer shall prepare a solar glare study that analyzes glare impacts, and this study shall be reviewed by the Airport Land Use Commission and Riverside County as owner and operator of French Valley Airport. In the event of any reasonable complaint about glare related to aircraft operations, the applicant shall agree to such specific mitigation measures as determined or requested by Riverside County.

10. The Federal Aviation Administration has conducted aeronautical studies of the proposed project (Aeronautical Study Nos. 2023-AWP-1817-OE thru 2023-AWP-1828-OE) and has determined that marking/ lighting of the structures are necessary for aviation safety in accordance with FAA Advisory Circular 70/7460-1 M, Obstruction Marking and Lighting, red lights-Chapter 4, 5, (Red), and 15, and shall be maintained in accordance therewith for the life of the project, unless superseded by subsequent FAA determination(s) in writing.

11. The proposed buildings and site elevations shall not exceed the heights identified in the aeronautical studies.

12. The maximum height and top point elevation specified above shall not be amended without further review by the Airport Land Use Commission and the Federal Aviation Administration; provided, however, that reduction in structure height or elevation shall not require further

review by the Airport Land Use Commission.

13. Temporary construction equipment used during actual construction of the structure(s) shall not exceed the structure heights and site elevations as identified in the aeronautical studies, unless separate notice is provided to the Federal Aviation Administration through the Form 7460-1 process.

14. Within five (5) days after construction of the proposed building reaches its greatest height, FAA Form 7460-2 (Part II), Notice of Actual Construction or Alteration, shall be completed by the project proponent or his/her designee and e-filed with the Federal Aviation Administration. (Go to https://oeaaa.faa.gov for instructions.) This requirement is also applicable in the event the project is abandoned or a decision is made not to construct the applicable structure.

15. Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, shall be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as normal operation is restored, notify the same number.

X:\AIRPORT CASE FILES\Perris Valley\ZAP1028PV23\ZAP1028PV23sr.doc

NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances [can vary from person to person. You may wish to consider what airport annoyances], if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. Business & Professions Code Section 11010 (b)(13)(A)

NOTICE

THERE IS AN AIRPORT NEARBY.

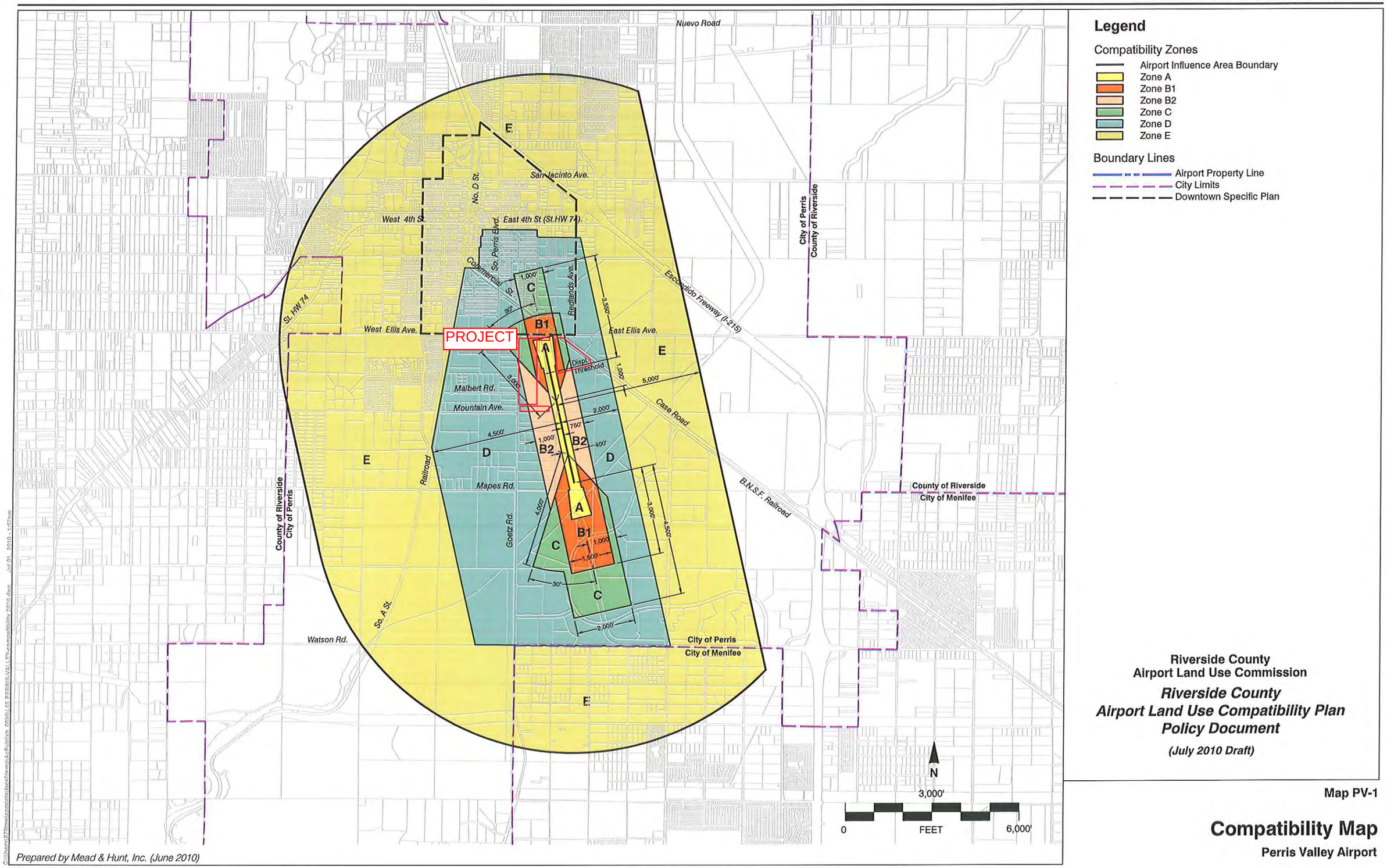
THIS STORM WATER BASIN IS DESIGNED TO HOLD STORM WATER FOR ONLY 48 HOURS AND NOT TO ATTRACT BIRDS

PROPER MAINTENANCE IS NECESSARY TO AVOID BIRD STRIKES

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION ALUC

IF THIS BASIN IS OVERGROWN, PLEASE CONTACT:

Name: _____ Phone: _____



Riverside County
Airport Land Use Commission

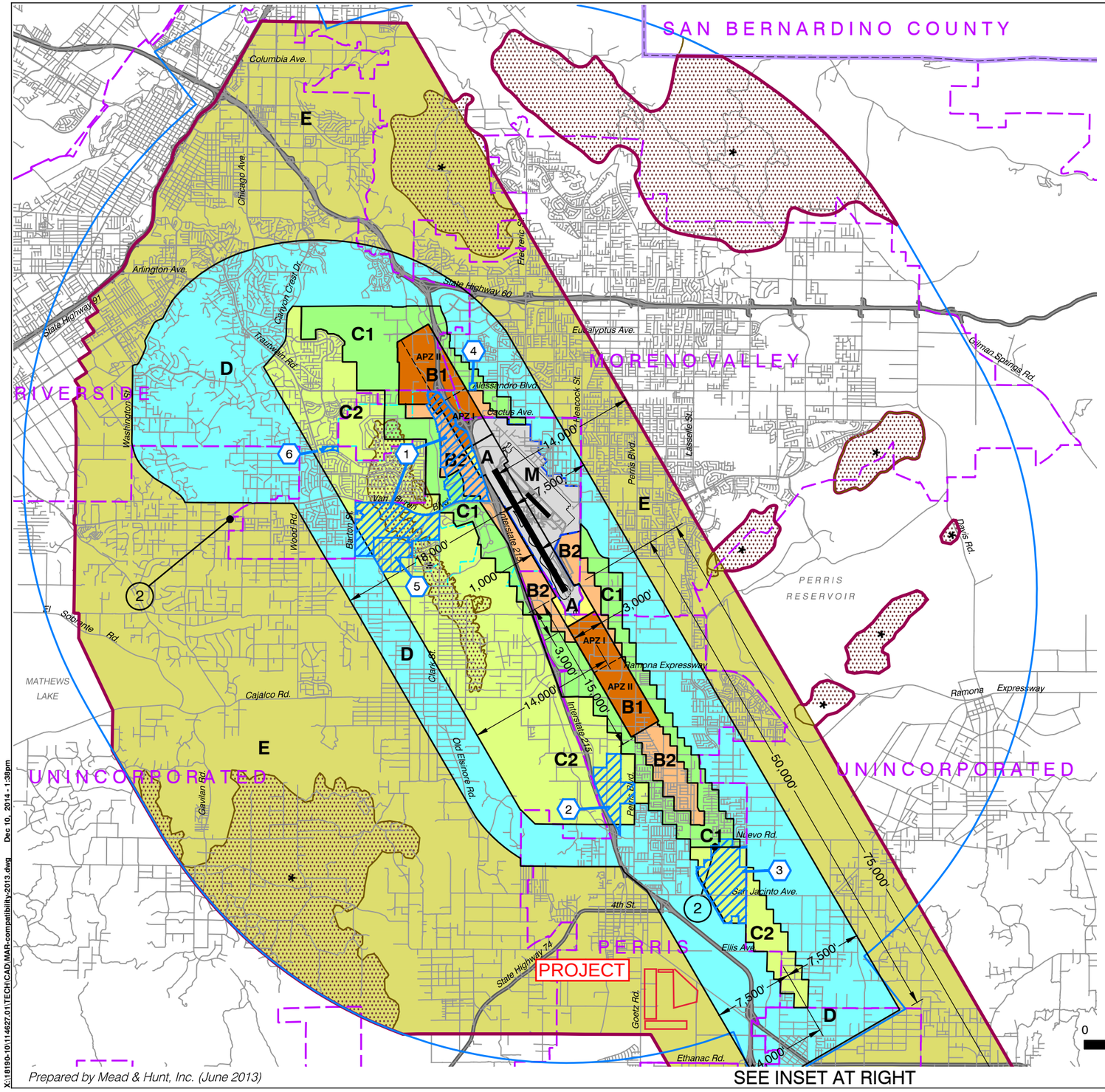
Riverside County
Airport Land Use Compatibility Plan
Policy Document

(July 2010 Draft)

Map PV-1

Compatibility Map

Perris Valley Airport



LEGEND

Compatibility Zones

- Airport Influence Area Boundary
- Zone A
- Zone B1
- Zone B2
- Zone C1
- Zone C2
- Zone D
- Zone E
- Zone M
- High Terrain Zone
- FAR Part 77 Military Outer Horizontal Surface Limits
- FAR Part 77 Notification Area

Boundary Lines

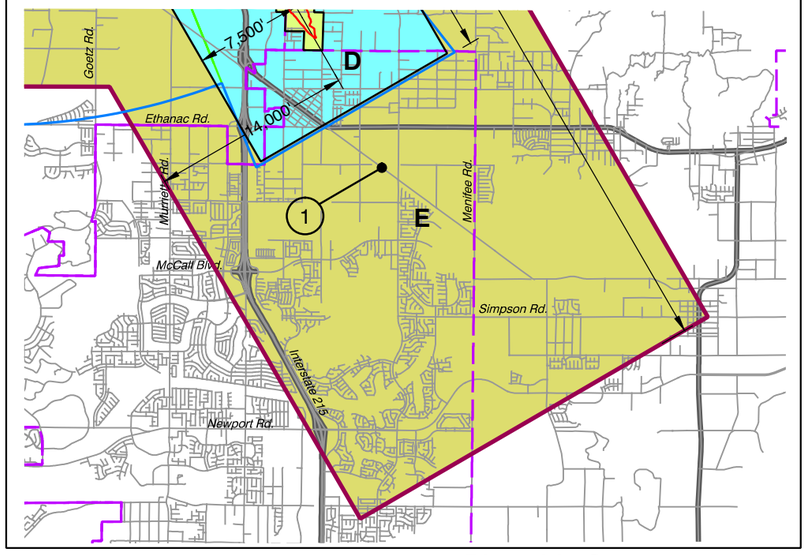
- March Air Reserve Base / Air Force Property
- March Joint Powers Authority Property Line
- County Boundary
- City Limits
- Site-Specific Exceptions (existing local agency commitments to development projects)

1. March JPA: March Business Center/Meridian
2. Perris: Harvest Landing
3. Perris: Park West
4. Moreno Valley: Affordable Housing
5. March JPA: Ben Clark Training Center
6. Riverside: Ridge Crest Subdivision

(1) Point at which aircraft on Runway 32 ILS approach descend below 3,000 feet above runway end. Airport Elevation is 1,535 feet MSL.

(2) Point at which departing aircraft typically reach 3,000 feet above runway end.

INSET



Note:
All dimensions are measured from runway ends and centerlines.

N

0 2 4 MILES

Base map source: County of Riverside 2013

Riverside County
Airport Land Use Commission

March Air Reserve Base / Inland Port Airport
Land Use Compatibility Plan

(Adopted November 13, 2014)

Map MA-1

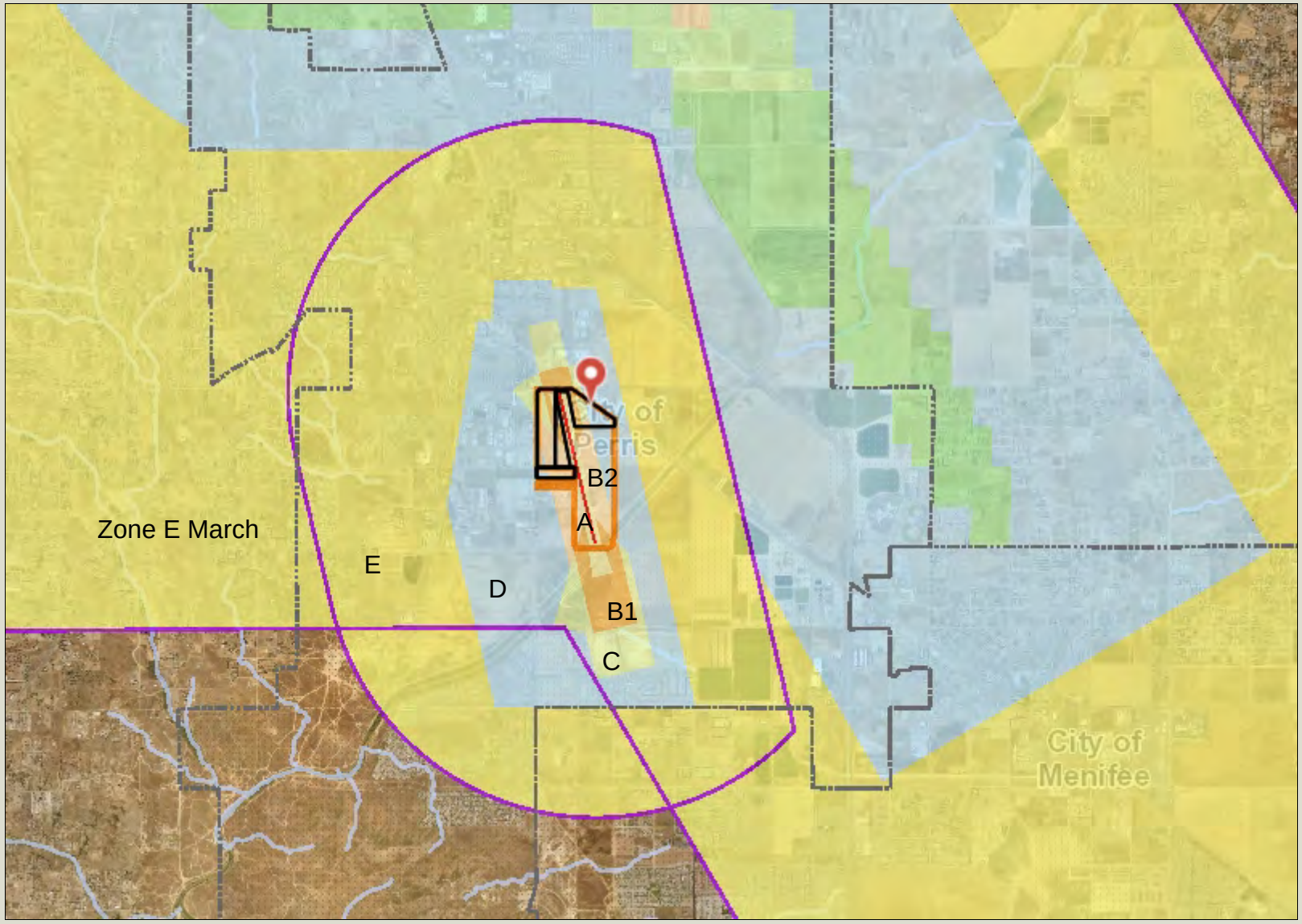
Compatibility Map

March Air Reserve Base / Inland Port Airport

Prepared by Mead & Hunt, Inc. (June 2013)

X:\18190-10\114627.01\TECH\CAD\MAR-compatibility2013.dwg Dec 10, 2014 - 1:38pm

Map My County Map



Legend

- Runways
- Airports
- Airport Influence Areas
- Airport Compatibility Zones
  - OTHER COMPATIBILITY ZONE
  - A
  - A-EXC1
  - B1
  - B1-APZ I
  - B1-APZ I-EXC1
  - B1-APZ II
  - B1-APZ II-EXC1
  - B1-EXC1
  - B2
  - B2-EXC1
  - C
  - C1
  - C1-EXC1
  - C1-EXC3
  - C1-EXC4
  - C1-HIGHT
  - C2
  - C2-EXC1
  - C2-EXC2
  - C2-EXC3
  - C2-EXC5
  - C2-EXC6

RCIT

0 6,157 12,314 Feet

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Notes

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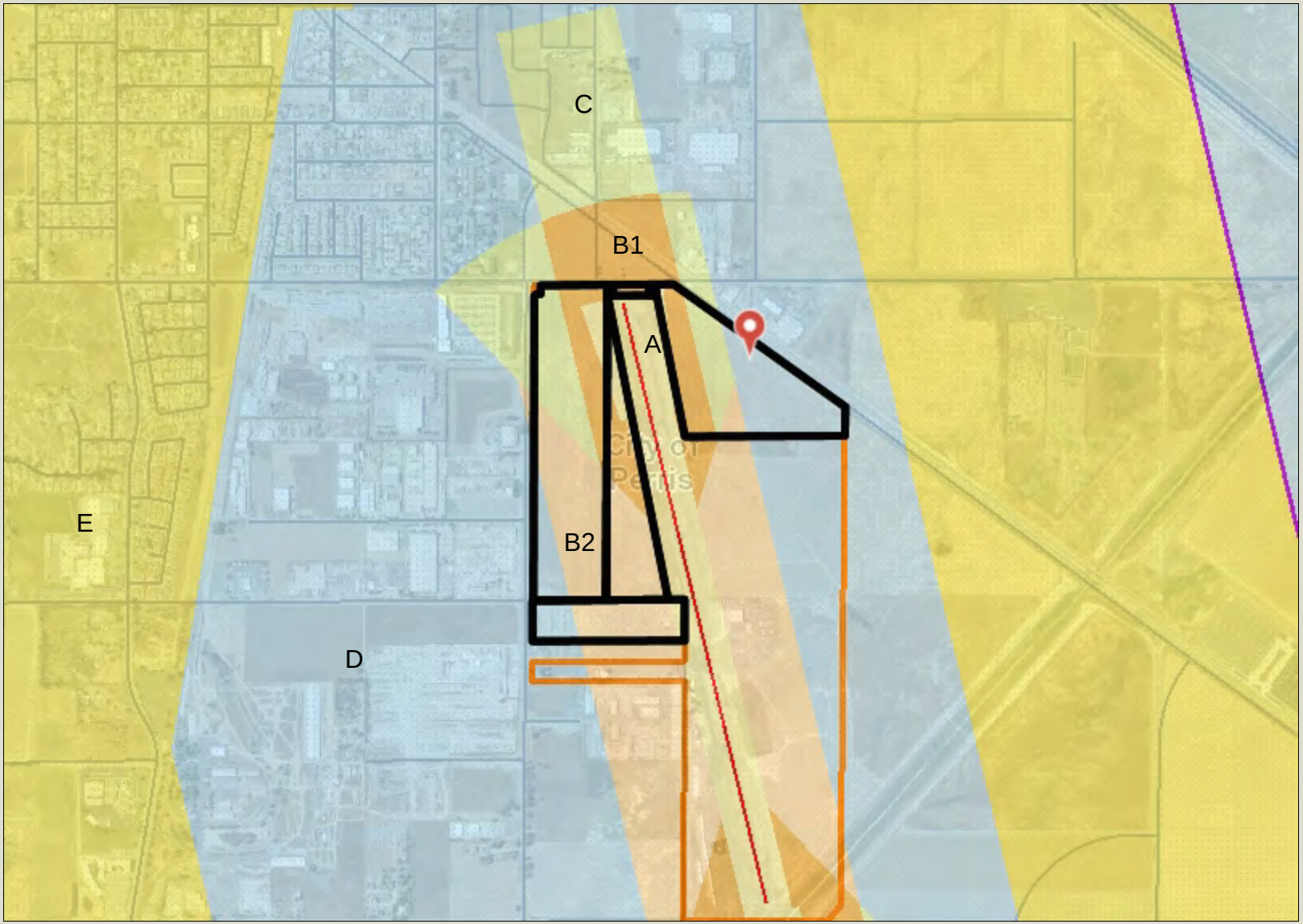

Legend

- Runways
- Airports
- Airport Influence Areas
- Airport Compatibility Zones
  - OTHER COMPATIBILITY ZONE
  - A
  - A-EXC1
  - B1
  - B1-APZ I
  - B1-APZ I-EXC1
  - B1-APZ II
  - B1-APZ II-EXC1
  - B1-EXC1
  - B2
  - B2-EXC1
  - C
  - C1
  - C1-EXC1
  - C1-EXC3
  - C1-EXC4
  - C1-HIGHT
  - C2
  - C2-EXC1
  - C2-EXC2
  - C2-EXC3
  - C2-EXC5
  - C2-EXC6

0 1,539 3,079 Feet

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Notes

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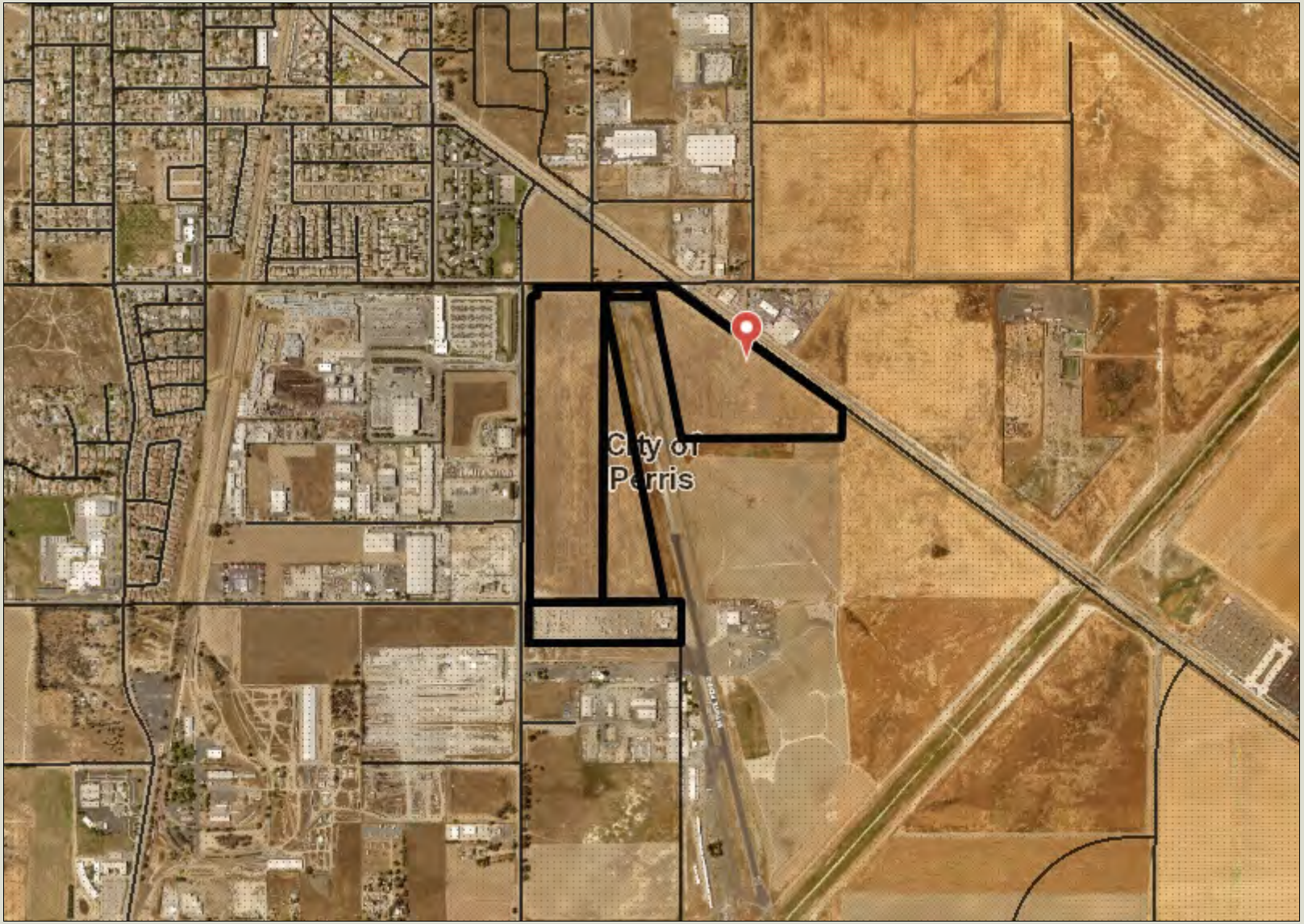

Legend

- County Centerline Names
- County Centerlines
- Blueline Streams
- City Areas
- World Street Map

0 1,539 3,079 Feet

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Notes

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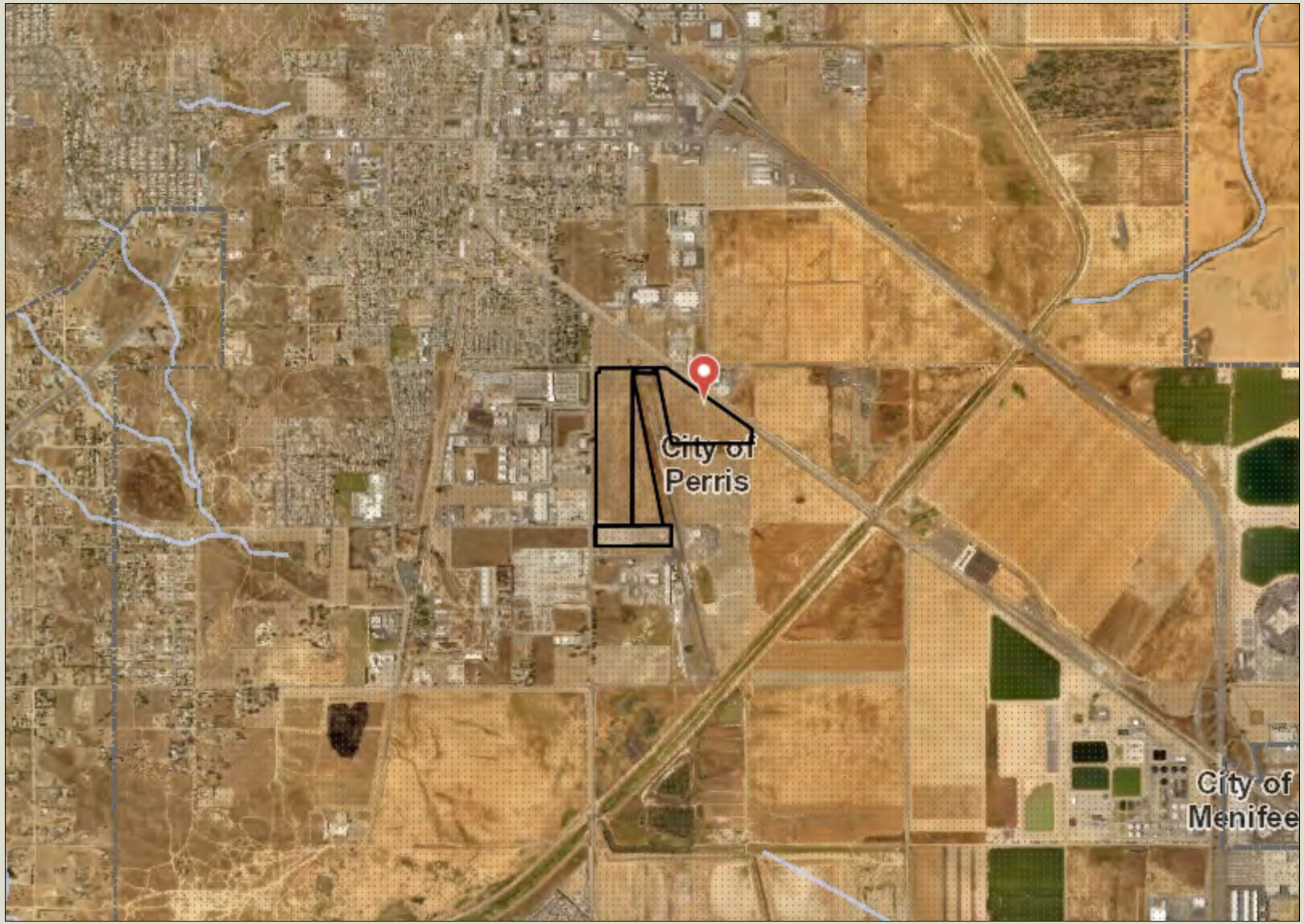

Legend

- Blueline Streams
- City Areas
- World Street Map

0 3,079 6,157 Feet

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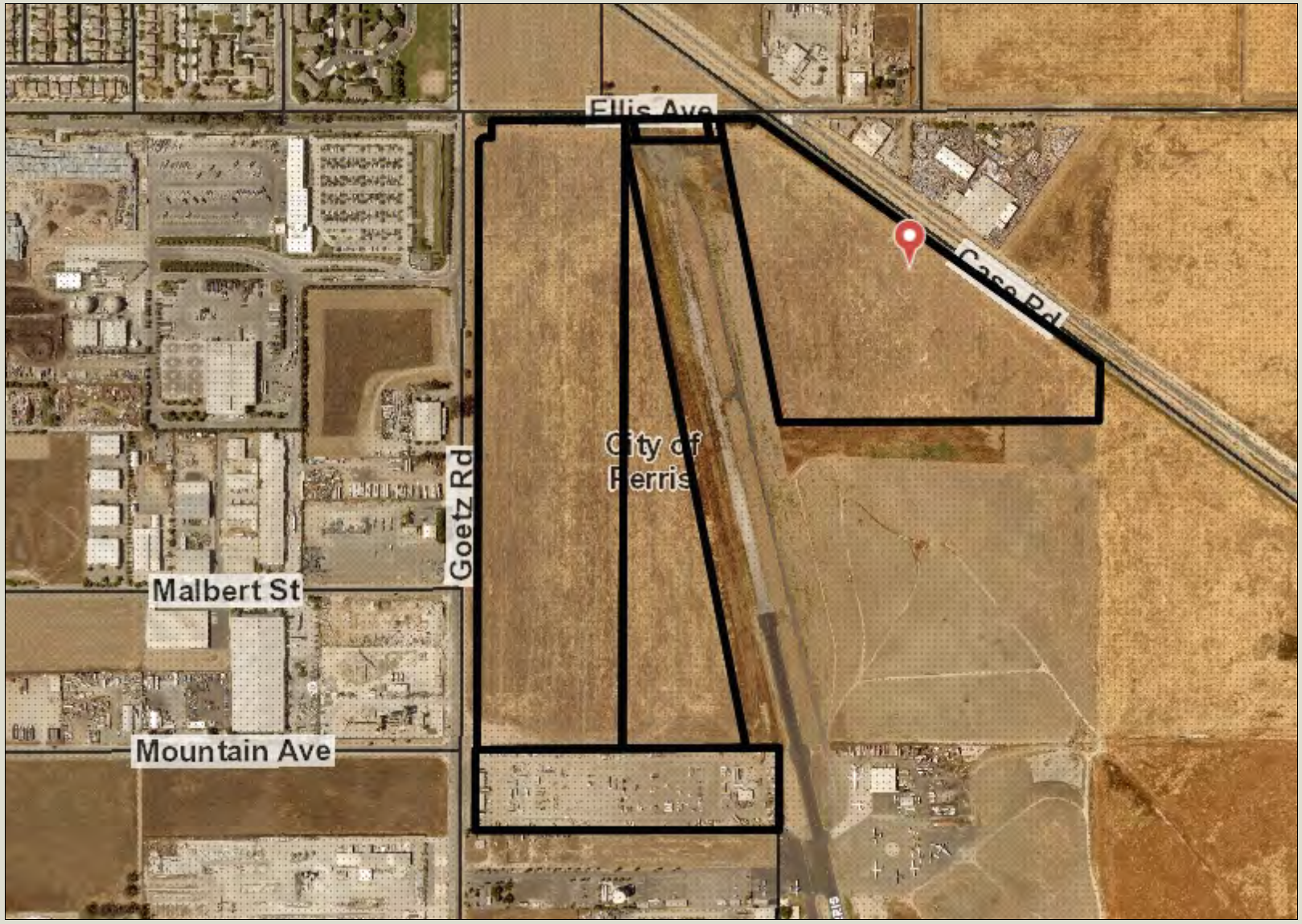

Legend

- County Centerline Names
- County Centerlines
- Blueline Streams
- City Areas
- World Street Map

0 770 1,539 Feet

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REPORT PRINTED ON... 1/30/2023 10:22:49 AM

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Notes

Perris Valley Airport

2091 Goetz RD.

Perris, California 92570

Ph. 951-657-3904

Cell 951-203-5668

May 5, 2023

City of Perris

Planning Department

At n: Mr. Nathan Perez

The Proposed Project:

This is regarding the proposed Perris Airport Industrial Project the project consists of the following I believe six APNs 330-090-031,-033,-034,-036,-038,-040.

This project is bounded by Goetz Rd. to the West, Ellis Rd. to the North, Case Rd. to the East and is bisected by the Perris Valley Airport. This project literally wraps around the Perris Airport Runway and Parachute landing zones. This proposed project will be in what was a property we leased for over 40 years for the sole purpose of a parachute landing area.

Airport Background:

As I'm sure you know the Perris Valley Airport was first certified as the city Perris Valley Airport in 1933. The airport has been an FAA approved parachute drop zone since 1962. The airport is zoned Public and operated as such. The Conatser family has owned and operated the airport since 1976. The Perris Valley Airport today is most likely the largest and busiest parachute drop zone in the world. We currently have numerous military contracts training pret y much all NATO militaries including many units of our own.

Potential Public Safety Issues:

We do approximately 120,000 +/- jumps annually, that means over 100,00 times a year people and equipment will be in the air at 130 mph directly over or near this proposed project site. There are many public safety concerns for not only the skydiver but the people inside the proposed structures. A few of the factors that are potential hazards are the physical Size of these proposed structures. The sheer size alone will have a change in the natural microclimate surrounding the airport. The mechanical turbulence off these huge structures potentially

effecting not only the of safe flying aircraft but the safe landing of parachutes. Parachutes do not have the ability to power up and go around like an airplane. If a parachute hits wind turbulence/ mechanical turbulence and it's strong enough it can just collapse the parachute. There are many other potential safety factors if an off target landing occurs, and it does happen. The proposed project is directly adjacent to one of our primary Military Landing Areas. Physical hazards like light standards, fences, vehicle parking, all being a safety hazard if hit. Then there is the mechanical turbulence off those structures as well. As you can see heights and distances from the runway and the parachute landing areas are critical for Public Safety.

Recent Developments:

We at the airport try and stay informed and in front of the local surrounding projects to maintain the safety of the airport operation as a whole and have done so for almost 50 years. We at end any City or ALUC meetings to ascertain the potential impacts of any proposed construction. Last week I was notified that the Federal Aviation Administration conducted and concluded a site study regarding the safety of navigation regarding this proposed project. A "Determination of No Hazard to Air Navigation" was found, not sure really what that means. The study was supposed to be open for public comment yet we at the airport were Never contacted or notified so we had no input in the determination. I spoke to Mr. Dan Shoemaker of the obstruction evaluation group and he said" there was no opposing public comment so they approved it". Hard for me to believe as the proposed structures exceed the federal standards by as much as 26 feet in one case??? In my mind these studies were done very poorly without looking at actual data and public safety concerns. The OE/AA report numbers are as follows 2023-AWP-1818-OE through 2023-1828 inclusive. The ALUC review of this project is currently scheduled for July 13, 2023. We will be there on record opposing the proposed project as proposed.

Our opinion:

The project will be a Safety to the Public issue that will more than likely kill or injure the Public in the air and or on the ground if it is built as planned.

As long as we are here and this is the Perris Valley Airport we will continue to fight for the City's Airport.

For the record we at the airport are adamantly opposed to this project for Safety of the Public concerns.

Your help in these mat ers is always appreciated.

Patrick Conatser Melanie Conatser

Perris Valley Airport

From:	skydiveperrispat@aol.com
To:	guerin060872@outlook.com; Rull, Paul; Vega, Jaqueline
Subject:	Re: L65 Perris Valley AirportFAA OEAAA Study 2023-AWP-1817-OE thru 1828 OE Inclusive
Date:	Tuesday, May 9, 2023 9:57:20 AM
Attachments:	Proposed Perris Airport Industrial Letter R1.docx

CAUTION: This email originated externally from the **Riverside County** email system. **DO NOT** click links or open attachments unless you recognize the sender and know the content is safe.

Mr. Guerin, Mr. Rull, Mrs. Vega, We had a meeting with the City of Peris Planning yesterday and I'm attaching a letter we provided. I'm forwarding it to you as delivered but if you like I can send one directed to you in this regard. Your attention is always appreciated. Pat Conatser Perris Valley Airport 951-203-5668 anytime

-----Original Message-----
From: skydiveperrispat@aol.com
To: guerin060872@outlook.com <guerin060872@outlook.com>; prull@rivco.org <prull@rivco.org>; javega@rivco.org <javega@rivco.org>
Sent: Thu, May 4, 2023 10:31 am
Subject: L65 Perris Valley AirportFAA OEAAA Study 2023-AWP-1817-OE thru 1828 OE Inclusive

Hi John, Paul and Jackie, This is regarding FAA studies 2023-AWP-1817-OE thru 1823-OE inclusive. I just received notice last Friday April 28th that these studies were done by the FAA without any input from anyone at L65. Thes studies came up with a "Determination of No Hazard to Air Navigation" ?? They clearly show in at least four locations that the proposed structures exceed the 7 to 1 by as much as 27 feet, crazy in my mind. These proposed huge structures, close to one million square feet and 1/3 of a mile long Will affect the microclimate of the airport. Adjacent to main parachute landing areas and the whole North end of runway 15. I have personal experience of mechanical turbulence and the effect on airplanes let alone unpowered parachutes. I just about got killed in an airplane at Perris from a rotor off of a 100'x100' X 32' high building that was out of the 7 to 1, fraction of the size destroyed the airplane. I know this project has been pushed back a few times and I understand it will come back to you on July 13th 2023. I definitely would like to be there for that, we at the Perris Valley Airport are adamantly opposed to the project as proposed. I know in the past we have been opposed to and modified local projects for public safety reasons, but this project Will kill people, Skydivers and Pilots. Yor help is always appreciated.

Patrick Conatser
Perris Valley Airport Owner/ Manager
2091 Goetz Rd. Perris, CA. 92570
my cell 951-203-5668 anytime

Rull, Paul

From: skydiveperrispat@aol.com
Sent: Thursday, February 16, 2023 11:10 AM
To: Rull, Paul
Cc: melanie@skydiveperris.com
Subject: Re: ZAP1028PV23 ALUC project

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Hi Paul, after a quick review of the proposed project this is what I'm seeing. As you probably figured we at the airport are Opposed to the project as a whole for many safety concerns. Safety concerns for all of these reasons and probably more: First safety of aircraft landing and departing with such a Large wall of building adjacent to the runway causing potential mechanical turbulence. This mechanical turbulence effecting not only airplanes but parachutists landing in adjacent field drop zone landing areas. Mechanical turbulence causes not only airplanes to crash but parachutes to collapse and potentially kill people. Second this proposed building or buildings are located directly in the world's largest parachute drop zone. Persons and property being dropped day and night directly over, potentially causing damage or injury/fatalities to persons within these structures. 120,000 to 130,000 drops annually on an average. Third it appears from the site plan that the RPZ for runway 15 is encroached with parking and potentially lighting and light poles. Based upon uses his project will have parked truck and trailers that will end up close to 14' high. Fourth and I'm sure not last is the basins located adjacent to the runway, we already have a bird problem and I'm thinking this will make it worse. In a nutshell it's the sheer size of the project with heights close to 50' changing historic wind and thermal patterns that really scare me. I'm sure you have heard these concerns from me on other projects but this one is literally on the airport. I also know you are aware we are The Perris Valley Public Airport and are open to the public and licensed as such although privately owned. Your help and attention is always appreciated. Pat Conatser 951-203-5668 anytime

-----Original Message-----
From: Patrick Conatser <skydiveperrispat@aol.com>
To: Rull, Paul <PRull@rivco.org>
Cc: melanie@skydiveperris.com
Sent: Tue, Jan 31, 2023 1:21 pm
Subject: Re: ZAP1028PV23 ALUC project

Thank you Paul we will see you there! Pat Conatser 951-203-5668 anytime

Sent from my iPhone

On Jan 31, 2023, at 9:23 AM, Rull, Paul <PRull@rivco.org> wrote:

Good Morning Pat and Melanie,

I wanted to inform you that the ALUC has received the Perris Valley Airport Industrial Project and is reviewing the project for a tentative public hearing meeting date of March 9 (which you will get an official notice). The project is located within Airport Zones A , B1, B2, C, and D and I have attached the project's site plan and project description.

If you have any questions, please feel free to contact me.

Paul Rull
ALUC Director

Rull, Paul

From: Dan Brodsky-Chenfeld <danbc@skydiveperris.com>
Sent: Monday, March 6, 2023 2:52 PM
To: Rull, Paul
Subject: RE: ZAP1028PV23 ALUC project

CAUTION: This email originated externally from the **Riverside County** email system. **DO NOT** click links or open attachments unless you recognize the sender and know the content is safe.

Hello Mr. Rull,

My name is Dan Brodsky-Chenfeld. Please allow me to give you a little background about myself. I have been the Manager of Skydive Perris for the last 20 years. In addition to my long history in Perris I have a degree in Aviation from the Ohio State University. I am a Single and Multi Engine Pilot, and FAA Parachute Rigger and United States Parachute Association Safety and Training advisor. I have been skydiving for 43 years, have over 30,000 jumps and am considered and international expert in the sport especially in regard to skydiving safety. Over the last few months I have done safety seminars at both the US and European Parachute Industry Symposiums.

It is my opinion that the Perris Valley Airport Industrial Project will negatively impact safety at the Perris Airport. A building that large, both vertically and horizontally, will inevitably cause significantly increased turbulence on the runway and parachute landing areas. This turbulence can make landing at the airport hazardous for both light airplanes and skydivers. In doing so greatly reducing both our usable landing area and the range of wind conditions we will be comfortable operating in. Not to mention the parking lot being proposed in the north corner.

Skydive Perris is arguably the largest skydiving center in the world. We are uniquely set up as a training facility for international military groups and to host large skydiving events. We often do jumps with over 200 skydivers at a time. One of the reasons Skydive Perris is chosen as the host for these groups and events is because we have a large open area on and surrounding the airport. This allows hundreds of jumpers the safe space to land at the same time. We have this while also being nicely tucked into the highly developed Inland Empire. Other skydiving centers who can host the same groups and events are deep in the desert in the middle of nowhere. Skydivers and military groups don't want to travel to the middle of nowhere.

The negative impact the Perris Valley Airport Industrial Project would have on the airport could limit the size and frequency of groups and events we host at Perris. This would not only negatively impact our business. This will have a negative impact on the local economy as literally the thousands of people who travel from around the world to Perris with these military groups and for these events may no longer do so.

The buildings and lots as proposed will at times create unsafe wind conditions and will always limit potential landing areas. Anything that can be done to reduce the height and coverage of both of these would be a benefit. Not building them at all would be ideal.

Thank you for your time and consideration.

Dan Brodsky-Chenfeld

Rull, Paul

From: andy witcomb <andy@skydiveperris.com>
Sent: Tuesday, March 7, 2023 5:35 PM
To: Rull, Paul
Subject: Aluc L65
Attachments: winmail.dat

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Hello Sir,

I wonder if you could help me. I wasn't sure of the correct channels to comment on the above Project being reviewed on Thursday 9 March 2023. My apologies, if this is the incorrect method. I look after the Military and Government Groups that currently train at L65. We are privileged to be selected by these groups for essential training. They have the choice of anywhere in the United States and select our location to train and our community to invest in.

I read the documents with interest and are concerned about the impact it may have. The study seems to focus on the effects on Aircraft operations and the FAA guidance. There are some comments relating to 'safety and over flights', but as a formal recognized aviation activity, under Federal Aviation Regulation Pt 105, parachuting and parachutists routinely (sometimes several times a day) overfly the subject area at relatively lower altitudes. Reducing the surrounding area footprint, placing large structures and increasing the likely hood of turbulence, will have a negative impact on our essential training and the safety, of all personnel on the ground and in the air.

It surprised me that the aviation activity under FAR Pt 105 wasn't mentioned and I wondered if I could politely ask for consideration in this important matter. The safety of all is paramount, parachuting is just one facet of aviation, but I felt the need to highlight my concerns.

Very Respectfully

Andy Witcomb

cid:15B772D8-6F6D-472C-A66B-EE3C036718AD

Technical Memorandum

To: Philip Cyburt, CH Realty Partners, LLC
From: Nick Johnson, Johnson Aviation, Inc.
Date: May 29, 2023

Subject: **Response to Comments, Riverside County ALUC - Perris Valley Airport Industrial Project**

Purpose

The Riverside County Airport Land Use Commission (ALUC) staff and City of Perris ("City") Planning Department staff received comments related to the Perris Valley Airport Industrial Project ("Project") in response to ALUC staff emailing a copy of the Project site plan and Project description to the owners/operators of the Perris Valley Airport (L65 or "Airport") and Skydive Perris. The purpose of this technical memorandum is to provide responses to the comments received by ALUC. Comments in each of the email messages sent to the ALUC are parsed to directly address the subject of each comment offered. The full comments are provided for reference as Exhibits A through E to this memo.

Background

The Project is a proposed industrial use, with two warehouse buildings and a trailer storage yard, located in the City and within the Airport Influence Area (AIA) of the Airport and March Air Reserve Base/Inland Port Airport (MARB/IPA). The Project site is compatible with the City's existing Light Industrial zoning. Allowed Light Industrial uses include limited assembly and packaging operations, self-storage warehouses, distribution centers, and business-to-business retail operations. An Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA) is currently in preparation for the Project. That study will fully address the environmental impacts of the Project including health and safety issues and hazards impacts raised in the comments to the ALUC.

An airport land use compatibility assessment was completed for the Project based on the adopted Perris Valley Airport Land Use Compatibility Plan (ALUCP) and other relevant documents for the Airport, which consider the compatibility concerns of aircraft noise, safety, overflight, and airspace protection. The Project site is within ALUCP Safety Compatibility Zones A through D. The warehouses, trailer storage, employee parking, and retention basins are specifically in Zones B1 through D. The assessment found the Project compatible within Zones B1 through D and consistent with the development criteria in the ALUCP. The assessment also found the Project compatible within the MARB/IP ALUCP Zone E.

Review of the Project by ALUC was documented in a draft staff report prepared for the July 13, 2023 Project hearing date and recommends a finding of CONDITIONALLY CONSISTENT with the 2011 Perris Valley Airport Land Use Compatibility Plan and the 2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan. This finding is subject to the conditions included therein, and such additional conditions as may be required by the Federal Aviation Administration (FAA).

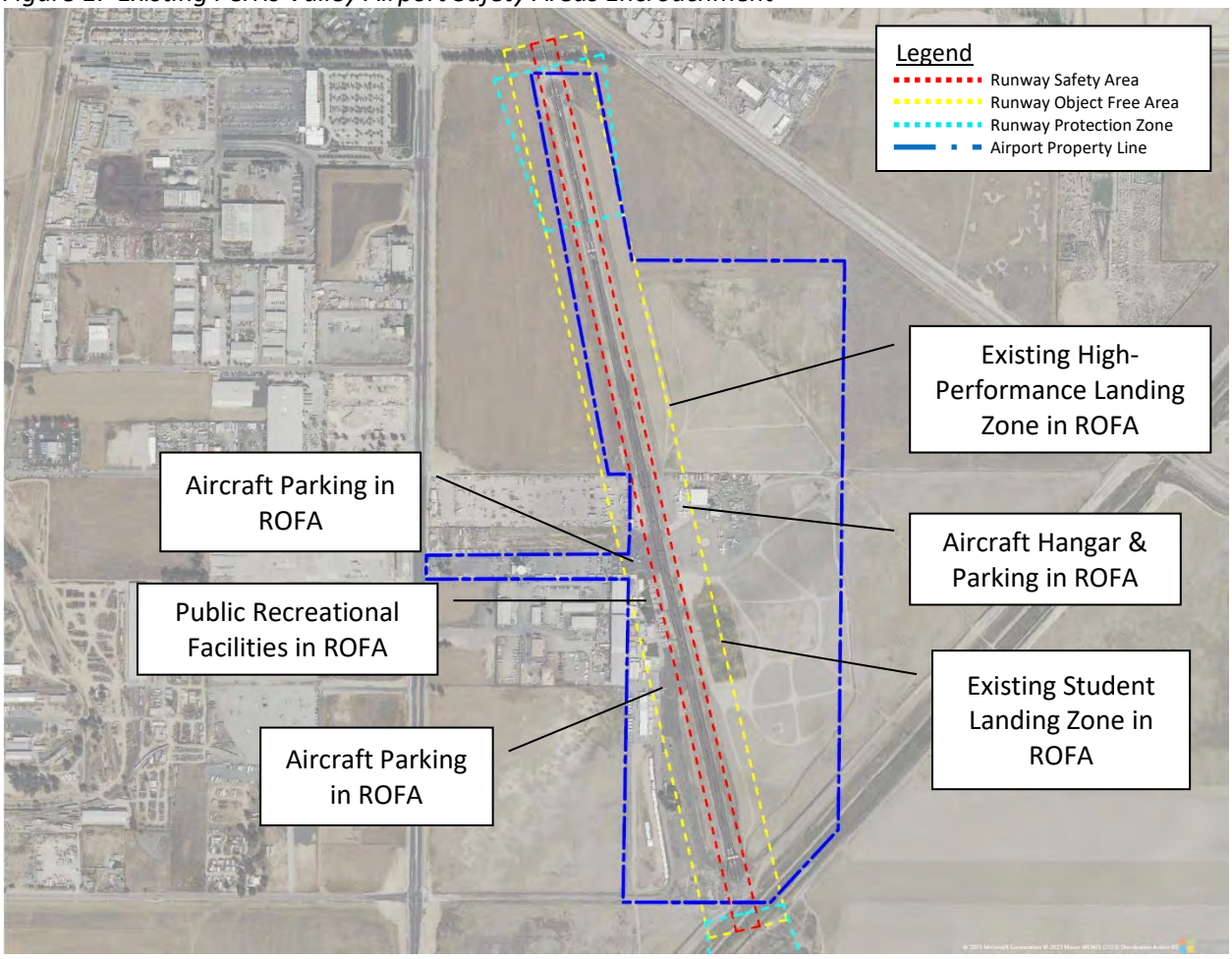
The FAA completed an aeronautical study of the Project buildings and issued Determinations of No Hazard to Air Navigation associated with the proposed location and heights of the buildings on April 19, 2023.

The Airport and all its facilities are owned and operated by the Conatser Family ("Conatsers"). They are responsible for the location and use of the Airport facilities on their property as a public use airport (available for use by the general public without a requirement for prior approval of the owner or

operator) (See Figure 1). The Airport has a landing permit issued by the State of California[1], Division of Aeronautics and Notice to the FAA[2] that the Airport is open and available to the public. Both the FAA and the State require that the Airport be operated and maintained to meet the basic runway safety area standards for airport design. There are three primary safety areas associated with the FAA's Airport Design[3] standards that provide critical separation distances from runways to on- and off-airport land uses. These include the Runway Safety Area (RSA), Runway Object Free Area (ROFA) and Runway Protection Zone (RPZ). These setback distances associated with these safety areas correspond to the size and speed of the aircraft that regularly use the runway. The current aircraft hangars, aircraft parking areas, public assembly areas, restaurant, recreational facilities, automobile parking, fences, trees, parachute landing zones on the Airport do not meet these basic safety setback standards (See Figure 1).

[1] California Department of Transportation, Division of Aeronautics, Corrected Airport Permit No. RIV-020, Pursuant to California Public Utilities Code, Section 21662, August 22, 2011. The most recent State permit compliance inspection was conducted on May 18, 2022 and corrective action was issued on June 7, 2022.
[2] 14 CFR Part 157, Notice of Construction, Alteration, Activation and Deactivation of Airports, https://www.govinfo.gov/content/pkg/CFR-2013-title14-vol3/xml/CFR-2013-title14-vol3-part157.xml
[3] Advisory Circular 150/5300-13B, *Airport Design*, issued March 31, 2022, available at, https://www.faa.gov/airports/resources/advisory_circulars/index.cfm/go/document.current/documentnumber/150_5300-13

Figure 1: Existing Perris Valley Airport Safety Areas Encroachment



The Project has been designed to comply with FAA Airport Design standards with building setbacks, entrance road locations, truck parking, trailer storage, fence lines, storm water quality basins, and security lighting (See Figure 2). These facilities are also positioned to exceed FAA and United States Parachute Association (USPA) landing zone setback guidelines to avoid conflicts with parachute operations and parachute landing zones associated with the Skydive Perris operation. The existing Airport facilities and parachute land zone locations do not meet the FAA and USPA safety setbacks as depicted in Figures 2, 3 and 4.

Figure 2: Proposed Project Consistent with Perris Valley Airport Safety Areas

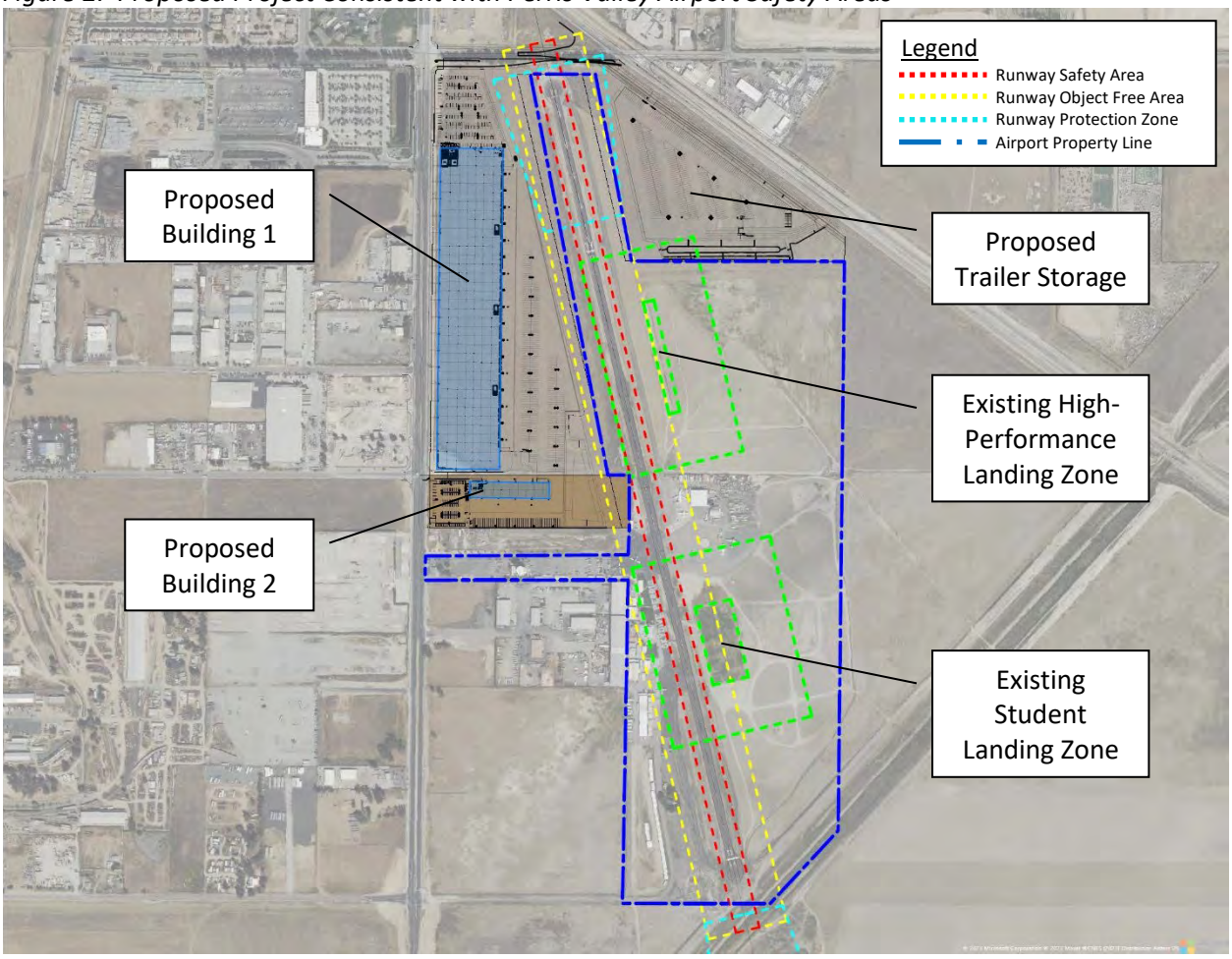


Figure 3: Comparison of Existing Airport Facilities to Proposed Project Facilities

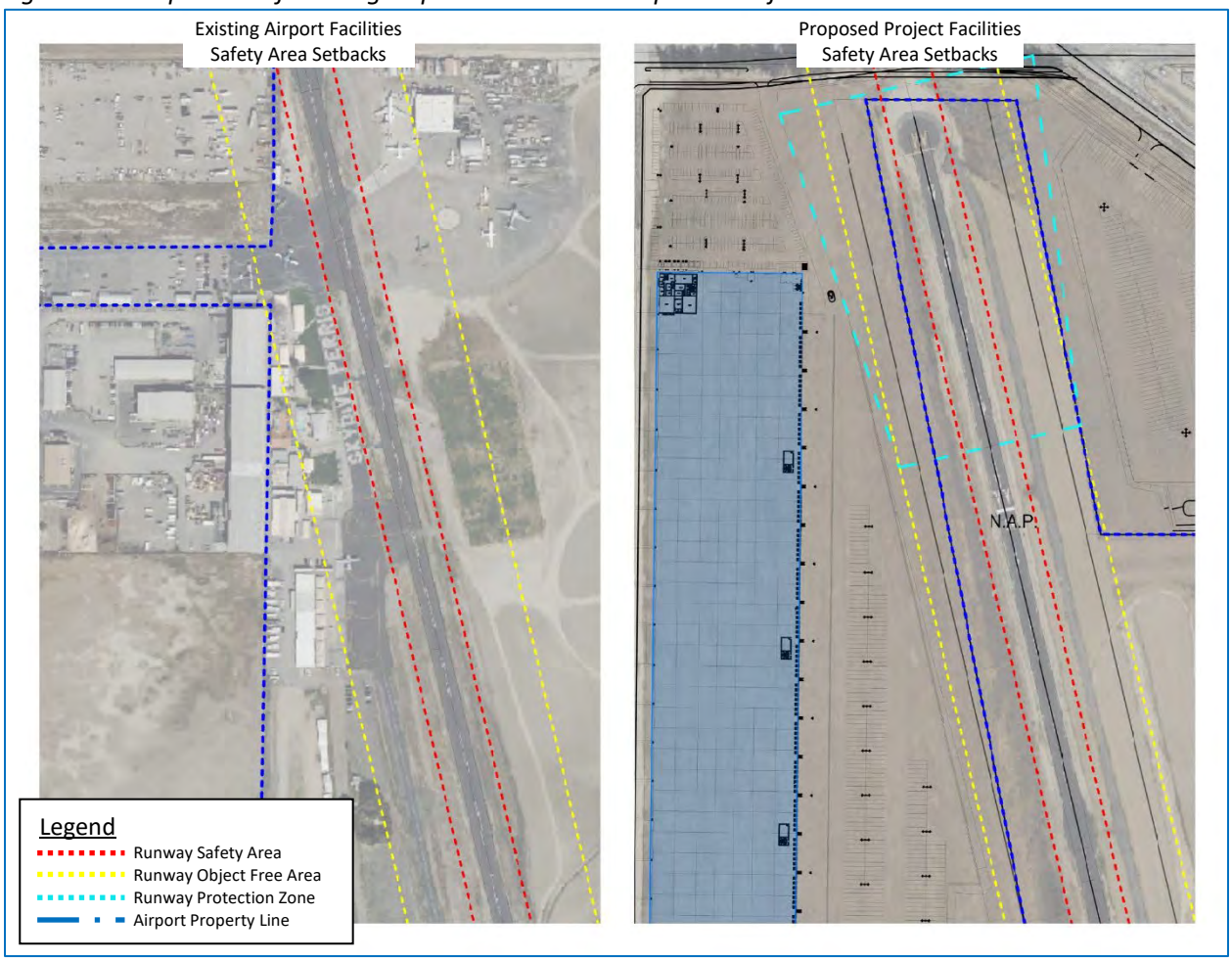
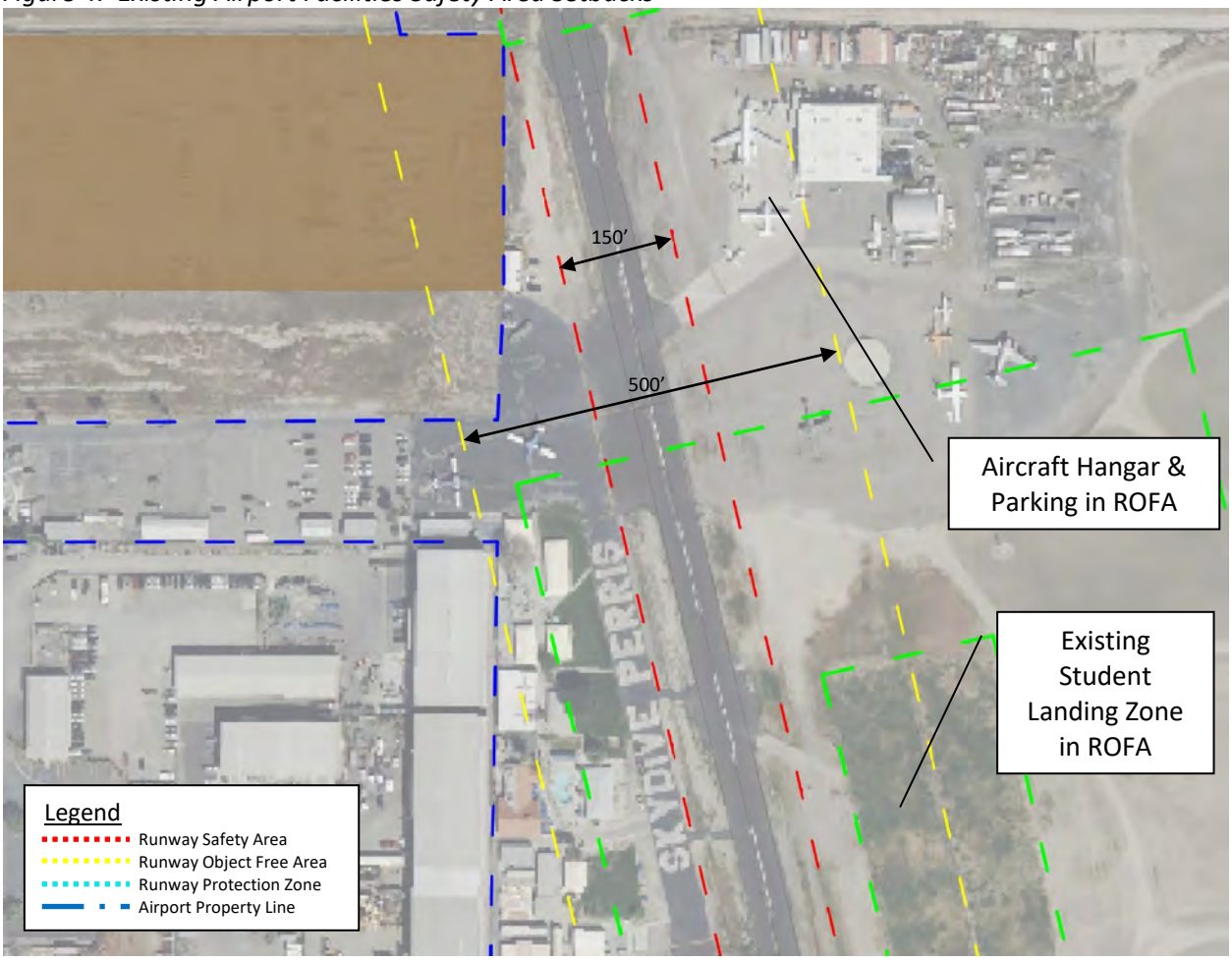


Figure 4: Existing Airport Facilities Safety Area Setbacks



Response to Comments

The following comments and responses are parsed by letter and by subject. Each comment reference corresponds to the letter received and the sequential comments raised in each letter.

Email to ALUC Staff on February 16, 2023 (See Exhibit A)

Comment A1. "First safety of aircraft landing and departing with such a large wall of building adjacent to the runway causing potential mechanical turbulence."

Response A1. The commenter provides no study or report data that supports the assertion in the comment. Pilots encounter mechanical turbulence, which is caused by the friction between air and ground from terrain and built structures that cause eddies and associated turbulence close to the ground. The intensity of this turbulence is proportional to the wind speed, the nature of the surface and the stability of the air mass. Generally, the surface winds need to be 20 knots or greater to create significant turbulence. Pilots train to recognize and prepare for wind variability when taking off and landing. Aircraft are also rated by the FAA and manufacturer for demonstrated crosswind capability and individual pilots train for their own crosswind proficiency.

Aircraft land and takeoff using the runway best aligned into the direction of the prevailing wind. The Project's proposed buildings would be located on the west side of Runway 15/33 and north of the runway midpoint. When winds are from the west or northwest, aircraft arriving and departing the Airport will be using Runway 33 toward the north/northwest. With 5,100 feet of runway length, aircraft in the Skydive Perris fleet have the performance to take off and land over a 50-foot obstacle within the first third of the runway length (approximately 1,700 feet or less). This allows them to operate currently without encountering surface wind mechanical turbulence from their own existing buildings and facilities and immediately adjacent shop buildings that are located west of the runway centerline and south of the runway midpoint. Also, the proposed buildings are set back from the runway by more than 500 feet from the runway to clear the effective distance of wind over a 50-foot obstacle when winds exceed 20 knots (23 miles per hour). When winds are from the south or southeast, aircraft arriving and departing the Airport will be using Runway 15 toward the south/southeast. The Project's proposed buildings would be downwind from the runway and of no consequence to the operation. However, Skydive Perris' existing hangars east of the runway at midfield will continue to interrupt wind flows over the runway and potentially cause mechanical turbulence.

The Project also meets or exceeds the FAA Airport Design Standards for Airports. The Project facilities are being designed to comply with the FAA's Runway Safety Area (RSA), Runway Object Free Area (ROFA), and Runway Protection Zone (RPZ) setbacks and the building heights are designed to comply with federal airspace protection regulations[4]. These design standards comply with the FAA's airport design standards and substantially exceed the existing conditions under which the Airport and its various facilities, aircraft parking locations, aircraft fueling and aircraft operations are currently maintained by the Airport Owners and operators.

Therefore, the proposed Project buildings would be in a location where they would not cause mechanical turbulence for aircraft operations to and from the Airport runway. These proposed Project buildings are designed to comply with FAA Airport design standards for setback from the runway. However, existing facilities owned and operated by the Airport owners would remain in locations that could cause mechanical turbulence for their own aircraft operations and those of the general public due to the public-use status of the Airport.

Comment A2. This mechanical turbulence [a]ffecting not only airplanes but parachutists landing in adjacent field drop zone landing areas.

Response A2. The commenter provides no study or report data that supports the assertion in the comment. Skydive Perris has two designated parachute landing areas that are located more than 500 feet from the proposed Project buildings and proposed Project trailer storage yard. The identified landing areas for both students and "high-performance" landings are located on the east side of the runway centerline. The proposed Project buildings are on the west side of the runway centerline and the proposed trailer storage lot is located north of the "high-performance" landing zone (See Figure 3).

FAA AC 150/105-2E, Sport Parachuting, provides suggestions to improve sport parachuting safety, and disseminates information to assist all parties associated with sport parachuting to be conducted in compliance with Title 14 of CFR Part 105. Section 5, Skydiver Safety, (f), Parachute Landing Area. This recommendation states: "The FAA recommends that areas used as parachute landing areas remain

[4] 14 CFR Part 77, *Safe, Efficient Use and Preservation of the Navigable Airspace*, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-E/part-77

unobstructed, with sufficient minimum radial distances to the nearest hazard." The guidelines in the United States Parachute Association (USPA) Basic Safety Requirements (BSR)[5] provide an industry measure for determining the adequacy of the landing area.

The USPA BSRs state the following with regard to drop zone requirements:

> J. Drop Zone Requirements - Areas used for skydiving should be unobstructed, with the following minimum radial distances to the nearest hazard:
>
> Solo students and A-license holders—330 feet
>
> B- and C-license holders and all tandem skydives—165 feet
>
> D-license holders—40 feet

The proposed Project buildings and trailer storage lot are more than 500 feet from the student landing area and the high-performance landing area and therefore would exceed skydiving industry standards for landing area clearing and setbacks and thereby avoid the potential for mechanical turbulence effects on skydiving operations. However, existing facilities owned and operated by the Skydive Perris owners would remain in locations that could cause mechanical turbulence from their own facilities, aircraft parking areas, runway, RSA and ROFA in proximity to the student landing area.

[5] Skydiver's Information Manual, Section 2: Basic Safety Requirements and Waivers, https://www.uspa.org/SIM/2

Figure 5: Skydive Perris High Performance Parachute Landing Zone and Project Setbacks

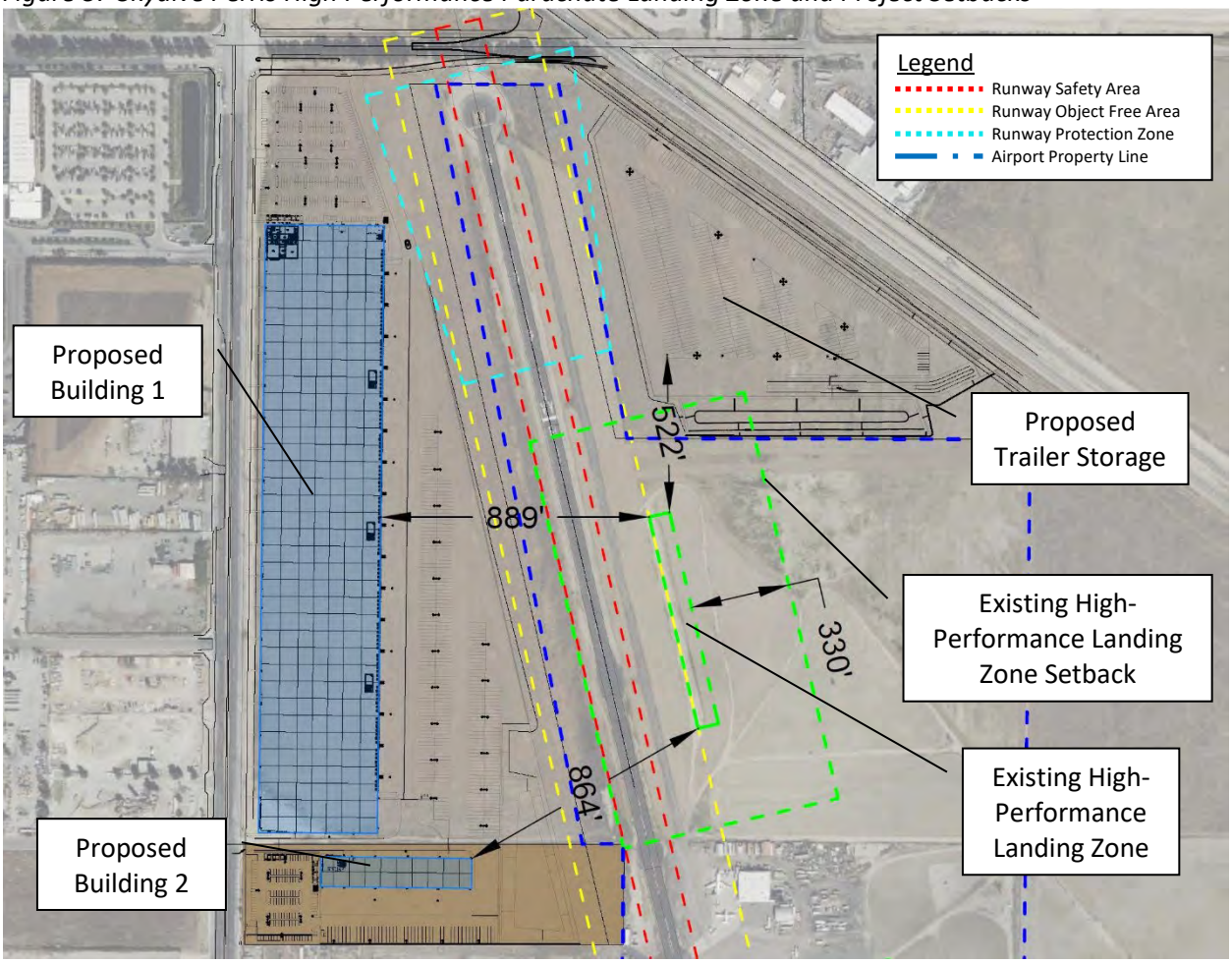
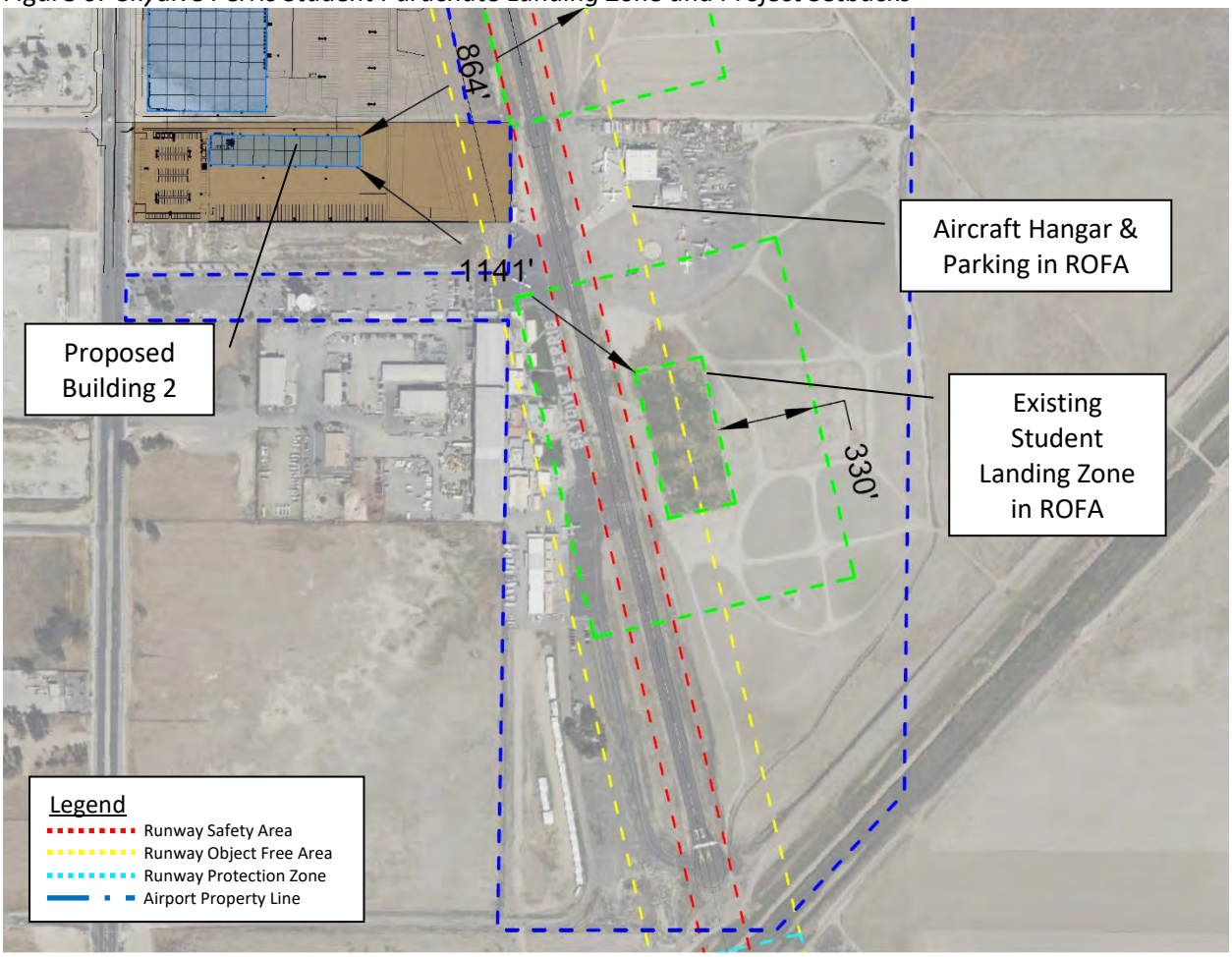


Figure 6: *Skydive Perris Student Parachute Landing Zone and Project Setbacks*



Comment A3. Mechanical turbulence causes not only airplanes to crash but parachutes to collapse and potentially kill people.

Response A3. Specific to the Project site, the National Transportation Safety Board (NTSB) recorded and investigated 24 accidents at Perris Valley Airport between 1984 to present (https://data.ntsb.gov/carol-main-public). Of these accidents, seven included fatalities. Based on the type of aircraft that are used by Skydive Perris and the NTSB reports, five of those 24 accidents are attributed to skydiving, and two involved fatalities. Most significantly, in 1992, 16 people were killed and six were seriously injured when the pilot inadvertently feathered the wrong propeller following an engine power loss. The NTSB does not report on skydiving accidents or incidents separately from aircraft. An internet search for news articles related to skydiving accidents at Perris Valley Airport found that there have been approximately 15 skydiving deaths reported since 2000.

Of the NTSB investigated accidents at Perris Valley Airport, 15 (65%) occurred during the takeoff, climb, approach, landing, or traffic pattern phase of flight; the remainder occurred during the enroute (cruise) portion of flight. One accident involved people on the ground when an aircraft collided with a parked DC-3 and three people were waiting to board the DC-3 (one was seriously injured). One accident involved impact with a building under construction and a camping trailer.

Pilots are required to be aware of the wind conditions in which they are operating and to not exceed their own proficiency with crosswinds and general wind conditions. Likewise, skydivers and skydiving instructors are required to be aware of the wind conditions in which they are performing and not exceed their own proficiency or that of their students. None of the accident data found attributes any of the accidents, injuries, or fatalities due to the existence of buildings.

Comment A4. Second this proposed building or buildings are located directly in the world's largest parachute drop zone. Persons and property being dropped day and night directly over, potentially causing damage or injury/fatalities to persons within these structures. 120,000 to 130,000 drops annually on an average.

Response A4. The commenter provides no study or report data that supports the assertion in the comment. The Project is not located in a parachute drop zone or in a "hazardous area" as shown in Figure 5. As per the SkyDive Perris website (https://skydiveperris.com/experienced/skydiving-safety-rules) the student landing area is east of Runway 15-33, directly adjacent to the airport operator's existing facilities. A high-performance landing area is also east of Runway 15-33 on the opposite side of the runway from the proposed Project buildings and south of the trailer storage lot. This landing area is more than 889 feet from the nearest proposed building and more than 522 feet from the nearest trailer storage position.

Comment A5. Third it appears from the site plan that the RPZ for runway 15 is encroached with parking and potentially lighting and light poles. Based upon uses this project will have parked truck and trailers that will end up close to 14' high.

Response A5. The RPZ for Runway 15 is not encroached with parking, lighting, or poles. All Project facilities are designed outside of the RPZ including the warehouses, truck yards, employee parking, entrance/exit roads and retention basins as shown in Figure 5.

Comment A6. Fourth and I'm sure not last is the basins located adjacent to the runway, we already have a bird problem and I'm thinking this will make it worse.

Response A6. The commenter provides no study or report data that supports the assertion in the comment. The two bioretention basins are dry-bottom facilities designed to the best management practices (BMPs) in the Riverside County Wildlife Hazard Management Plan for Riverside County Airports, which aims to deter birds by requiring that stormwater management basins must be capable of draining within 48 hours of a rain event. Landscaping near the proposed basins and on all of the Project property is also compliant with the Wildlife Hazard Management Plan.

Comment A7. In a nutshell it's the sheer size of the project with heights close to 50' changing historic wind and thermal patterns that really scare me.

Response A7. The commenter provides no study or report data that supports the assertion in the comment. The building height for Building 1 ranges from 47 feet to 50 feet to top of parapet; for Building 2 it is 41 feet to 45 feet to top of parapet. An aeronautical study by the FAA was initiated for the buildings associated with the Project and each received Determinations of No Hazard to Air Navigation. The aeronautical studies assessed the building locations, planned heights and whether there is a need for any associated lighting or markings to ensure that the buildings are conspicuous at night and during low visibility weather conditions. Also see Response A1 with regard to the position of the proposed buildings relative to the takeoff and landing of aircraft on Runway 15/33.

Comment A8. I'm sure you have heard these concerns from me on other projects but this one is literally on the airport.

Response A8. The proposed Project is located on private property adjacent to the Perris Valley Airport and is not located on property owned or otherwise controlled by the airport operators. The closest structures to the Airport and the runway are structures owned by the Airport operator that do not meet FAA Airport Design safety standards for public use airports.

Comment A9. I also know you are aware we are The Perris Valley Public Airport and are open to the public and licensed as such although privately owned.

Response A9. The proposed Project is located on private property adjacent to the Perris Valley Airport and is not located on property owned or otherwise controlled by the airport operators. Further the proposed Project is designed to meet or exceed FAA Airport Design separation standards from runways. The existing airport facilities and skydiving facilities do not currently meet the FAA Airport Design standards or the FAA design guidelines for sport parachuting drop zones despite being open to the public for public use.

Email to ALUC Staff on March 6, 2023 (See Exhibit B)

Comment B1. It is my opinion that the Perris Valley Airport Industrial Project will negatively impact safety at the Perris Airport.

Response B1. The commenter provides no study or report data that supports the assertion in the comment. The Project design follows the airport safety design criteria, as per FAA AC 150/5300-13B, Airport Design. The Project does not encroach on parachute landing areas, as per FAA AC 150/105-2E, Sport Parachuting and the diagrams provided on the SkyDive Perris website. The FAA issued Determinations of No Hazard to Air Navigation associated with the proposed Project buildings. The Project is compatible within ALUCP Safety Compatibility Zones A through D as per the safety criteria outlined in Table 2A in the Countywide Policies of the Riverside County ALUCP.

Comment B2. A building that large, both vertically and horizontally, will inevitably cause significantly increased turbulence on the runway and parachute landing areas. This turbulence can make landing at the airport hazardous for both light airplanes and skydivers. In doing so greatly reducing both our usable landing area and the range of wind conditions we will be comfortable operating in.

Response B2. SEE RESPONSES A1, A2, AND A3.

Comment B3. Not to mention the parking lot being proposed in the north corner.

Response B3. SEE RESPONSES A1, A2, AND A3.

Comment B4. Skydive Perris is arguably the largest skydiving center in the world. We are uniquely set up as a training facility for international military groups and to host large skydiving events. We often do jumps with over 200 skydivers at a time. One of the reasons Skydive Perris is chosen as the host for these groups and events is because we have a large open area on and surrounding the airport. This allows hundreds of jumpers the safe space to land at the same time. We have this while also being nicely tucked into the highly developed Inland Empire. Other skydiving centers who can host the same groups and events are deep in the desert in the middle of nowhere. Skydivers and military groups don't want to travel to the middle of nowhere.

Response B4. The proposed Project is designed to meet or exceed the FAA Airport Design standards and the FAA Sport Parachuting recommendations for designated landing areas. Use of additional airport property east of the designated landing zones is unobstructed by the proposed Project. The airport owners own approximately 74 acres east of the runway and east of the existing Runway Object Free Area (ROFA) that is theirs to continue to use and accommodate large skydiving events and would be compliant with FAA Airport Design standards.

Comment B5. The negative impact the Perris Valley Airport Industrial Project would have on the airport could limit the size and frequency of groups and events we host at Perris. This would not only negatively impact our business. This will have a negative impact on the local economy as literally the thousands of people who travel from around the world to Perris with these military groups and for these events may no longer do so.

Response B5. The proposed Project is located on private property and is not affiliated with the skydiving operations at Perris Valley Airport. The airport owners own approximately 74 acres east of the runway and east of the existing Runway Object Free Area (ROFA) that is theirs to continue to use and accommodate large skydiving events and would be compliant with FAA Airport Design standards. Also, as stated in the above responses, development and operation of the Project will not have safety impacts on the Airport or its skydiving operations.

Comment B6. The buildings and lots as proposed will at times create unsafe wind conditions and will always limit potential landing areas. Anything that can be done to reduce the height and coverage of both of these would be a benefit. Not building them at all would be ideal.

Response B6. SEE RESPONSES A1, A2, AND A3.

Email to ALUC Staff on March 7, 2023 (See Exhibit C)

Comment C1. There are some comments relating to 'safety and over flights', but as a formal recognized aviation activity, under Federal Aviation Regulation Pt 105, parachuting and parachutists routinely (sometimes several times a day) overfly the subject area at relatively lower altitudes.

Response C1. Safety and Overflight as used in the context of airport land use compatibility planning refers to the limitation of people living and working in the vicinity of the airport and the type of land uses that are compatible with airport operations.

To the commenter's point, parachutists similarly cannot fly at any altitude or in any airspace and cannot create a hazard to air traffic or to persons and property on the ground. As the commenter notes and as per 14 CFR Part 105, Section 23, at non-towered airports, "a parachutist may drift over that airport with a fully deployed and properly functioning parachute if the parachutist is at least 2,000 feet above that airport's traffic pattern and avoids creating a hazard to air traffic or to persons and property on the ground".

As per 14 CFR Part 105, Section 25, no parachute operation may be conducted in "Class E or G airspace area unless the air traffic control facility having jurisdiction over the airspace at the first intended exit altitude is notified of the parachute operation no earlier than 24 hours before or no later than 1 hour before the parachute operation begins".

Therefore, the parachutists are required to comply with 14 CFR Part 105 and thus have a duty to surrounding landowners to avoid creating hazards to people and property on the ground and to avoid creating hazards in the air to aircraft.

Comment C2. Reducing the surrounding area footprint, placing large structures and increasing the likely hood [sic] of turbulence, will have a negative impact on our essential training and the safety, of all personnel on the ground and in the air.

Response C2. SEE RESPONSES A1, A2, AND A3.

Comment C3. It surprised me that the aviation activity under FAR Pt 105 wasn't mentioned and I wondered if I could politely ask for consideration in this important matter. The safety of all is paramount, parachuting is just one facet of aviation, but I felt the need to highlight my concerns.

Response C3. Perris Valley Airport is a public-use, privately-owned airport without an operating control tower, and is known as a skydiving center. 14 CFR Part 105 (also referred to as FAR Part 105) provides regulations for parachute operations. Section 23 and Section 25 address airports and airspace safety. The following excerpts from the regulations are provided for information regarding these responsibilities skydivers and skydiving instructors operating at Skydive Perris. FAR Part 105 only imposes obligations on those who operate parachute facilities pilots and the parachuters themselves and does not impose regulations upon the development and operation of the Proposed Project.

Section 105.23, Parachute operations over or onto airports:

> No person may conduct a parachute operation, and no pilot in command of an aircraft may allow a parachute operation to be conducted from that aircraft, over or onto any airport unless -
>
> (a) For airports with an operating control tower [DOES NOT APPLY TO PERRIS VALLEY]:
>
> > (1) Prior approval has been obtained from the management of the airport to conduct parachute operations over or on that airport.
> >
> > (2) Approval has been obtained from the control tower to conduct parachute operations over or onto that airport.
> >
> > (3) Two-way radio communications are maintained between the pilot of the aircraft involved in the parachute operation and the control tower of the airport over or onto which the parachute operation is being conducted.
>
> (b) [APPLIES TO PERRIS VALLEY] For airports without an operating control tower, prior approval has been obtained from the management of the airport to conduct parachute operations over or on that airport.
>
> (c) [APPLIES TO PERRIS VALLEY] A parachutist may drift over that airport with a fully deployed and properly functioning parachute if the parachutist is at least 2,000 feet above that airport's traffic pattern, and avoids creating a hazard to air traffic or to persons and property on the ground.

Section 105.25, Parachute operations in designated airspace:

> (a) No person may conduct a parachute operation, and no pilot in command of an aircraft may allow a parachute operation to be conducted from that aircraft -

(1) Over or within a restricted area or prohibited area unless the controlling agency of the area concerned has authorized that parachute operation;

(2) Within or into a Class A, B, C, D airspace area without, or in violation of the requirements of, an air traffic control authorization issued under this section;

(3) Except as provided in paragraph (c) and (d) of this section, within or into Class E or G airspace area unless the air traffic control facility having jurisdiction over the airspace at the first intended exit altitude is notified of the parachute operation no earlier than 24 hours before or no later than 1 hour before the parachute operation begins.

(b) Each request for a parachute operation authorization or notification required under this section must be submitted to the air traffic control facility having jurisdiction over the airspace at the first intended exit altitude and must include the information prescribed by § 105.15(a) of this part.

(c) For the purposes of paragraph (a)(3) of this section, air traffic control facilities may accept a written notification from an organization that conducts parachute operations and lists the scheduled series of parachute operations to be conducted over a stated period of time not longer than 12 calendar months. The notification must contain the information prescribed by § 105.15(a) of this part, identify the responsible persons associated with that parachute operation, and be submitted at least 15 days, but not more than 30 days, before the parachute operation begins. The FAA may revoke the acceptance of the notification for any failure of the organization conducting the parachute operations to comply with its requirements.

(d) Paragraph (a)(3) of this section does not apply to a parachute operation conducted by a member of an Armed Force within a restricted area that extends upward from the surface when that area is under the control of an Armed Force.

Email to ALUC Staff on May 4, 2023 (See Exhibit D)

Comment D1. This is regarding FAA studies 2023-AWP-1817-OE thru 1823-OE inclusive. I just received notice last Friday April 28th that these studies were done by the FAA without any input from anyone at L65.

Response D1. FAA performs aeronautical studies of proposed development on and near airports under the requirements of 14 CFR Part 77[6]. The Project owners prepared proper notice to the FAA of the proposed buildings associated with the Project. The FAA prepared aeronautical studies based on the height and location of the proposed buildings to ensure that they would meet FAA safety standards. The FAA notifies airport owners and operators of these studies as well as other interested aviation parties. It is the responsibility of airport owners and operators to respond timely to these studies to provide substantive aeronautical comment.

[6] 14 CFR Part 77, *Safe, Efficient Use and Preservation of the Navigable Airspace*, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-E/part-77

Comment D2. These studies came up with a "Determination of No Hazard to Air Navigation" ?? They clearly show in at least four locations that the proposed structures exceed the 7 to 1 by as much as 27 feet, crazy in my mind.

Response D2. 14 CFR Part 77 imaginary surfaces around the runway are in place to identify objects planned around the runway for further study. The FAA considers the specific types of aircraft operations taking place on the runway during its aeronautical study and the exact location of the planned building or facility. Exceeding Part 77 surfaces, particularly the sideline transitional surface to the runway, is not considered a hazard to air navigation when a facility is outside of the Runway Safety Area (RSA), Runway Object Free Area (ROFA) and Runway Protection Zone (RPZ) as is the case of the proposed Project.

Comment D3. These proposed huge structures, close to one million square feet and 1/3 of a mile long Will affect the microclimate of the airport.

Response D3. The commenter provides no study or report data that supports the assertion in the comment. The FAA's aeronautical study of the proposed Project buildings included the height, size and location of the buildings relative to Runway 15/33 at Perris Valley Airport. Also see Responses A1, A2, AND A3 for responses regarding wind and weather effects of the Project.

Comment D4. Adjacent to main parachute landing areas and the whole North end of runway 15. I have personal experience of mechanical turbulence and the effect on airplanes let alone unpowered parachutes. I just about got killed in an airplane at Perris from a rotor off of a 100'x100' X 32' high building that was out of the 7 to 1, fraction of the size destroyed the airplane.

Response D4. SEE RESPONSES A1, A2, AND A3. The commenter provides no study or report data that supports the assertion in the comment. Also see Appendix A for the full NTSB Aviation Investigation Final Report on the referenced accident by the commentor. Of note is the fact that the accident airplane ran into a fuel truck parked within the ROFA that sheared off the right wing of the aircraft and came to rest approximately 90 feet from the skydiving parachute packing facilities that are also located within the ROFA (See Figure 7). These substandard existing facilities in fact put unsuspecting members of the public within unenclosed tents and outdoor facilities within the ROFA. Parked aircraft and other airport vehicles within the ROFA increase the risk to pilots and their passengers in the case of runway excursions like the subject aircraft accident.

Figure 7: NTSB Accident Investigation Docket GAA17CA30 (Photo Courtesy of FAA)

Comment D5. I know this project has been pushed back a few times and I understand it will come back to you on July 13th 2023. I definitely would like to be there for that, we at the Perris Valley Airport are adamantly opposed to the project as proposed. I know in the past we have been opposed to and modified local projects for public safety reasons, but this project Will kill people, Skydivers and Pilots. Yor help is always appreciated.

Response D5. The commenter provides no study or report data that supports the assertion in the comment.

Letter to City of Perris Planning Department and Copied to ALUC Staff (See Exhibit E)

Comment E1. This project is bounded by Goetz Rd. to the West, Ellis Rd. to the North, Case Rd. to the East and is bisected by the Perris Valley Airport. This project literally wraps around the Perris Airport Runway and Parachute landing zones. This proposed project will be in what was a property we leased for over 40 years for the sole purpose of a parachute landing area.

Response E1. The property associated with the proposed Project is wholly owned by the Project proponent. The Airport operators do not currently have a lease or operating rights associated with the Project property.

Comment E2. We do approximately 120,000 +/- jumps annually, that means over 100,00 times a year people and equipment will be in the air at 130 mph directly over or near this proposed project site. There are many public safety concerns for not only the skydiver but the people inside

the proposed structures. A few of the factors that are potential hazards are the physical Size of these proposed structures.

Response E2. The commenter provides no study or report data that supports the assertion in the comment. The proposed Project buildings and their industrial warehouse use are consistent with the ALUCP Safety Zones and with the City's Zoning Code. Also SEE RESPONSES A1, A2, AND A3.

Comment E3. The sheer size alone will have a change in the natural microclimate surrounding the airport. The mechanical turbulence off these huge structures potentially effecting not only the of safe flying aircraft but the safe landing of parachutes. Parachutes do not have the ability to power up and go around like an airplane. If a parachute hits wind turbulence/ mechanical turbulence and it's strong enough it can just collapse the parachute. There are many other potential safety factors if an off target landing occurs, and it does happen. The proposed project is directly adjacent to one of our primary Military Landing Areas. Physical hazards like light standards, fences, vehicle parking, all being a safety hazard if hit. Then there is the mechanical turbulence off those structures as well. As you can see heights and distances from the runway and the parachute landing areas are critical for Public Safety.

Response E3. SEE RESPONSES A1, A2, AND A3. The commenter provides no study or report data that supports the assertion in the comment.

Comment E4. Recent Developments: We at the airport try and stay informed and in front of the local surrounding projects to maintain the safety of the airport operation as a whole and have done so for almost 50 years. We attend any City or ALUC meetings to ascertain the potential impacts of any proposed construction. Last week I was notified that the Federal Aviation Administration conducted and concluded a site study regarding the safety of navigation regarding this proposed project. A "Determination of No Hazard to Air Navigation" was found, not sure really what that means. The study was supposed to be open for public comment yet we at the airport were Never contacted or notified so we had no input in the determination. I spoke to Mr. Dan Shoemaker of the obstruction evaluation group and he said" there was no opposing public comment so they approved it". Hard for me to believe as the proposed structures exceed the federal standards by as much as 26 feet in one case??? In my mind these studies were done very poorly without looking at actual data and public safety concerns. The OE/AA report numbers are as follows 2023-AWP-1818-OE through 2023-1828 inclusive. The ALUC review of this project is currently scheduled for July 13, 2023. We will be there on record opposing the proposed project as proposed.

Response E4. SEE RESPONSES D1, D2, AND D3.

Comment E5. Our opinion: The project will be a Safety to the Public issue that will more than likely kill or injure the Public in the air and or on the ground if it is built as planned.

Response E5. The commenter provides no study or report data that supports the assertion in the comment.

Comment E6. As long as we are here and this is the Perris Valley Airport we will continue to fight for the City's Airport. For the record we at the airport are adamantly opposed to this project for Safety of the Public concerns. Your help in these matters is always appreciated.

Response E6. As stated previously, the Airport is privately owned and open to the public. It is not owned and/or operated by the City of Perris or any other public entity and the City has no financial stake in the Airport ownership or operation. Comment noted.

Comment Letters Received by ALUC regarding ALUC Case ZAP1028PV23

The following letters were received by ALUC staff regarding the Project.

Exhibit A: Email to ALUC Staff on February 16, 2023

Subject: Re: ZAP1028PV23 ALUC project

Hi Paul, after a quick review of the proposed project this is what I'm seeing. As you probably figured we at the airport are Opposed to the project as a whole for many safety concerns. Safety concerns for all of these reasons and probably more: First safety of aircraft landing and departing with such a Large wall of building adjacent to the runway causing potential mechanical turbulence . This mechanical turbulence effecting not only airplanes but parachutists landing in adjacent field drop zone landing areas. Mechanical turbulence causes not only airplanes to crash but parachutes to collapse and potentially kill people. Second this proposed building or buildings are located directly in the world's largest parachute drop zone. Persons and property being dropped day and night directly over, potentially causing damage or injury/fatalities to persons within these structures . 120,000 to 130,000 drops annually on an average. Third it appears from the site plan that the RPZ for runway 15 is encroached with parking and potentially lighting and light poles. Based upon uses his project will have parked truck and trailers that will end up close to 14' high. Fourth and I'm sure not last is the basins located adjacent to the runway, we already have a bird problem and I'm thinking this will make it worse. In a nutshell it's the sheer size of the project with heights close to 50' changing historic wind and thermal patterns that really scare me. I'm sure you have heard these concerns from me on other projects but this one is literally on the airport. I also know you are aware we are The Perris Valley Public Airport and are open to the public and licensed as such although privately owned. Your help and attention is always appreciated. Pat Conatser 951-203-5668 anytime

Exhibit B: Email to ALUC Staff on March 6, 2023

Subject: RE: ZAP1028PV23 ALUC project

Hello Mr. Rull,

My name is Dan Brodsky-Chenfeld. Please allow me to give you a little background about myself. I have been the Manager of Skydive Perris for the last 20 years. In addition to my long history in Perris I have a degree in Aviation from the Ohio State University. I am a Single and Multi Engine Pilot, and FAA Parachute Rigger and United States Parachute Association Safety and Training advisor. I have been skydiving for 43 years, have over 30,000 jumps and am considered and international expert in the sport especially in regard to skydiving safety. Over the last few months I have done safety seminars at both the US and European Parachute Industry Symposiums.

It is my opinion that the Perris Valley Airport Industrial Project will negatively impact safety at the Perris Airport. A building that large, both vertically and horizontally, will inevitably cause significantly increased turbulence on the runway and parachute landing areas. This turbulence can make landing at the airport hazardous for both light airplanes and skydivers. In doing so greatly reducing both our usable landing area and the range of wind conditions we will be comfortable operating in. Not to mention the parking lot being proposed in the north corner.

Skydive Perris is arguably the largest skydiving center in the world. We are uniquely set up as a training facility for international military groups and to host large skydiving events. We often do jumps with over 200 skydivers at a time. One of the reasons Skydive Perris is chosen as the host for these groups and events is because we have a large open area on and surrounding the airport. This allows hundreds of jumpers the safe space to land at the same time. We have this while also being nicely tucked into the highly developed Inland Empire. Other skydiving centers who can host the same groups and events are deep in the desert in the middle of nowhere. Skydivers and military groups don't want to travel to the middle of nowhere.

The negative impact the Perris Valley Airport Industrial Project would have on the airport could limit the size and frequency of groups and events we host at Perris. This would not only negatively impact our business. This will have a negative impact on the local economy as literally the thousands of people who travel from around the world to Perris with these military groups and for these events may no longer do so.

The buildings and lots as proposed will at times create unsafe wind conditions and will always limit potential landing areas. Anything that can be done to reduce the height and coverage of both of these would be a benefit. Not building them at all would be ideal.

Thank you for your time and consideration.

Dan Brodsky-Chenfeld

Exhibit C: Email to ALUC Staff on March 7, 2023

Subject: Aluc L65

Hello Sir,

I wonder if you could help me. I wasn't sure of the correct channels to comment on the above Project being reviewed on Thursday 9 March 2023. My apologies, if this is the incorrect method. I look after the Military and Government Groups that currently train at L65. We are privileged to be selected by these groups for essential training. They have the choice of anywhere in the United States and select our location to train and our community to invest in.

I read the documents with interest and are concerned about the impact it may have. The study seems to focus on the effects on Aircraft operations and the FAA guidance. There are some comments relating to

'safety and over flights', but as a formal recognized aviation activity, under Federal Aviation Regulation Pt 105, parachuting and parachutists routinely (sometimes several times a day) overfly the subject area at relatively lower altitudes. Reducing the surrounding area footprint, placing large structures and increasing the likely hood of turbulence, will have a negative impact on our essential training and the safety, of all personnel on the ground and in the air.

It surprised me that the aviation activity under FAR Pt 105 wasn't mentioned and I wondered if I could politely ask for consideration in this important matter. The safety of all is paramount, parachuting is just one facet of aviation, but I felt the need to highlight my concerns.

Very Respectfully

Andy Witcomb

Andy Witcomb
Military Operations Manager
Skydive Perris
Office:(951) 657-3904
Cell: (619)971-1362

Exhibit D: Email to ALUC Staff on May 4, 2023

Subject: L65 Perris Valley Airport FAA OEAAA Study 2023-AWP-1817-OE thru 1828 OE Inclusive

Hi John, Paul and Jackie, This is regarding FAA studies 2023-AWP-1817-OE thru 1823-OE inclusive. I just received notice last Friday April 28th that these studies were done by the FAA without any input from anyone at L65. Thes studies came up with a "Determination of No Hazard to Air Navigation" ?? They clearly show in at least four locations that the proposed structures exceed the 7 to 1 by as much as 27 feet, crazy in my mind. These proposed huge structures, close to one million square feet and 1/3 of a mile long Will affect the microclimate of the airport. Adjacent to main parachute landing areas and the whole North end of runway 15. I have personal experience of mechanical turbulence and the effect on airplanes let alone unpowered parachutes. I just about got killed in an airplane at Perris from a rotor off of a 100'x100' X 32' high building that was out of the 7 to 1, fraction of the size destroyed the airplane. I know this project has been pushed back a few times and I understand it will come back to you on July 13th 2023. I definitely would like to be there for that, we at the Perris Valley Airport are adamantly opposed to the project as proposed. I know in the past we have been opposed to and modified local projects for public safety reasons, but this project Will kill people, Skydivers and Pilots. Yor help is always appreciated.

Patrick Conatser
Perris Valley Airport Owner/ Manager
2091 Goetz Rd. Perris, CA. 92570
my cell 951-203-5668 anytime

Exhibit E: Letter to City of Perris Planning Department on May 5, 2023

Perris Valley Airport
2091 Goetz RD.
Perris, California 92570
Ph. 951-657-3904
Cell 951-203-5668

May 5, 2023
City of Perris
Planning Department
Attn: Mr. Nathan Perez

The Proposed Project:
This is regarding the proposed Perris Airport Industrial Project the project consists of the following I believe six APNs 330-090-031,-033,-034,-036,-038,-040.

This project is bounded by Goetz Rd. to the West, Ellis Rd. to the North, Case Rd. to the East and is bisected by the Perris Valley Airport. This project literally wraps around the Perris Airport Runway and Parachute landing zones. This proposed project will be in what was a property we leased for over 40 years for the sole purpose of a parachute landing area.

Airport Background:
As I'm sure you know the Perris Valley Airport was first certified as the city Perris Valley Airport in 1933. The airport has been an FAA approved parachute drop zone since 1962. The airport is zoned Public and operated as such. The Conatser family has owned and operated the airport since 1976. The Perris Valley Airport today is most likely the largest and busiest parachute drop zone in the world. We currently have numerous military contracts training pretty much all NATO militaries including many units of our own.

Potential Public Safety Issues:
We do approximately 120,000 +/- jumps annually, that means over 100,00 times a year people and equipment will be in the air at 130 mph directly over or near this proposed project site. There are many public safety concerns for not only the skydiver but the people inside the proposed structures. A few of the factors that are potential hazards are the physical Size of these proposed structures. The sheer size alone will have a change in the natural microclimate surrounding the airport. The mechanical turbulence off these huge structures potentially effecting not only the of safe flying aircraft but the safe landing of parachutes. Parachutes do not have the ability to power up and go around like an airplane. If a parachute hits wind turbulence/ mechanical turbulence and it's strong enough it can just collapse the parachute. There are many other potential safety factors if an off target landing occurs, and it does happen. The proposed project is directly adjacent to one of our primary Military Landing Areas. Physical hazards like light standards, fences, vehicle parking, all being a safety hazard if hit. Then there is the mechanical turbulence off those structures as well. As you can see heights and distances from the runway and the parachute landing areas are critical for Public Safety.

Recent Developments:
We at the airport try and stay informed and in front of the local surrounding projects to maintain the safety of the airport operation as a whole and have done so for almost 50 years. We attend any City or ALUC meetings to ascertain the potential impacts of any proposed construction. Last week I was notified that the Federal Aviation Administration conducted and concluded a site study regarding the safety of navigation regarding this proposed project. A "Determination of No Hazard to Air Navigation" was found, not sure really what that means. The study was supposed to be open for public comment yet we at the airport were Never contacted or notified so we had no input in the determination. I spoke to Mr. Dan Shoemaker of the obstruction evaluation group and he said" there was no opposing public comment so they approved it". Hard for me to believe as the proposed structures exceed the federal standards by as much as 26 feet in one case??? In my mind these studies were done very poorly without looking at actual data and public safety concerns. The OE/AA report numbers are as follows 2023-AWP-1818-OE through 2023-1828 inclusive. The ALUC review of this project is currently scheduled for July 13, 2023. We will be there on record opposing the proposed project as proposed.

Our opinion:
The project will be a Safety to the Public issue that will more than likely kill or injure the Public in the air and or on the ground if it is built as planned.

As long as we are here and this is the Perris Valley Airport we will continue to fight for the City's Airport. For the record we at the airport are adamantly opposed to this project for Safety of the Public concerns. Your help in these matters is always appreciated.

Patrick Conatser Melanie Conatser

Perris Valley Airport

Appendix A – National Transportation Safety Board – Aviation Investigation Final Report, GAA17CA303, May 24, 2017.

Aviation Investigation Final Report

Location:	Perris, California	**Accident Number:**	GAA17CA303
Date & Time:	May 24, 2017, 15:15 Local	**Registration:**	N708PV
Aircraft:	DEHAVILLAND DHC 6	**Aircraft Damage:**	Substantial
Defining Event:	Loss of control in flight	**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Skydiving		

Analysis

The pilot of the twin-engine, turbine-powered airplane reported that, while providing flights for skydivers throughout the day, he had a potential new hire pilot flying with him in the right seat. He added that, on the eighth flight of the day, the new pilot was flying during the approach and "approximately 200' [ft.] south from the threshold of [runway] 15 at approximately 15 feet AGL [above ground level] the bottom violently and unexpectedly dropped out. [He] believe[d] some kind of wind shear caused the aircraft [to] slam onto [the] runway and bounce into the air at a 45 to 60-degree bank angle to the right." The prospective pilot then said, "you got it." The pilot took control of the airplane and initiated a go-around by increasing power, which aggravated the "off runway heading." The right wing contacted the ground, the airplane exited the runway to the right and impacted a fuel truck, and the right wing separated from the airplane. The impact caused the pilot to unintentionally add max power, and the airplane, with only the left engine functioning, ground looped to the right, coming to rest nose down.

The airplane sustained substantial damage to the fuselage and right wing.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

The automated weather observation system about 8 nautical miles from the accident site reported that, about the time of the accident, the wind was from 280° at 7 knots, visibility 10 statute miles, few clouds at 20,000 ft agl, temperature 86°F, dew point 45°F, and altimeter 29.81 inches of mercury. The pilot landed on runway 15.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The prospective pilot's improper landing flare and the pilot's delayed remedial action to initiate a go-around, which resulted in a runway excursion.

Findings

Aircraft	Landing flare - Not attained/maintained
Personnel issues	Aircraft control - Copilot
Personnel issues	Delayed action - Pilot
Environmental issues	Windshear - Effect on operation
Environmental issues	Ground vehicle - Contributed to outcome

Factual Information

History of Flight

Landing	Windshear or thunderstorm
Landing	Loss of control in flight (Defining event)
Landing-aborted after touchdown	Abnormal runway contact
Landing-aborted after touchdown	Attempted remediation/recovery
Landing-aborted after touchdown	Dragged wing/rotor/float/other
Landing-aborted after touchdown	Runway excursion
Landing-aborted after touchdown	Collision with terr/obj (non-CFIT)
Landing-aborted after touchdown	Nose over/nose down

Pilot Information

Certificate:	Airline transport; Flight engineer	**Age:**	56,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	Lap only
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 2 Without waivers/limitations	**Last FAA Medical Exam:**	December 27, 2016
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	January 23, 2017
Flight Time:	(Estimated) 3358 hours (Total, all aircraft), 2131 hours (Total, this make and model), 3198 hours (Pilot In Command, all aircraft), 31 hours (Last 90 days, all aircraft), 27 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Co-pilot Information

Certificate:	Commercial	**Age:**	31,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Right
Other Aircraft Rating(s):	None	**Restraint Used:**	Lap only
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 1 Without waivers/limitations	**Last FAA Medical Exam:**	September 22, 2016
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	March 15, 2016
Flight Time:	(Estimated) 1893 hours (Total, all aircraft), 12 hours (Total, this make and model), 1725 hours (Pilot In Command, all aircraft), 26 hours (Last 90 days, all aircraft), 24 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	DEHAVILLAND	**Registration:**	N708PV
Model/Series:	DHC 6 300	**Aircraft Category:**	Airplane
Year of Manufacture:	1976	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	489
Landing Gear Type:	Tricycle	**Seats:**	24
Date/Type of Last Inspection:	May 1, 2017 100 hour	**Certified Max Gross Wt.:**	12500 lbs
Time Since Last Inspection:		**Engines:**	2 Turbo prop
Airframe Total Time:	37885.7 Hrs at time of accident	**Engine Manufacturer:**	Pratt & Whitney
ELT:	C126 installed, not activated	**Engine Model/Series:**	PT6A-27
Registered Owner:		**Rated Power:**	620 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None
Operator Does Business As:	SKYDIVE PERRIS	**Operator Designator Code:**	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	KRIV,1536 ft msl	**Distance from Accident Site:**	8 Nautical Miles
Observation Time:	21:58 Local	**Direction from Accident Site:**	349°
Lowest Cloud Condition:	Few / 20000 ft AGL	**Visibility**	10 miles
Lowest Ceiling:		**Visibility (RVR):**	
Wind Speed/Gusts:	7 knots /	**Turbulence Type Forecast/Actual:**	/ None
Wind Direction:	280°	**Turbulence Severity Forecast/Actual:**	/ N/A
Altimeter Setting:	29.8 inches Hg	**Temperature/Dew Point:**	30°C / 7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Perris, CA (L65)	**Type of Flight Plan Filed:**	None
Destination:	Perris, CA (L65)	**Type of Clearance:**	VFR;Traffic advisory
Departure Time:	14:45 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	PERRIS VALLEY L65	**Runway Surface Type:**	Asphalt
Airport Elevation:	1413 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	15	**IFR Approach:**	None
Runway Length/Width:	5100 ft / 50 ft	**VFR Approach/Landing:**	Full stop;Straight-in;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	2 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 None	**Latitude, Longitude:**	33.761112,-117.218055(est)

Administrative Information

Investigator In Charge (IIC):	Swenson, Eric
Additional Participating Persons:	Patrick Gates; FAA; Riverside, CA
Original Publish Date:	August 3, 2017
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=95231

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available here.

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2023-AWP-1817-OE

Issued Date: 04/19/2023

Michael Masterson
CH Realty IX-MC I Riverside Perris Airport Center
18032 Lemon Drive
Suite 367
Yorba Linda, CA 92886

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Building 1-1
Location:	Perris, CA
Latitude:	33-46-13.66N NAD 83
Longitude:	117-13-23.62W
Heights:	1422 feet site elevation (SE) 53 feet above ground level (AGL) 1475 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, red lights-Chapters 4,5(Red),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Air Missions (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

The structure considered under this study lies in proximity to an airport and occupants may be subjected to noise from aircraft operating to and from the airport.

This determination expires on 10/19/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

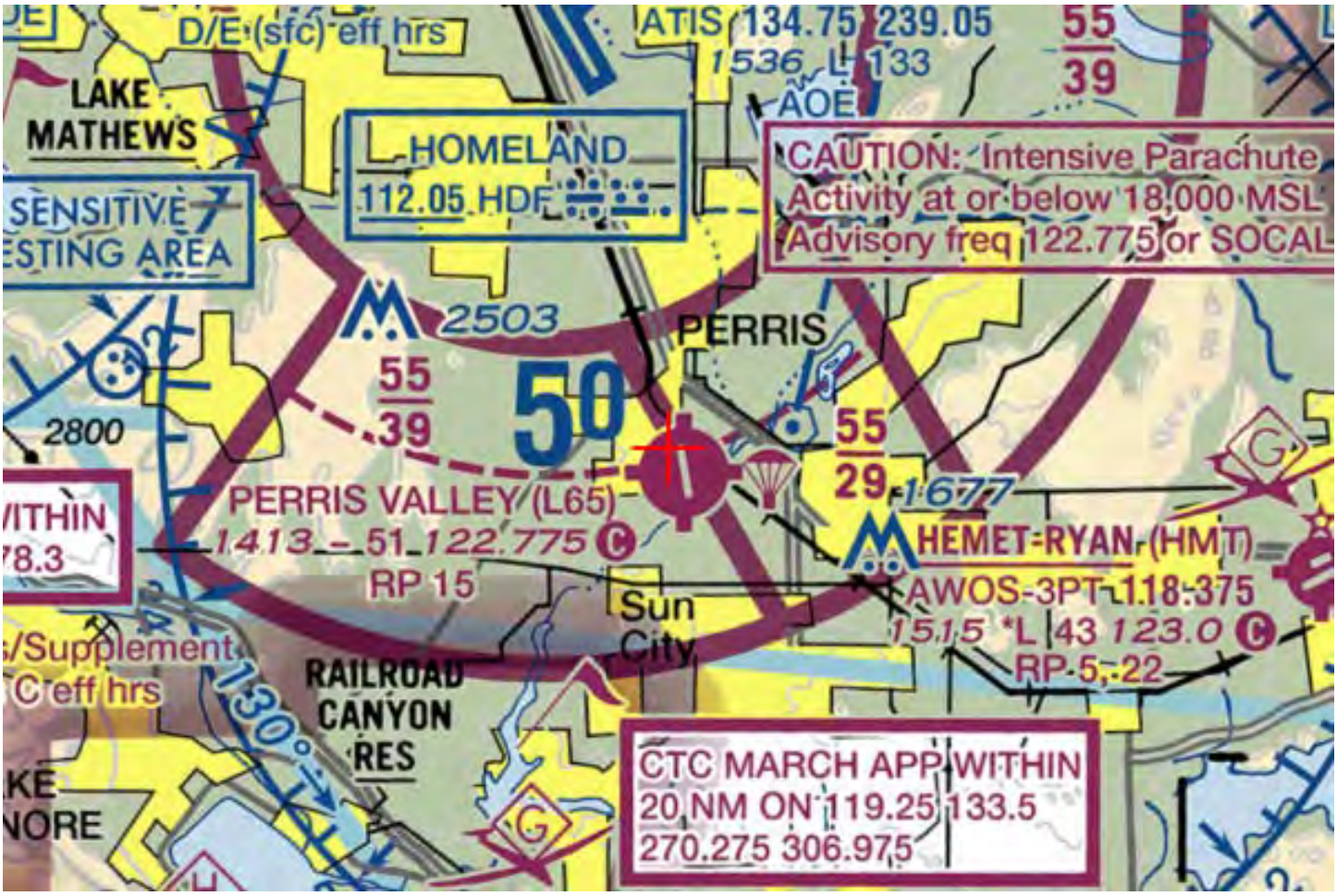
If we can be of further assistance, please contact our office at (847) 294-7575, or vivian.vilaro@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2023-AWP-1817-OE.

Signature Control No: 569690155-581801816 (DNE)
Vivian Vilaro
Specialist

Attachment(s)
Map(s)

TOPO Map for ASN 2023-AWP-1817-OE

Sectional Map for ASN 2023-AWP-1817-OE



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10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2023-AWP-1818-OE

Issued Date: 04/19/2023

Michael Masterson
CH Realty IX-MC I Riverside Perris Airport Center
18032 Lemon Drive
Suite 367
Yorba Linda, CA 92886

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Building 1-2
Location:	Perris, CA
Latitude:	33-46-13.64N NAD 83
Longitude:	117-13-18.99W
Heights:	1421 feet site elevation (SE) 51 feet above ground level (AGL) 1472 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, red lights-Chapters 4,5(Red),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Air Missions (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

The structure considered under this study lies in proximity to an airport and occupants may be subjected to noise from aircraft operating to and from the airport.

This determination expires on 10/19/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before May 19, 2023. In the event an interested party files a petition for review, it must contain a full statement of the basis upon which the petition is made. Petitions can be submitted to the Manager of the Rules and Regulations Group via e-mail at OEPetitions@faa.gov, via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, Room 425, 800 Independence Ave, SW, Washington, DC 20591, or via facsimile (202) 267-9328. FAA encourages the use of email to ensure timely processing.

This determination becomes final on May 29, 2023 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Vivian Vilaro, at (847) 294-7575, or vivian.vilaro@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2023-AWP-1818-OE.

Signature Control No: 569690156-581799326 (DNH)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

AERONAUTICAL STUDY NO. 2023-AWP-1818-through-1821-OE

Abbreviations

VFR - Visual Flight Rules AGL - Above Ground Level RWY - Runway
IFR - Instrument Flight Rules MSL - Mean Sea Level NM - Nautical Mile
AMSL - Above Mean Sea Level
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

1. LOCATION OF PROPOSED CONSTRUCTION

CH Realty IX-MC I Riverside Perris Airport Center is proposing to construct two industrial buildings west of Perris Valley Airport. The proposed structures have been identified as an obstruction under Part 77 standards. The proposal would be located 0.29 nautical miles northwest of the Perris Valley Airport (L65) airport reference point (ARP) in Perris, CA. L65 elevation is 1413 feet MSL.

Aeronautical Study Number	AGL/AMSL	L65 ARP	Coordinates	BLDG
2023-AWP-1818-OE	51/1472	0.38	33-46-13.64/117-13-18.99	1-2
2023-AWP-1819-OE	50/1472	0.35	33-46-11.66/117-13-18.99	1-3
2023-AWP-1820-OE	50/1472	0.32	33-46-09.60/117-13-19.00	1-4
2023-AWP-1821-OE	50/1472	0.29	33-46-07.56/117-13-19.01	1-5

2. OBSTRUCTION STANDARDS EXCEEDED

Section 77.19(e) - These surfaces extend outward and upward at right angles to the runway centerline and the runway centerline extended at a slope of 7 to 1 from the sides of the primary surface and from the sides of the approach surfaces. The proposed structure would exceed L65 transitional surface for the existing RWY 15/33 by the values shown below:

Aeronautical Study Number	Transitional Surface exceeds by
2023-AWP-1818-OE	27 feet
2023-AWP-1819-OE	20 feet
2023-AWP-1820-OE	13 feet
2023-AWP-1821-OE	6 feet

3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR follows: The VFR traffic pattern airspace (TPA) is not penetrated.

FAA Findings

There are no effects on any existing or proposed arrival, departure, or en route IFR operations or procedures.
There are no effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes.
There is no penetration into the VFR traffic pattern airspace.
There are no physical or electromagnetic effects on the operation of air navigation and communications facilities.
There are no effects on any airspace and routes used by the military.

The L65 Airport Master Record can be viewed or downloaded at https://adip.faa.gov/agis/public/#/airportData/L65 It states that there are eight (8) single engine, twelve (12) multi-engine and one (1) jet aircraft based there with 27,550 operations for the 12 months ending 04/30/2022 (latest information).

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR follows: Aeronautical study disclosed that the proposed structure would have no effect on any existing or proposed arrival or en route IFR operations or procedures.

c. The impact on all planned public-use airports and aeronautical facilities follows: Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposed structure affect the capacity of any known existing or planned public-use or military airport.

d. The cumulative impact resulting from the proposed construction or alteration of a structure when combined with the impact of other existing or proposed structures is not considered to be significant.

4. CIRCULATION AND COMMENTS RECEIVED

As a result of the negotiation process the sponsor requested circularization of the proposed structure. The proposal was circularized for public comment on March 7, 2023. No comments were received as a result of the circularization.

5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed structure would not have a substantial adverse effect on the safe and efficient use of navigable airspace by aircraft.

6. BASIS FOR DECISION

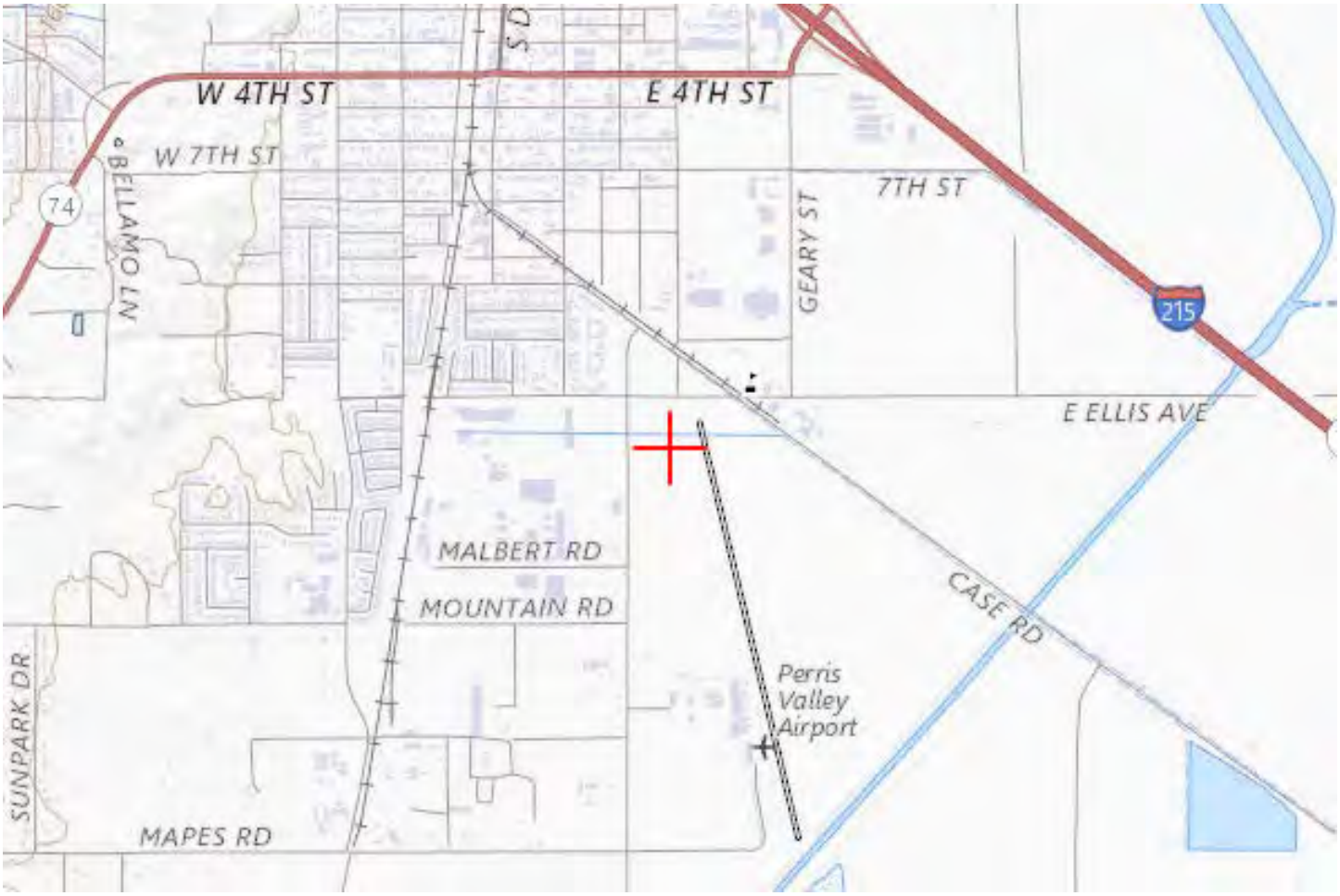
Part 77 establishes standards for determining obstructions to air navigation. A structure that exceeds one or more of these standards is presumed to be a hazard to air navigation unless the obstruction evaluation study determines otherwise. Just because a proposed structure exceeds a Part 77 surface does not automatically make it a hazard. In this case the proposal would exceed the RWY 15/33 transitional surface by the values listed above, however, it would not conflict with airspace required to conduct normal VFR traffic pattern operations. There are no IFR impacts and the VFR traffic pattern airspace is not impacted. The incorporation of obstruction lighting will provide pilot conspicuity for VFR and IFR aircraft operations in the vicinity of the airport.

7. CONDITIONS

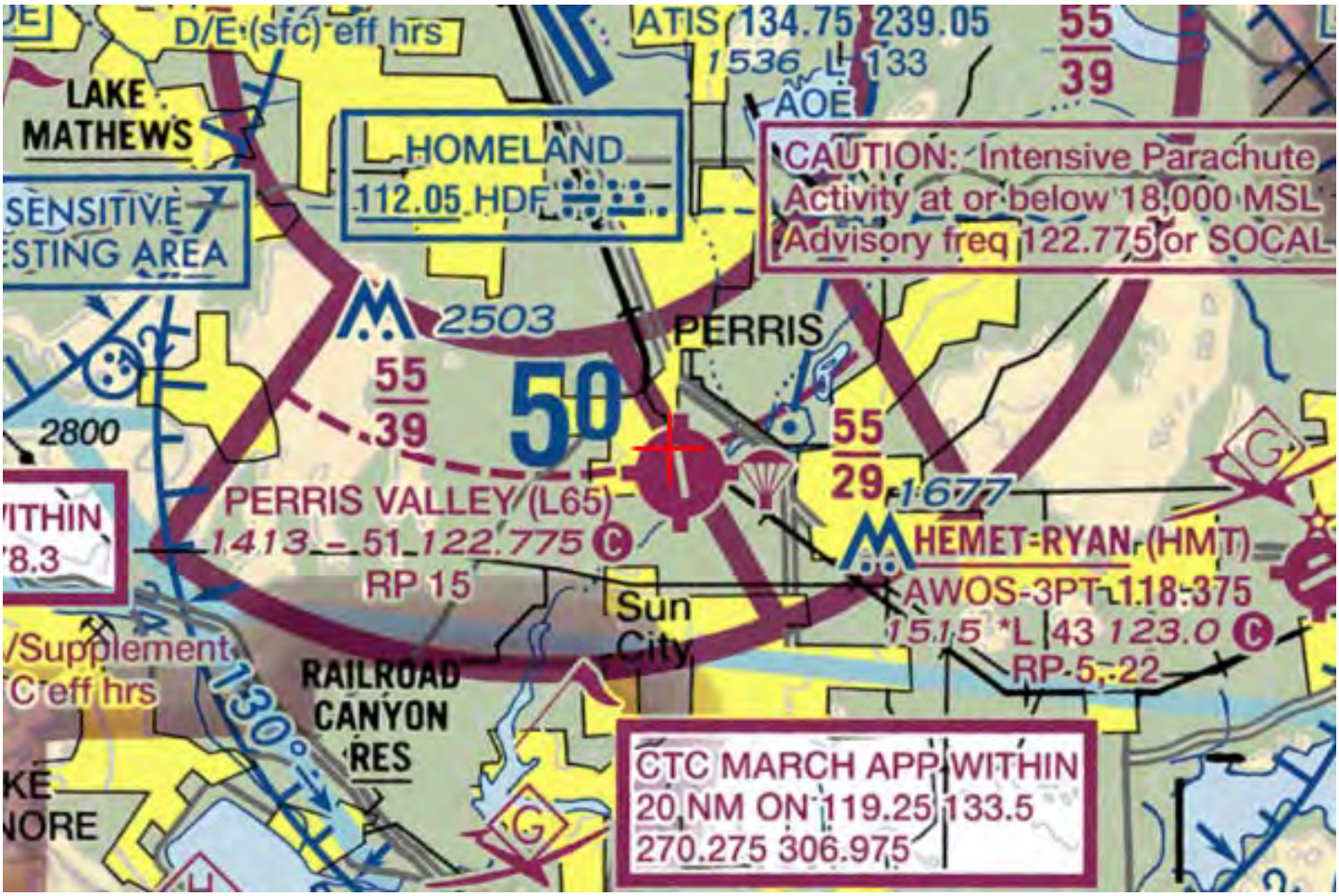
The structure shall be lighted as outlined in Chapters 4, 5(Red) & 15 of the Advisory Circular AC 70/7460-1M. The advisory circular is available online at https://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.information/documentID/1038519.

Within five days after the structure reaches its greatest height, the proponent is required to file on line the Supplemental Notice, FAA form 7460-2, with actual construction details, at the OE/AAA website (https://oeaaaa.faa.gov/oeaaa). Detailed instructions are available under the Instructions link. This Supplemental Notice notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national database.

TOPO Map for ASN 2023-AWP-1818-OE



Sectional Map for ASN 2023-AWP-1818-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2023-AWP-1819-OE

Issued Date: 04/19/2023

Michael Masterson
CH Realty IX-MC I Riverside Perris Airport Center
18032 Lemon Drive
Suite 367
Yorba Linda, CA 92886

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Building 1-3
Location:	Perris, CA
Latitude:	33-46-11.66N NAD 83
Longitude:	117-13-18.99W
Heights:	1422 feet site elevation (SE) 50 feet above ground level (AGL) 1472 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, red lights-Chapters 4,5(Red),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Air Missions (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

The structure considered under this study lies in proximity to an airport and occupants may be subjected to noise from aircraft operating to and from the airport.

This determination expires on 10/19/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before May 19, 2023. In the event an interested party files a petition for review, it must contain a full statement of the basis upon which the petition is made. Petitions can be submitted to the Manager of the Rules and Regulations Group via e-mail at OEPetitions@faa.gov, via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, Room 425, 800 Independence Ave, SW, Washington, DC 20591, or via facsimile (202) 267-9328. FAA encourages the use of email to ensure timely processing.

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This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Vivian Vilaro, at (847) 294-7575, or vivian.vilaro@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2023-AWP-1819-OE.

Signature Control No: 569690158-581799328 (DNH)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

AERONAUTICAL STUDY NO. 2023-AWP-1818-through-1821-OE

Abbreviations

VFR - Visual Flight Rules AGL - Above Ground Level RWY - Runway
IFR - Instrument Flight Rules MSL - Mean Sea Level NM - Nautical Mile
AMSL - Above Mean Sea Level
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

1. LOCATION OF PROPOSED CONSTRUCTION

CH Realty IX-MC I Riverside Perris Airport Center is proposing to construct two industrial buildings west of Perris Valley Airport. The proposed structures have been identified as an obstruction under Part 77 standards. The proposal would be located 0.29 nautical miles northwest of the Perris Valley Airport (L65) airport reference point (ARP) in Perris, CA. L65 elevation is 1413 feet MSL.

Aeronautical Study Number	AGL/AMSL	L65 ARP	Coordinates	BLDG
2023-AWP-1818-OE	51/1472	0.38	33-46-13.64/117-13-18.99	1-2
2023-AWP-1819-OE	50/1472	0.35	33-46-11.66/117-13-18.99	1-3
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2. OBSTRUCTION STANDARDS EXCEEDED

Section 77.19(e) - These surfaces extend outward and upward at right angles to the runway centerline and the runway centerline extended at a slope of 7 to 1 from the sides of the primary surface and from the sides of the approach surfaces. The proposed structure would exceed L65 transitional surface for the existing RWY 15/33 by the values shown below:

Aeronautical Study Number	Transitional Surface exceeds by
2023-AWP-1818-OE	27 feet
2023-AWP-1819-OE	20 feet
2023-AWP-1820-OE	13 feet
2023-AWP-1821-OE	6 feet

3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR follows: The VFR traffic pattern airspace (TPA) is not penetrated.

FAA Findings

There are no effects on any existing or proposed arrival, departure, or en route IFR operations or procedures.
There are no effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes.
There is no penetration into the VFR traffic pattern airspace.
There are no physical or electromagnetic effects on the operation of air navigation and communications facilities.
There are no effects on any airspace and routes used by the military.

The L65 Airport Master Record can be viewed or downloaded at https://adip.faa.gov/agis/public/#/airportData/L65 It states that there are eight (8) single engine, twelve (12) multi-engine and one (1) jet aircraft based there with 27,550 operations for the 12 months ending 04/30/2022 (latest information).

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR follows: Aeronautical study disclosed that the proposed structure would have no effect on any existing or proposed arrival or en route IFR operations or procedures.

c. The impact on all planned public-use airports and aeronautical facilities follows: Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposed structure affect the capacity of any known existing or planned public-use or military airport.

d. The cumulative impact resulting from the proposed construction or alteration of a structure when combined with the impact of other existing or proposed structures is not considered to be significant.

4. CIRCULATION AND COMMENTS RECEIVED

As a result of the negotiation process the sponsor requested circularization of the proposed structure. The proposal was circularized for public comment on March 7, 2023. No comments were received as a result of the circularization.

5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed structure would not have a substantial adverse effect on the safe and efficient use of navigable airspace by aircraft.

6. BASIS FOR DECISION

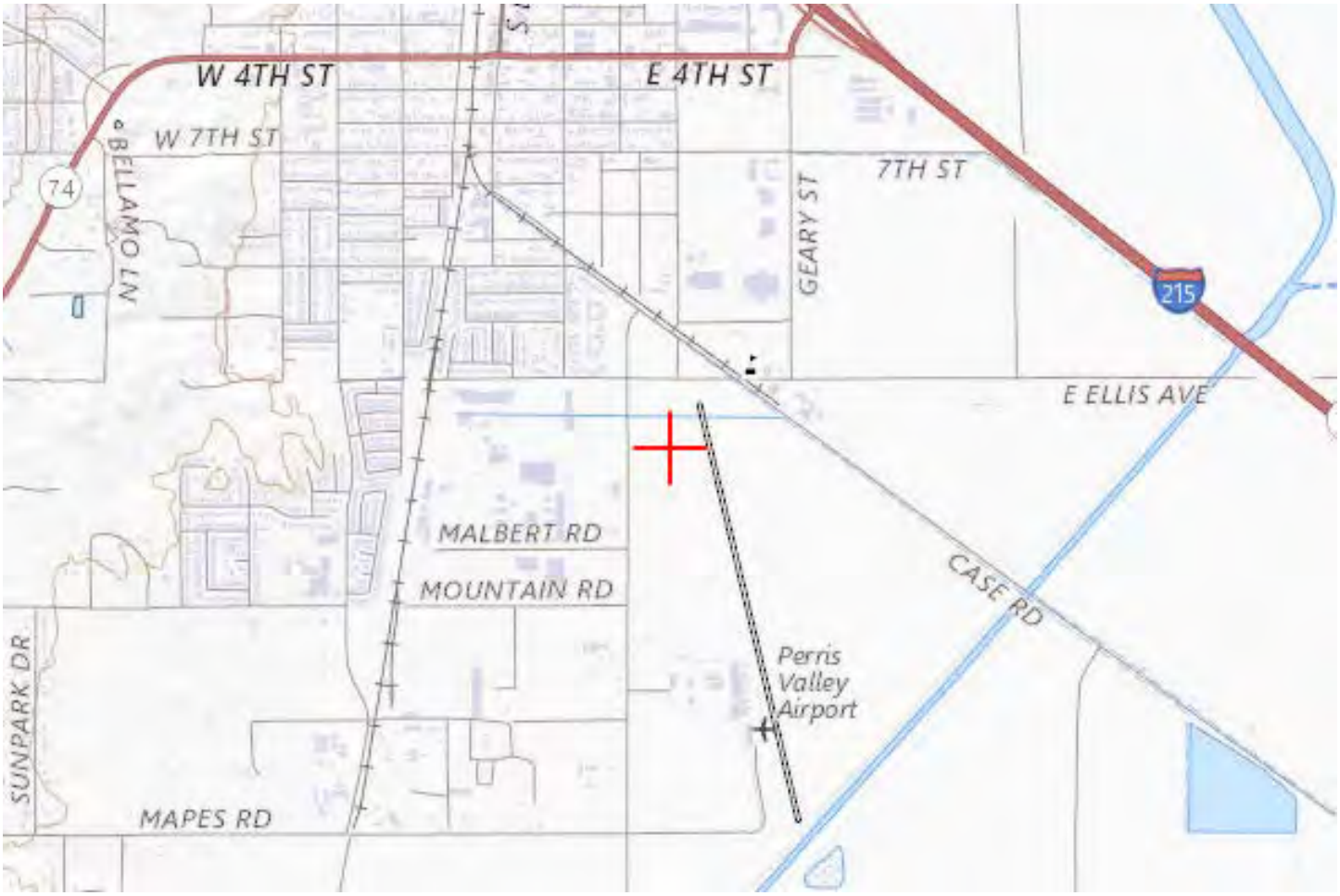
Part 77 establishes standards for determining obstructions to air navigation. A structure that exceeds one or more of these standards is presumed to be a hazard to air navigation unless the obstruction evaluation study determines otherwise. Just because a proposed structure exceeds a Part 77 surface does not automatically make it a hazard. In this case the proposal would exceed the RWY 15/33 transitional surface by the values listed above, however, it would not conflict with airspace required to conduct normal VFR traffic pattern operations. There are no IFR impacts and the VFR traffic pattern airspace is not impacted. The incorporation of obstruction lighting will provide pilot conspicuity for VFR and IFR aircraft operations in the vicinity of the airport.

7. CONDITIONS

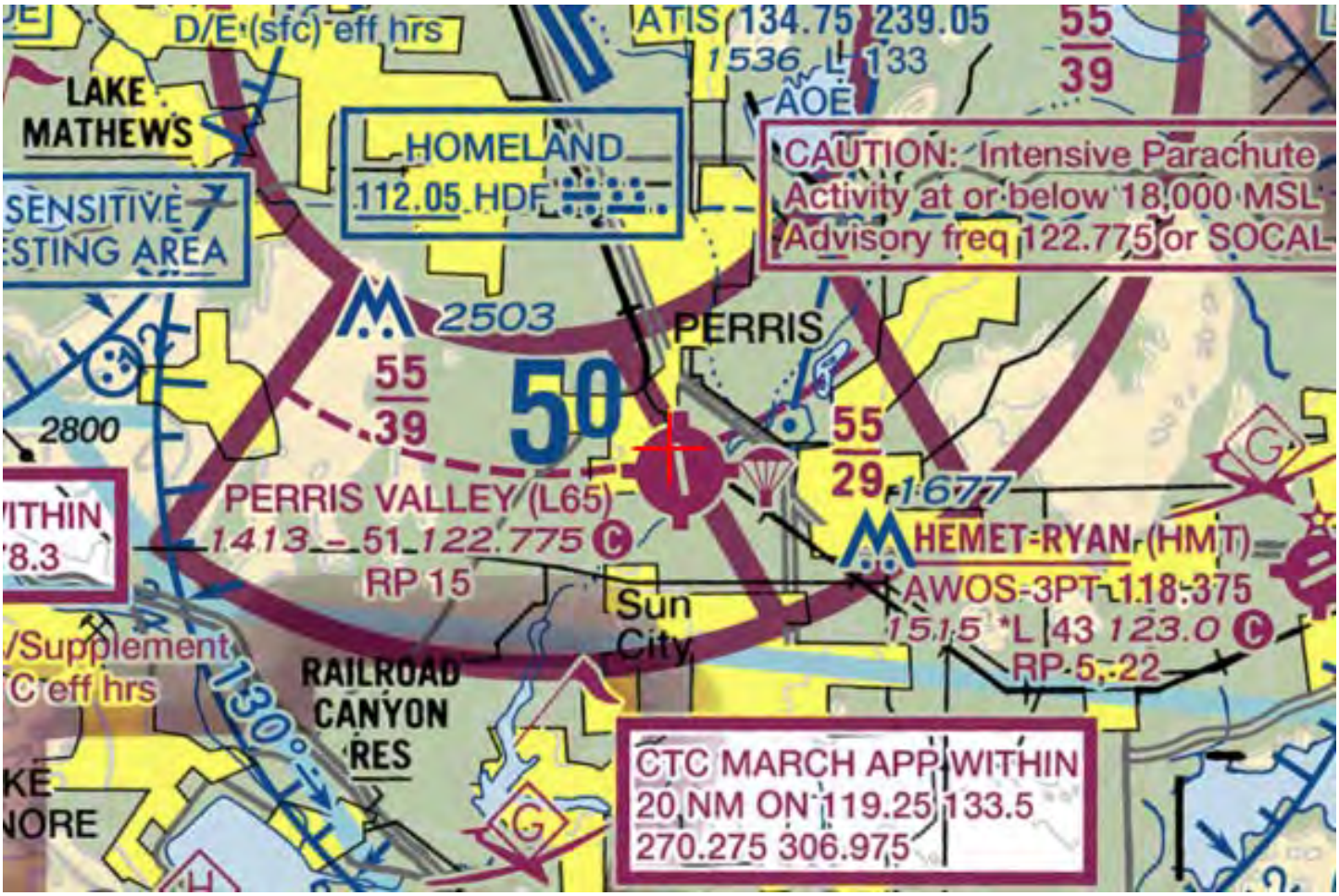
The structure shall be lighted as outlined in Chapters 4, 5(Red) & 15 of the Advisory Circular AC 70/7460-1M. The advisory circular is available online at https://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.information/documentID/1038519.

Within five days after the structure reaches its greatest height, the proponent is required to file on line the Supplemental Notice, FAA form 7460-2, with actual construction details, at the OE/AAA website (https://oeaaaa.faa.gov/oeaaa). Detailed instructions are available under the Instructions link. This Supplemental Notice notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national database.

TOPO Map for ASN 2023-AWP-1819-OE



Sectional Map for ASN 2023-AWP-1819-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2023-AWP-1820-OE

Issued Date: 04/19/2023

Michael Masterson
CH Realty IX-MC I Riverside Perris Airport Center
18032 Lemon Drive
Suite 367
Yorba Linda, CA 92886

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Building 1-4
Location:	Perris, CA
Latitude:	33-46-09.60N NAD 83
Longitude:	117-13-19.00W
Heights:	1422 feet site elevation (SE) 50 feet above ground level (AGL) 1472 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

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See attachment for additional condition(s) or information.

The structure considered under this study lies in proximity to an airport and occupants may be subjected to noise from aircraft operating to and from the airport.

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An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

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Signature Control No: 569690159-581799329 (DNH)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

AERONAUTICAL STUDY NO. 2023-AWP-1818-through-1821-OE

Abbreviations

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2023-AWP-1820-OE	13 feet
2023-AWP-1821-OE	6 feet

3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR follows: The VFR traffic pattern airspace (TPA) is not penetrated.

FAA Findings

There are no effects on any existing or proposed arrival, departure, or en route IFR operations or procedures.
There are no effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes.
There is no penetration into the VFR traffic pattern airspace.
There are no physical or electromagnetic effects on the operation of air navigation and communications facilities.
There are no effects on any airspace and routes used by the military.

The L65 Airport Master Record can be viewed or downloaded at https://adip.faa.gov/agis/public/#/airportData/L65 It states that there are eight (8) single engine, twelve (12) multi-engine and one (1) jet aircraft based there with 27,550 operations for the 12 months ending 04/30/2022 (latest information).

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR follows: Aeronautical study disclosed that the proposed structure would have no effect on any existing or proposed arrival or en route IFR operations or procedures.

c. The impact on all planned public-use airports and aeronautical facilities follows: Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposed structure affect the capacity of any known existing or planned public-use or military airport.

d. The cumulative impact resulting from the proposed construction or alteration of a structure when combined with the impact of other existing or proposed structures is not considered to be significant.

4. CIRCULATION AND COMMENTS RECEIVED

As a result of the negotiation process the sponsor requested circularization of the proposed structure. The proposal was circularized for public comment on March 7, 2023. No comments were received as a result of the circularization.

5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed structure would not have a substantial adverse effect on the safe and efficient use of navigable airspace by aircraft.

6. BASIS FOR DECISION

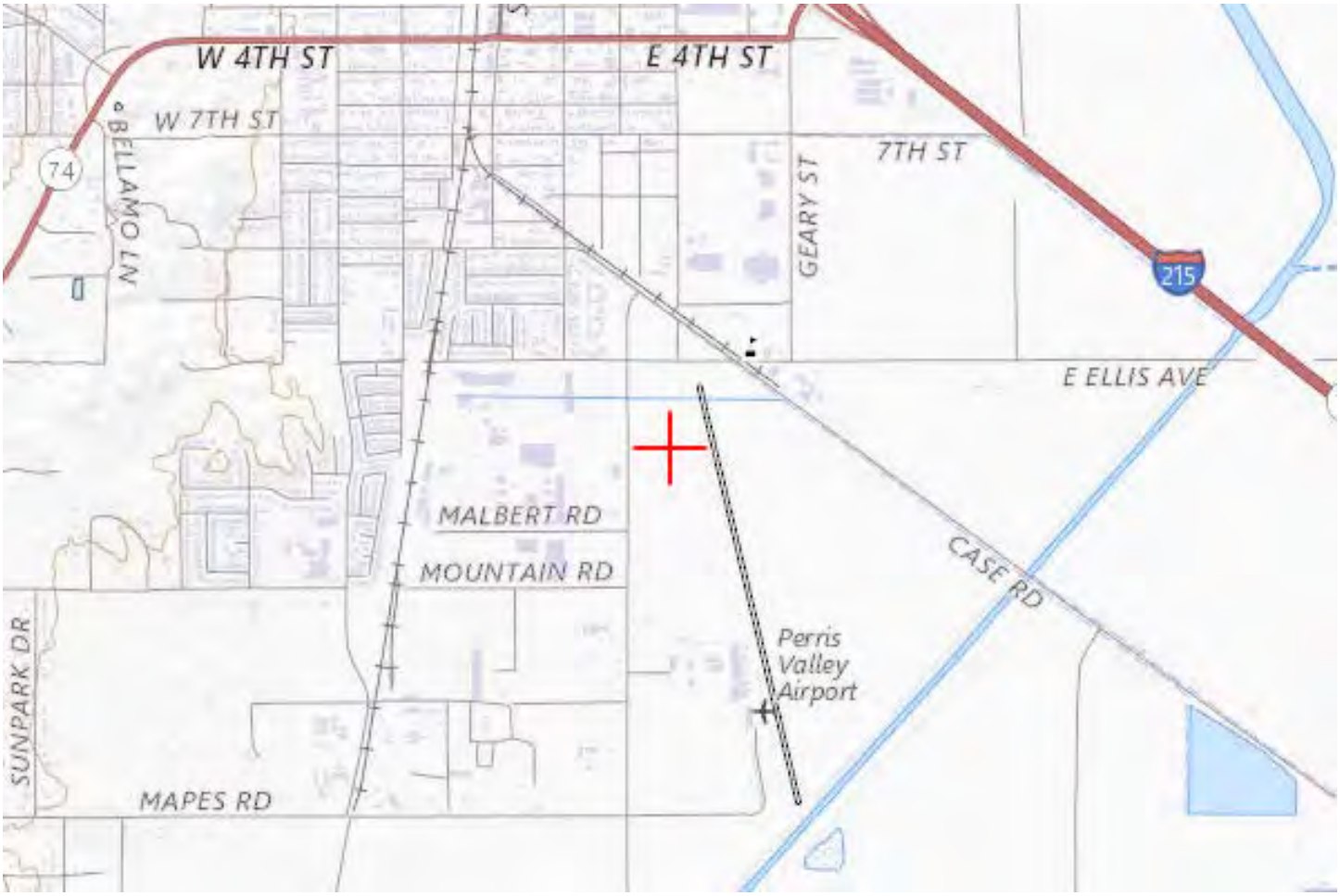
Part 77 establishes standards for determining obstructions to air navigation. A structure that exceeds one or more of these standards is presumed to be a hazard to air navigation unless the obstruction evaluation study determines otherwise. Just because a proposed structure exceeds a Part 77 surface does not automatically make it a hazard. In this case the proposal would exceed the RWY 15/33 transitional surface by the values listed above, however, it would not conflict with airspace required to conduct normal VFR traffic pattern operations. There are no IFR impacts and the VFR traffic pattern airspace is not impacted. The incorporation of obstruction lighting will provide pilot conspicuity for VFR and IFR aircraft operations in the vicinity of the airport.

7. CONDITIONS

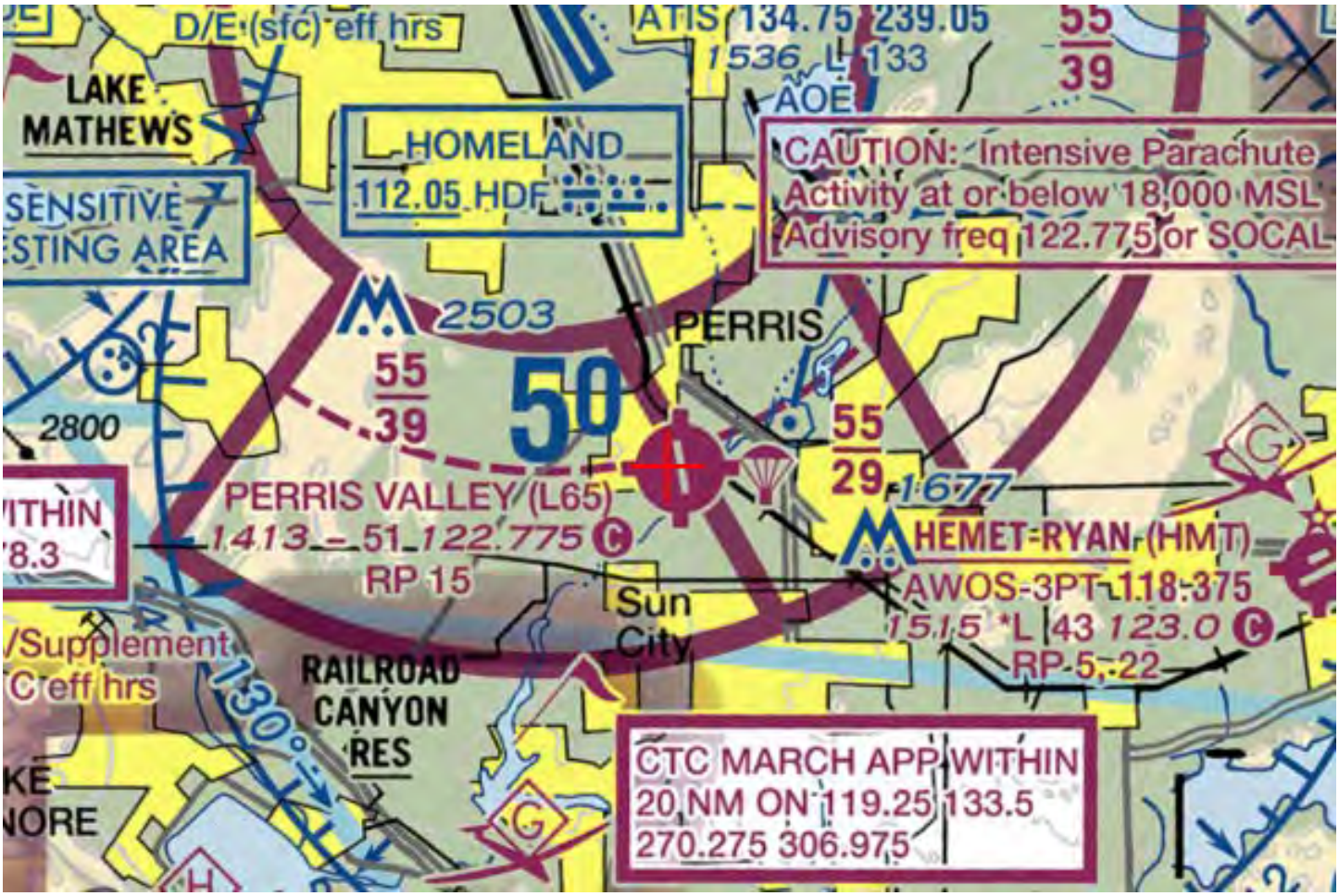
The structure shall be lighted as outlined in Chapters 4, 5(Red) & 15 of the Advisory Circular AC 70/7460-1M. The advisory circular is available online at https://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.information/documentID/1038519.

Within five days after the structure reaches its greatest height, the proponent is required to file on line the Supplemental Notice, FAA form 7460-2, with actual construction details, at the OE/AAA website (https://oeaaaa.faa.gov/oeaaa). Detailed instructions are available under the Instructions link. This Supplemental Notice notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national database.

TOPO Map for ASN 2023-AWP-1820-OE



Sectional Map for ASN 2023-AWP-1820-OE



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Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2023-AWP-1821-OE

Issued Date: 04/19/2023

Michael Masterson
CH Realty IX-MC I Riverside Perris Airport Center
18032 Lemon Drive
Suite 367
Yorba Linda, CA 92886

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Building 1-5
Location:	Perris, CA
Latitude:	33-46-07.56N NAD 83
Longitude:	117-13-19.01W
Heights:	1422 feet site elevation (SE) 50 feet above ground level (AGL) 1472 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, red lights-Chapters 4,5(Red),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Air Missions (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

The structure considered under this study lies in proximity to an airport and occupants may be subjected to noise from aircraft operating to and from the airport.

This determination expires on 10/19/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before May 19, 2023. In the event an interested party files a petition for review, it must contain a full statement of the basis upon which the petition is made. Petitions can be submitted to the Manager of the Rules and Regulations Group via e-mail at OEPetitions@faa.gov, via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, Room 425, 800 Independence Ave, SW, Washington, DC 20591, or via facsimile (202) 267-9328. FAA encourages the use of email to ensure timely processing.

This determination becomes final on May 29, 2023 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Vivian Vilaro, at (847) 294-7575, or vivian.vilaro@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2023-AWP-1821-OE.

Signature Control No: 569690160-581799327 (DNH)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

AERONAUTICAL STUDY NO. 2023-AWP-1818-through-1821-OE

Abbreviations

VFR - Visual Flight Rules AGL - Above Ground Level RWY - Runway
IFR - Instrument Flight Rules MSL - Mean Sea Level NM - Nautical Mile
AMSL - Above Mean Sea Level
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

1. LOCATION OF PROPOSED CONSTRUCTION

CH Realty IX-MC I Riverside Perris Airport Center is proposing to construct two industrial buildings west of Perris Valley Airport. The proposed structures have been identified as an obstruction under Part 77 standards. The proposal would be located 0.29 nautical miles northwest of the Perris Valley Airport (L65) airport reference point (ARP) in Perris, CA. L65 elevation is 1413 feet MSL.

Aeronautical Study Number	AGL/AMSL	L65 ARP	Coordinates	BLDG
2023-AWP-1818-OE	51/1472	0.38	33-46-13.64/117-13-18.99	1-2
2023-AWP-1819-OE	50/1472	0.35	33-46-11.66/117-13-18.99	1-3
2023-AWP-1820-OE	50/1472	0.32	33-46-09.60/117-13-19.00	1-4
2023-AWP-1821-OE	50/1472	0.29	33-46-07.56/117-13-19.01	1-5

2. OBSTRUCTION STANDARDS EXCEEDED

Section 77.19(e) - These surfaces extend outward and upward at right angles to the runway centerline and the runway centerline extended at a slope of 7 to 1 from the sides of the primary surface and from the sides of the approach surfaces. The proposed structure would exceed L65 transitional surface for the existing RWY 15/33 by the values shown below:

Aeronautical Study Number	Transitional Surface exceeds by
2023-AWP-1818-OE	27 feet
2023-AWP-1819-OE	20 feet
2023-AWP-1820-OE	13 feet
2023-AWP-1821-OE	6 feet

3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR follows: The VFR traffic pattern airspace (TPA) is not penetrated.

FAA Findings

There are no effects on any existing or proposed arrival, departure, or en route IFR operations or procedures.
There are no effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes.
There is no penetration into the VFR traffic pattern airspace.
There are no physical or electromagnetic effects on the operation of air navigation and communications facilities.
There are no effects on any airspace and routes used by the military.

The L65 Airport Master Record can be viewed or downloaded at https://adip.faa.gov/agis/public/#/airportData/L65 It states that there are eight (8) single engine, twelve (12) multi-engine and one (1) jet aircraft based there with 27,550 operations for the 12 months ending 04/30/2022 (latest information).

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR follows: Aeronautical study disclosed that the proposed structure would have no effect on any existing or proposed arrival or en route IFR operations or procedures.

c. The impact on all planned public-use airports and aeronautical facilities follows: Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposed structure affect the capacity of any known existing or planned public-use or military airport.

d. The cumulative impact resulting from the proposed construction or alteration of a structure when combined with the impact of other existing or proposed structures is not considered to be significant.

4. CIRCULATION AND COMMENTS RECEIVED

As a result of the negotiation process the sponsor requested circularization of the proposed structure. The proposal was circularized for public comment on March 7, 2023. No comments were received as a result of the circularization.

5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed structure would not have a substantial adverse effect on the safe and efficient use of navigable airspace by aircraft.

6. BASIS FOR DECISION

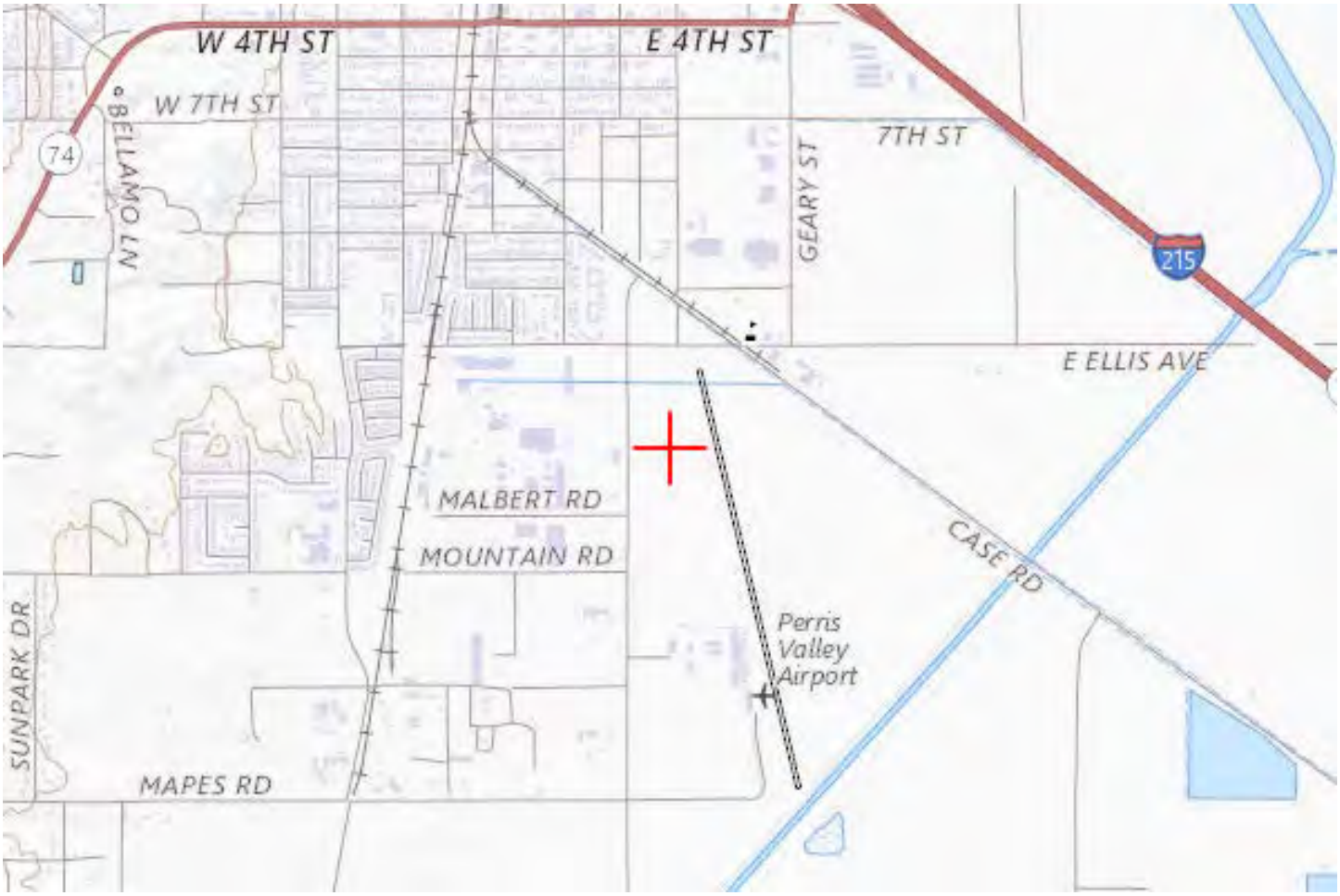
Part 77 establishes standards for determining obstructions to air navigation. A structure that exceeds one or more of these standards is presumed to be a hazard to air navigation unless the obstruction evaluation study determines otherwise. Just because a proposed structure exceeds a Part 77 surface does not automatically make it a hazard. In this case the proposal would exceed the RWY 15/33 transitional surface by the values listed above, however, it would not conflict with airspace required to conduct normal VFR traffic pattern operations. There are no IFR impacts and the VFR traffic pattern airspace is not impacted. The incorporation of obstruction lighting will provide pilot conspicuity for VFR and IFR aircraft operations in the vicinity of the airport.

7. CONDITIONS

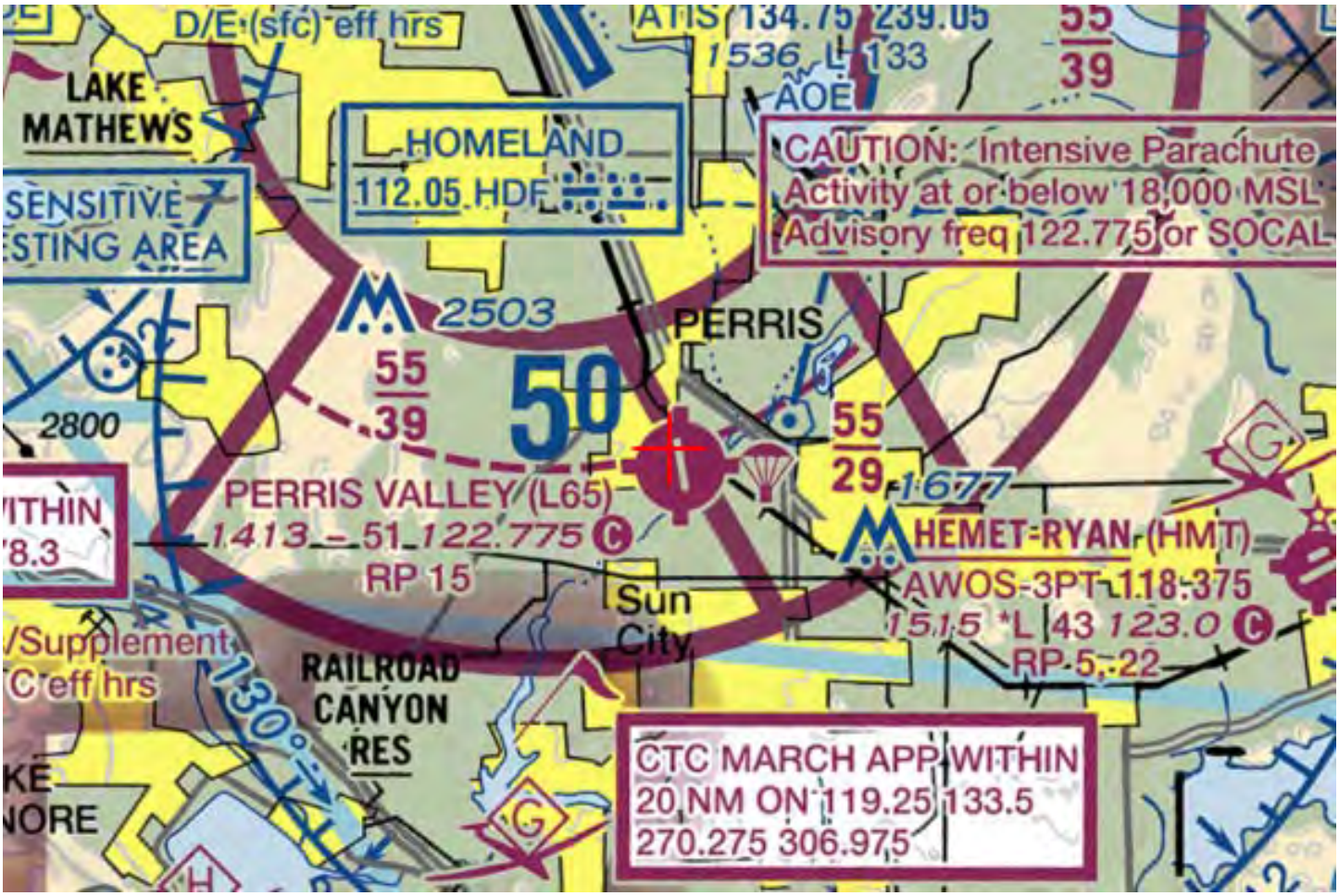
The structure shall be lighted as outlined in Chapters 4, 5(Red) & 15 of the Advisory Circular AC 70/7460-1M. The advisory circular is available online at https://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.information/documentID/1038519.

Within five days after the structure reaches its greatest height, the proponent is required to file on line the Supplemental Notice, FAA form 7460-2, with actual construction details, at the OE/AAA website (https://oeaaaa.faa.gov/oeaaa). Detailed instructions are available under the Instructions link. This Supplemental Notice notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national database.

TOPO Map for ASN 2023-AWP-1821-OE



Sectional Map for ASN 2023-AWP-1821-OE



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10101 Hillwood Parkway
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Aeronautical Study No.
2023-AWP-1822-OE

Issued Date: 04/19/2023

Michael Masterson
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18032 Lemon Drive
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Yorba Linda, CA 92886

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Building 1-6
Location:	Perris, CA
Latitude:	33-46-02.83N NAD 83
Longitude:	117-13-19.02W
Heights:	1422 feet site elevation (SE) 50 feet above ground level (AGL) 1472 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, red lights-Chapters 4,5(Red),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Air Missions (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

The structure considered under this study lies in proximity to an airport and occupants may be subjected to noise from aircraft operating to and from the airport.

This determination expires on 10/19/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

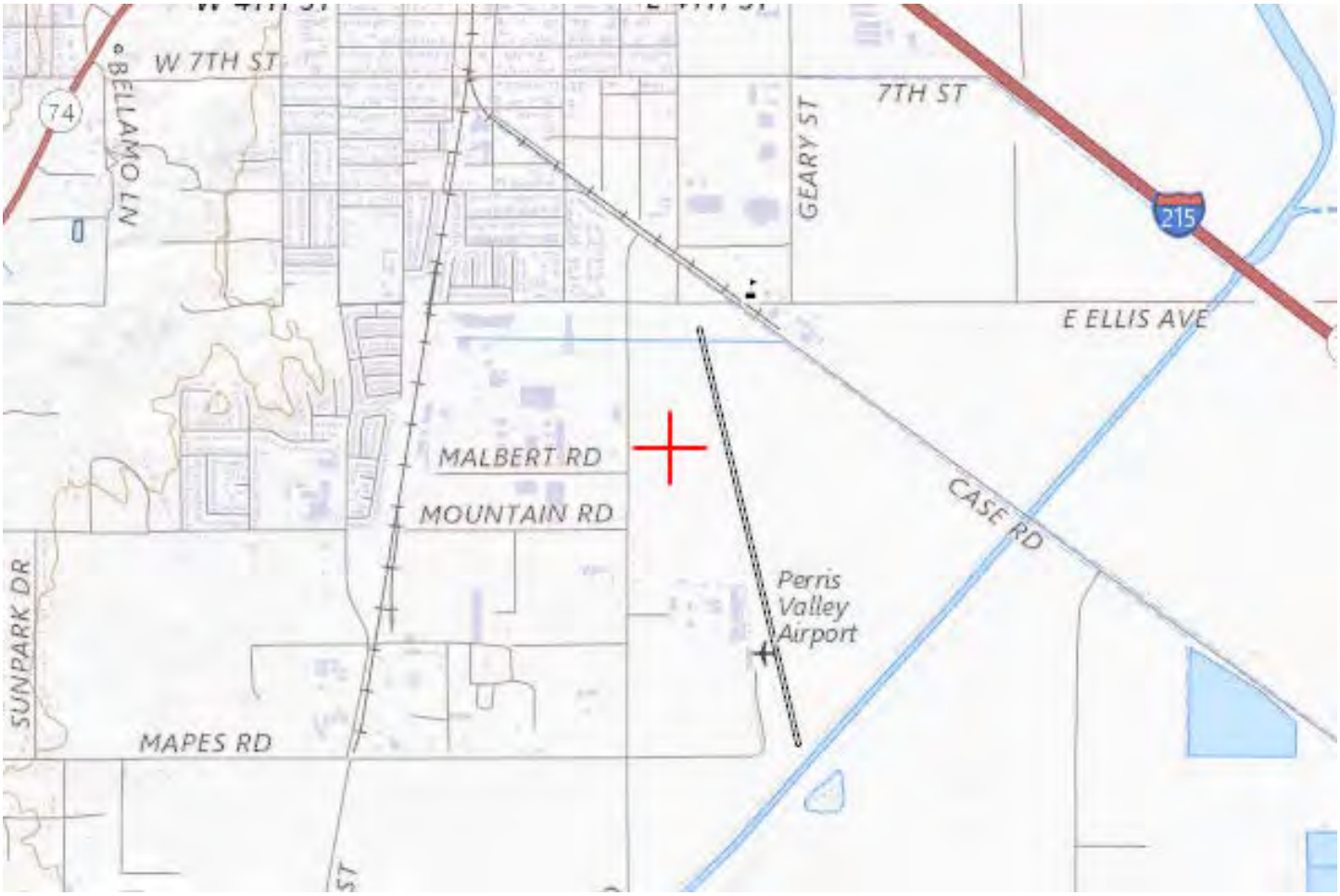
This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (847) 294-7575, or vivian.vilaro@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2023-AWP-1822-OE.

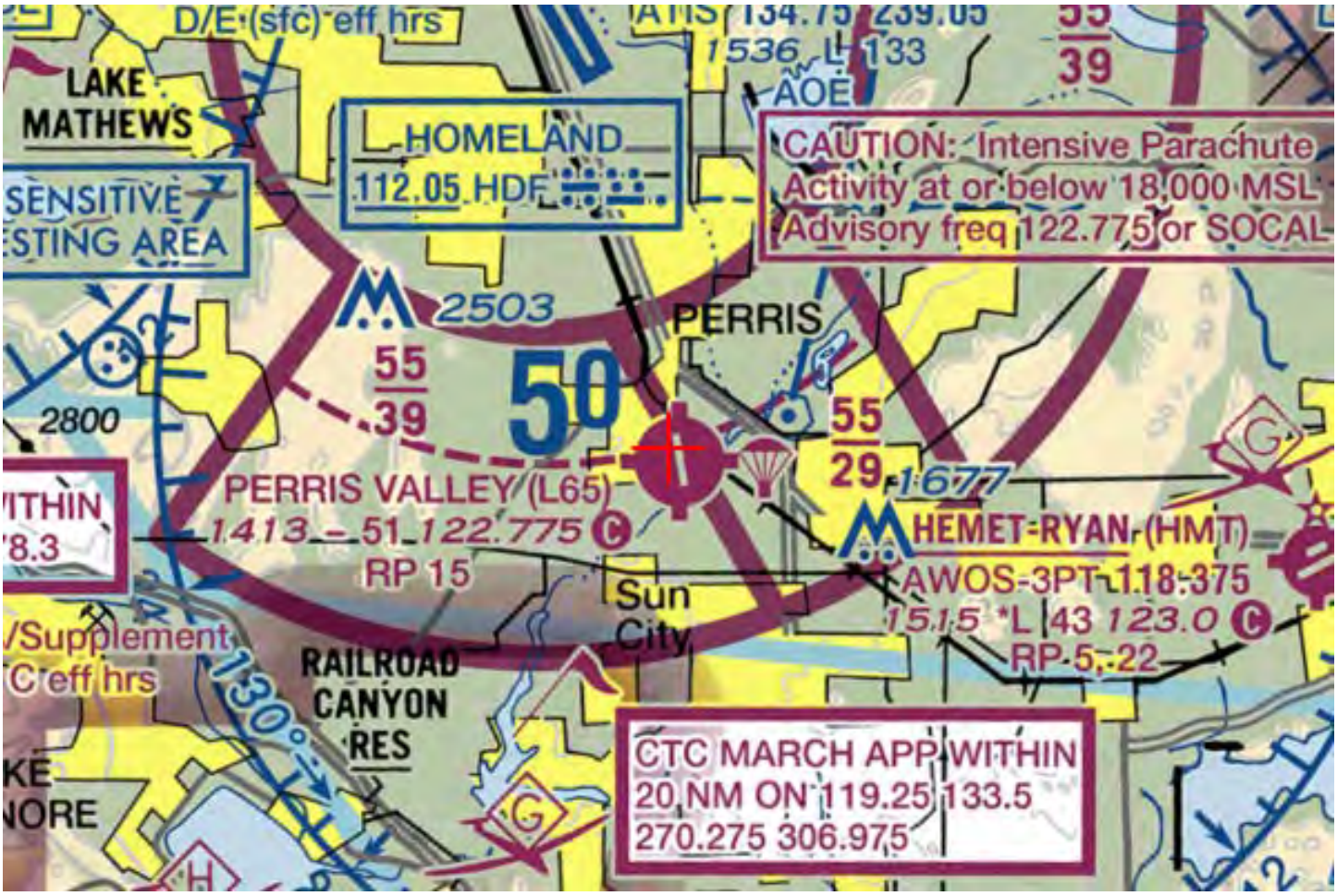
Signature Control No: 569690161-581801817 (DNE)
Vivian Vilaro
Specialist

Attachment(s)
Map(s)

TOPO Map for ASN 2023-AWP-1822-OE



Sectional Map for ASN 2023-AWP-1822-OE



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Aeronautical Study No.
2023-AWP-1823-OE

Issued Date: 04/19/2023

Michael Masterson
CH Realty IX-MC I Riverside Perris Airport Center
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Yorba Linda, CA 92886

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Building 1-7
Location:	Perris, CA
Latitude:	33-45-53.79N NAD 83
Longitude:	117-13-19.07W
Heights:	1420 feet site elevation (SE) 52 feet above ground level (AGL) 1472 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, red lights-Chapters 4,5(Red),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Air Missions (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

The structure considered under this study lies in proximity to an airport and occupants may be subjected to noise from aircraft operating to and from the airport.

This determination expires on 10/19/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

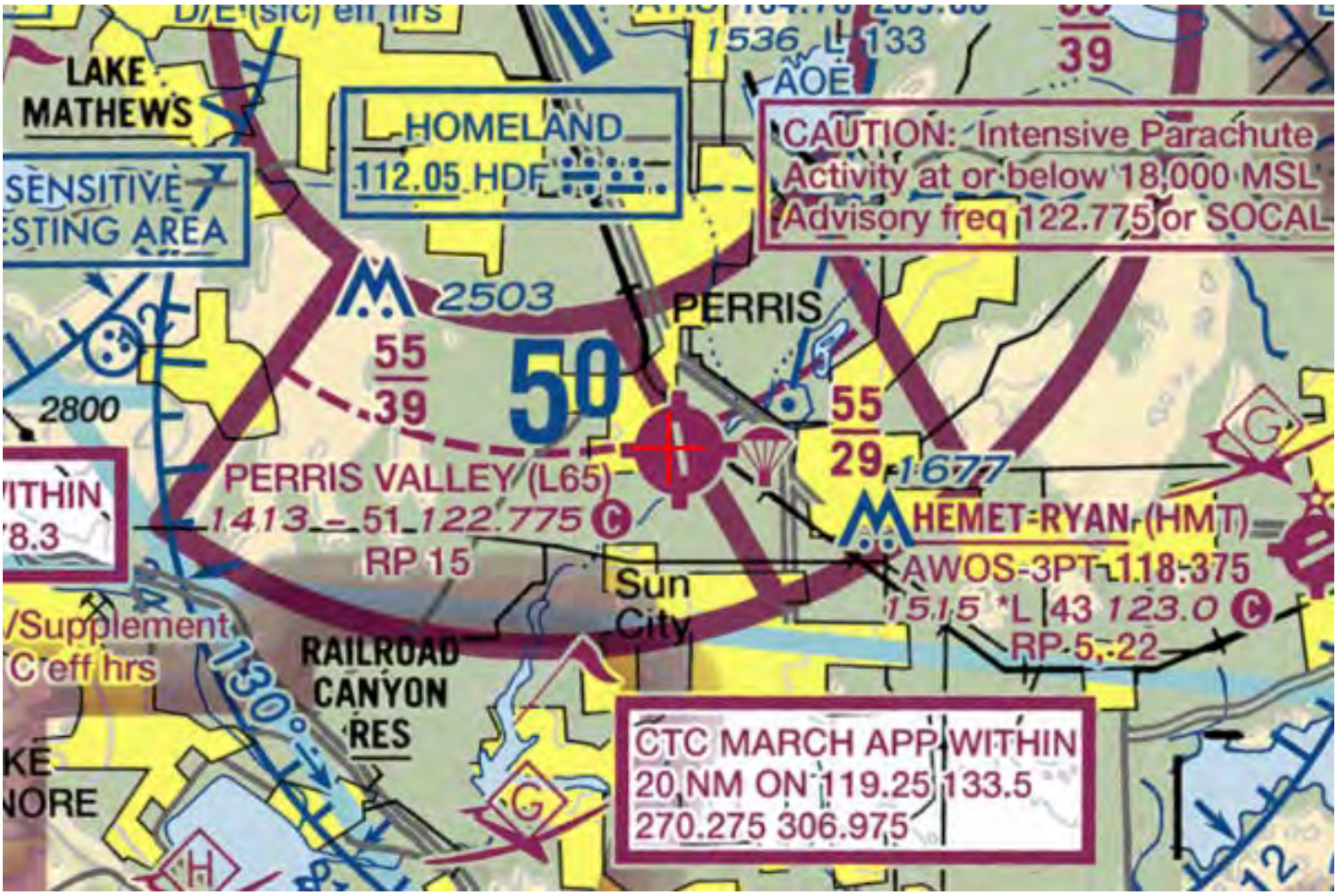
If we can be of further assistance, please contact our office at (847) 294-7575, or vivian.vilaro@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2023-AWP-1823-OE.

Signature Control No: 569690162-581801814 (DNE)
Vivian Vilaro
Specialist

Attachment(s)
Map(s)

TOPO Map for ASN 2023-AWP-1823-OE

Sectional Map for ASN 2023-AWP-1823-OE



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10101 Hillwood Parkway
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Aeronautical Study No.
2023-AWP-1824-OE

Issued Date: 04/19/2023

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**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Building 1-8
Location:	Perris, CA
Latitude:	33-45-53.81N NAD 83
Longitude:	117-13-23.67W
Heights:	1423 feet site elevation (SE) 52 feet above ground level (AGL) 1475 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, red lights-Chapters 4,5(Red),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Air Missions (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

The structure considered under this study lies in proximity to an airport and occupants may be subjected to noise from aircraft operating to and from the airport.

This determination expires on 10/19/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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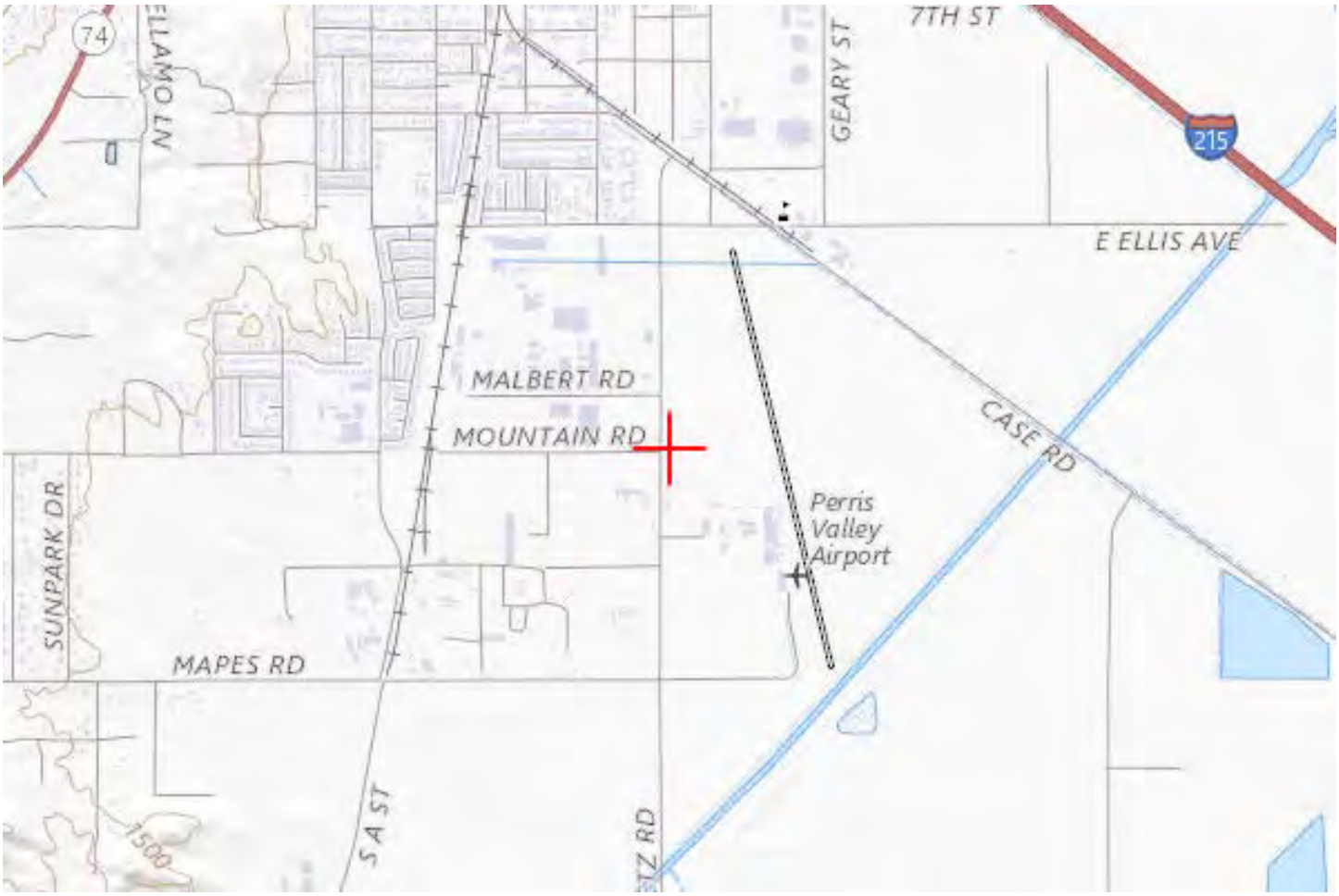
If we can be of further assistance, please contact our office at (847) 294-7575, or vivian.vilaro@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2023-AWP-1824-OE.

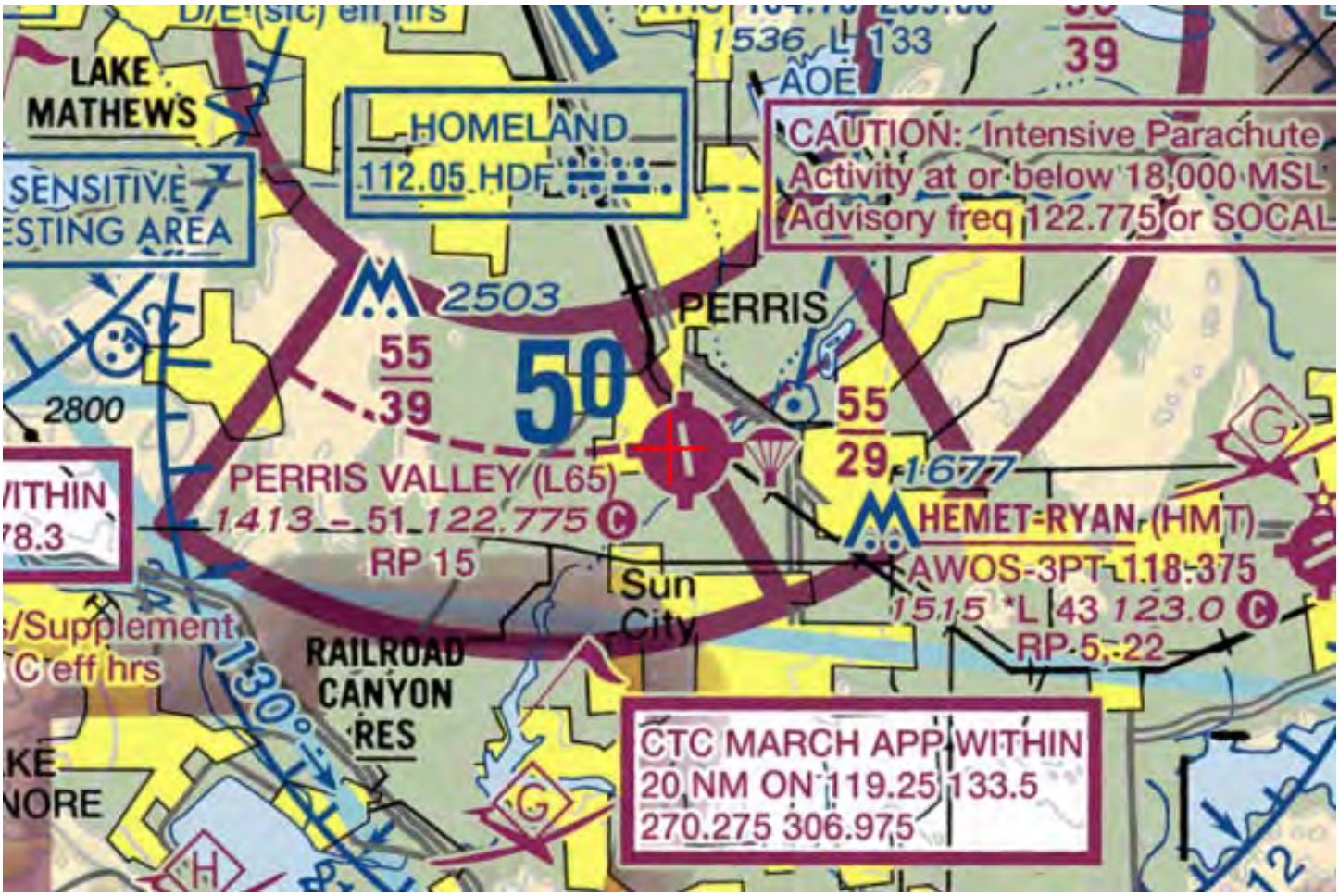
Signature Control No: 569690163-581801815 (DNE)
Vivian Vilaro
Specialist

Attachment(s)
Map(s)

TOPO Map for ASN 2023-AWP-1824-OE



Sectional Map for ASN 2023-AWP-1824-OE



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Fort Worth, TX 76177

Aeronautical Study No.
2023-AWP-1825-OE

Issued Date: 04/19/2023

Michael Masterson
CH Realty IX-MC I Riverside Perris Airport Center
18032 Lemon Drive
Suite 367
Yorba Linda, CA 92886

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Building 2-1
Location:	Perris, CA
Latitude:	33-45-53.02N NAD 83
Longitude:	117-13-21.22W
Heights:	1419 feet site elevation (SE) 51 feet above ground level (AGL) 1470 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

The structure considered under this study lies in proximity to an airport and occupants may be subjected to noise from aircraft operating to and from the airport.

This determination expires on 10/19/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

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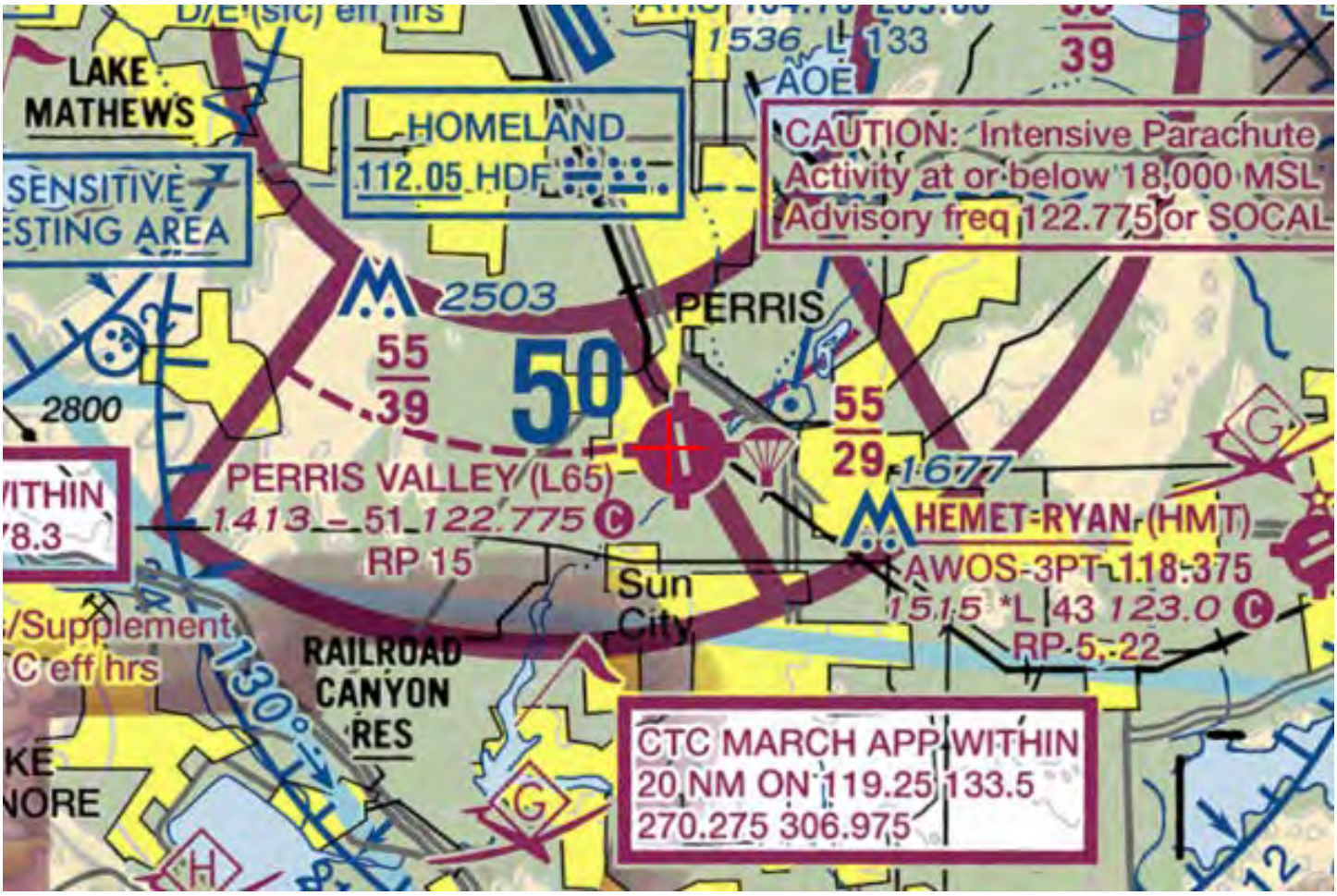
If we can be of further assistance, please contact our office at (847) 294-7575, or vivian.vilaro@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2023-AWP-1825-OE.

Signature Control No: 569690164-581800011 (DNE)
Vivian Vilaro
Specialist

Attachment(s)
Map(s)

TOPO Map for ASN 2023-AWP-1825-OE

Sectional Map for ASN 2023-AWP-1825-OE



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10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2023-AWP-1826-OE

Issued Date: 04/19/2023

Michael Masterson
CH Realty IX-MC I Riverside Perris Airport Center
18032 Lemon Drive
Suite 367
Yorba Linda, CA 92886

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Building 2-2
Location:	Perris, CA
Latitude:	33-45-53.01N NAD 83
Longitude:	117-13-15.35W
Heights:	1417 feet site elevation (SE)
	53 feet above ground level (AGL)
	1470 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

The structure considered under this study lies in proximity to an airport and occupants may be subjected to noise from aircraft operating to and from the airport.

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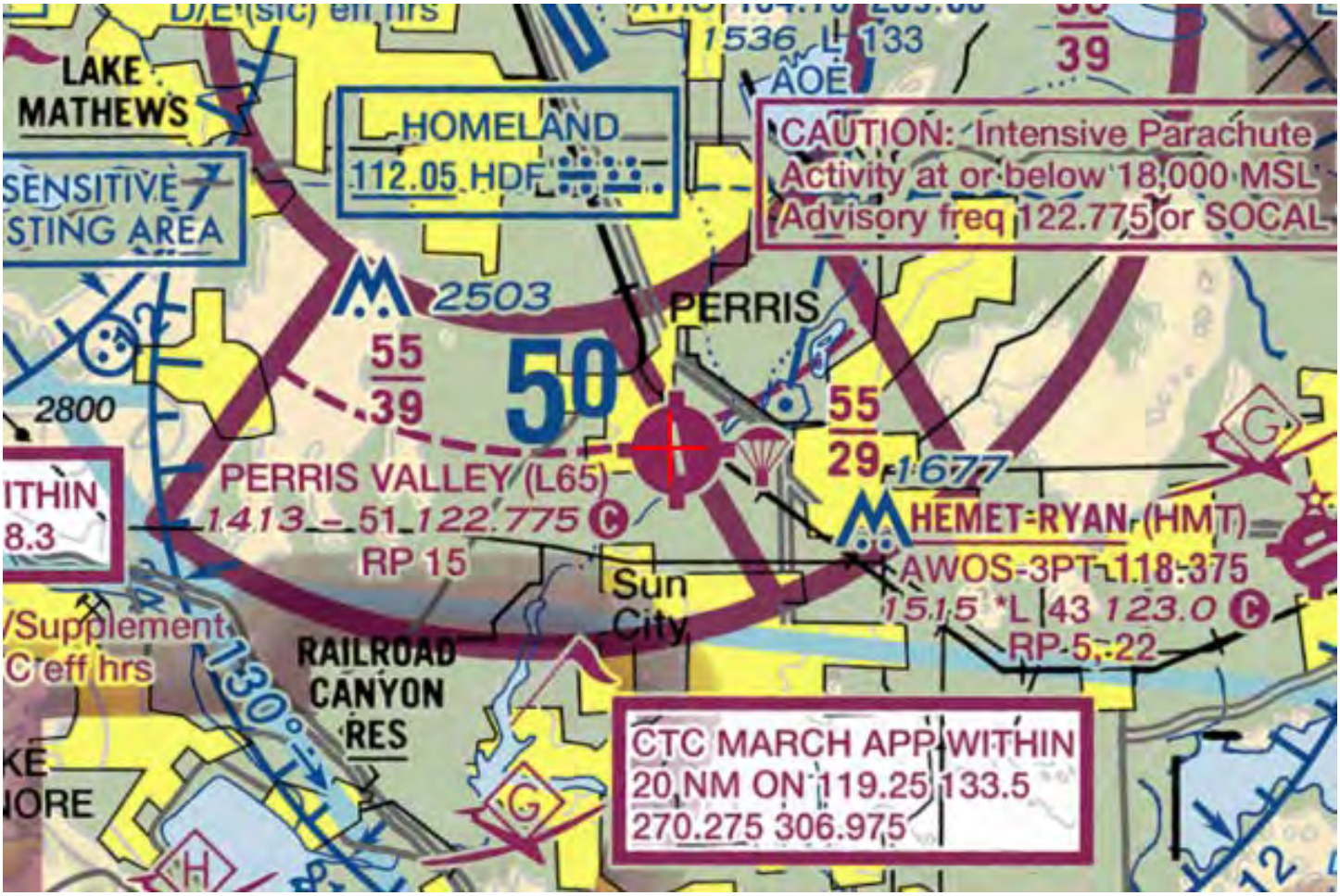
Signature Control No: 569690165-581800013 (DNE)
Vivian Vilaro
Specialist

Attachment(s)
Map(s)

TOPO Map for ASN 2023-AWP-1826-OE

Sectional Map for ASN 2023-AWP-1826-OE



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Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2023-AWP-1827-OE

Issued Date: 04/19/2023

Michael Masterson
CH Realty IX-MC I Riverside Perris Airport Center
18032 Lemon Drive
Suite 367
Yorba Linda, CA 92886

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Building 2-3
Location:	Perris, CA
Latitude:	33-45-52.02N NAD 83
Longitude:	117-13-15.36W
Heights:	1416 feet site elevation (SE) 54 feet above ground level (AGL) 1470 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

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Signature Control No: 569690166-581800015 (DNE)
Vivian Vilaro
Specialist

Attachment(s)
Map(s)

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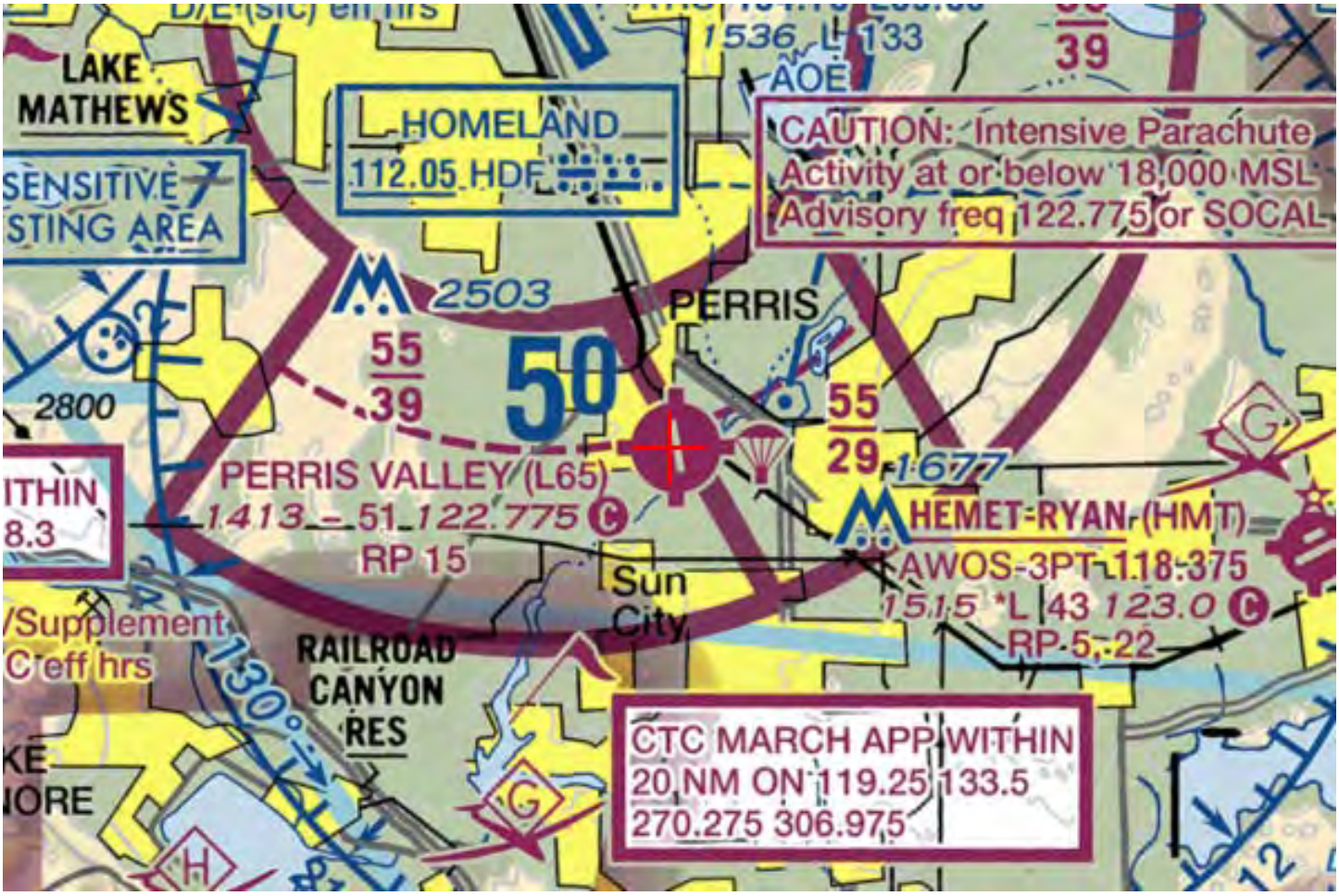

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10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2023-AWP-1828-OE

Issued Date: 04/19/2023

Michael Masterson
CH Realty IX-MC I Riverside Perris Airport Center
18032 Lemon Drive
Suite 367
Yorba Linda, CA 92886

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Building 2-4
Location:	Perris, CA
Latitude:	33-45-52.04N NAD 83
Longitude:	117-13-21.28W
Heights:	1419 feet site elevation (SE) 51 feet above ground level (AGL) 1470 feet above mean sea level (AMSL)

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Signature Control No: 569690167-581800014 (DNE)
Vivian Vilaro
Specialist

Attachment(s)
Map(s)

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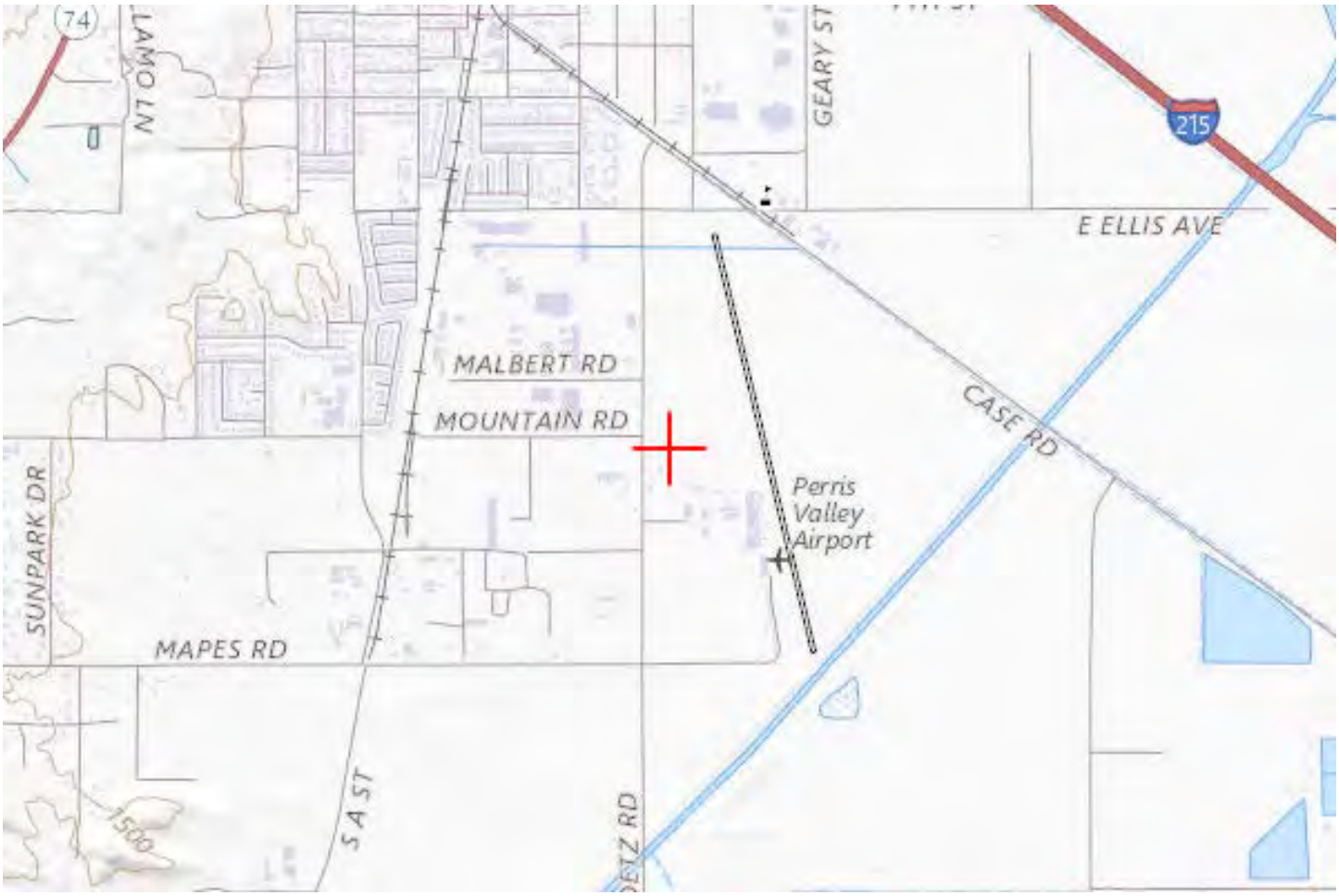
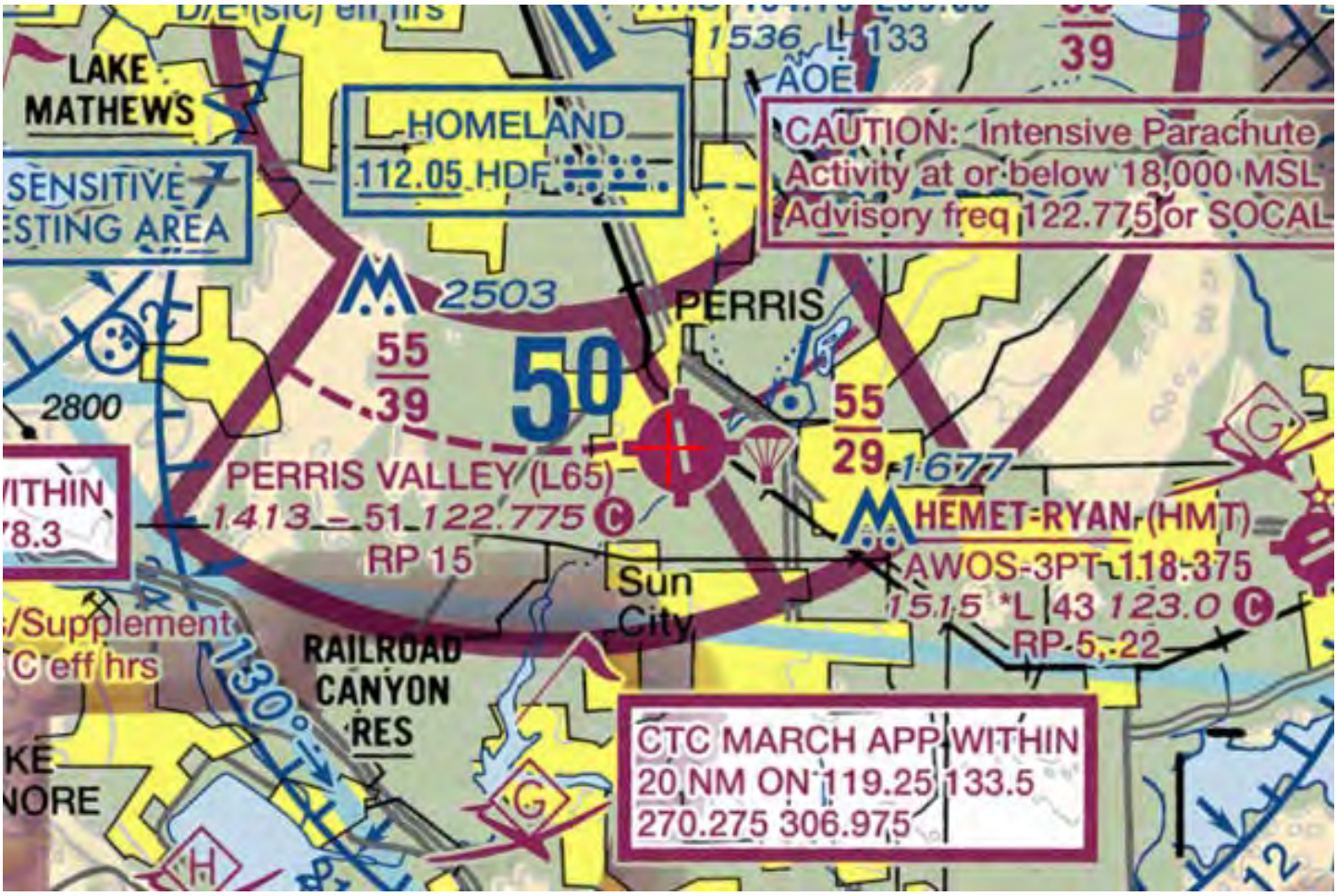


Sectional Map for ASN 2023-AWP-1828-OE



Technical Memorandum - DRAFT

To: Christine Saunders, Christine Saunders & Associates
From: Nick Johnson, Johnson Aviation, Inc.
Date: February 14, 2023

Subject: Perris Valley Airport Industrial Project - Goetz Road & Mountain Avenue, Perris, CA - Airport Land Use Compatibility

A. Introduction and Finding

The Perris Valley Airport Industrial Project (Project) is a proposed industrial use, with two warehouse buildings and a trailer parking yard (truck yard), located in the City of Perris, California (City) and within the Airport Influence Area (AIA) of Perris Valley Airport (L65 or Airport). The Project is also located within the AIA of the March Air Reserve Base/Inland Port (MARB/IP). Coordination with the City of Perris and Riverside County Airport Land Use Commission (ALUC) staff are required. The Perris Valley Airport Land Use Compatibility Plan[1] (ALUCP) was adopted by the ALUC in 2011 and provides specific airport land use guidance in addition to the ALUC's Countywide Policies[2] adopted in 2004. The Project is also subject to height restrictions by the Federal Aviation Administration (FAA) and other development restrictions by the City of Perris and the owners of the Airport. The FAA is required under 14 Code of Federal Regulations (CFR) Part 77[3] to protect navigable airspace by studying proposed developments and issuing determinations that a project would not be a hazard to air navigation. The City adopted its General Plan Land Use Element in 2005 and amended it in 2016[4].

The Project site is zoned Light Industrial, which includes limited assembly and packaging operations, self-storage warehouses, distribution centers, and business-to-business retail operations. The allowable floor area ratio (FAR) for light industrial is 0.75:1 FAR and the minimum lot size is 10,000 square feet. The Project is compatible with the General Plan and zoning.

Countywide ALUC Policies, Section 1.5.1(a) and State Law require an ALUC determination of consistency with the ALUCP prior to approval by the City. The intended use of the Project site is compatible within both the Perris Valley and MARB/IP AIAs. The Project site is compatible within the Perris Valley ALUCP Zones B1, B2, C, and D. The Project site is compatible within the MARB/IP ALUCP Zones E. The occupancy analysis using the Perris Valley ALUCP guidance indicates that the total site intensity (people per acre) is less than the allowable parameters and both average and single-acre intensity are consistent with the ALUCP Zone limits. The Project site meets the open land requirements of the Perris Valley ALUCP. Because the MARB/IP Zone E has no explicit upper limit on usage intensity, an occupancy analysis is not required. The MARB/IP Zone E has no open land requirements. ***Therefore, the proposed Project is found to be compatible with the parameters of the General Plan, the 2011 Perris Valley ALUCP, and the 2014 MARB/IP ALUCP.***

[1] https://rcaluc.org/Portals/13/19%20-%20Vol.%201%20Perris%20Valley%20(Final-Mar.2011).pdf?ver=2016-08-15-155627-183
[2] https://www.rcaluc.org/Portals/13/PDFGeneral/plan/newplan/04-%20Vol.%201%20County%20wide%20Policies.pdf
[3] 14 CFR Part 77 – *Safe, Efficient Use, and Preservation of the Navigable Airspace*, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-E/part-77
[4] https://www.cityofperris.org/home/showpublisheddocument/457/637203139714030000

B. Purpose and Project Description

The purpose of this Technical Memorandum is to complete an airport land use compatibility assessment for the Project that addresses aviation safety, aircraft noise impacts, aircraft overflight, airspace protection, and the operational risk to people and property within the Project site. This assessment is based on a review of relevant documents, local knowledge, and publicly available information.

The Project site is 85.2 net-acres located in Planning Area 8 – Perris Valley Airport, of the City of Perris General Plan. The Project site is on either side of Runway 15-33. Goetz Road is to the west; Case Road is to the east and East Ellis Avenue is to the north of the Project site. The Project is two warehouse buildings and a truck yard. Building 1 is a total of 792,688 SF that includes 20,000 SF of office space. Building 1 has a racking system and product staging areas in front of the dock doors (Figure 3). Building 2 is a total of 50,026 SF that includes 6,500 SF of office space. The truck yard is 996,653 SF.

The Project site is within the airport influence area (AIA) of Perris Valley Airport, which is privately-owned, has one runway (Runway 15-33) and is a skydiving center. Figure 1 shows the Property in relation to the Airport. Figure 2 shows the site plan for the Project.

Figure 1 - Project Site Relative to L65

Figure 2 – Site Plan

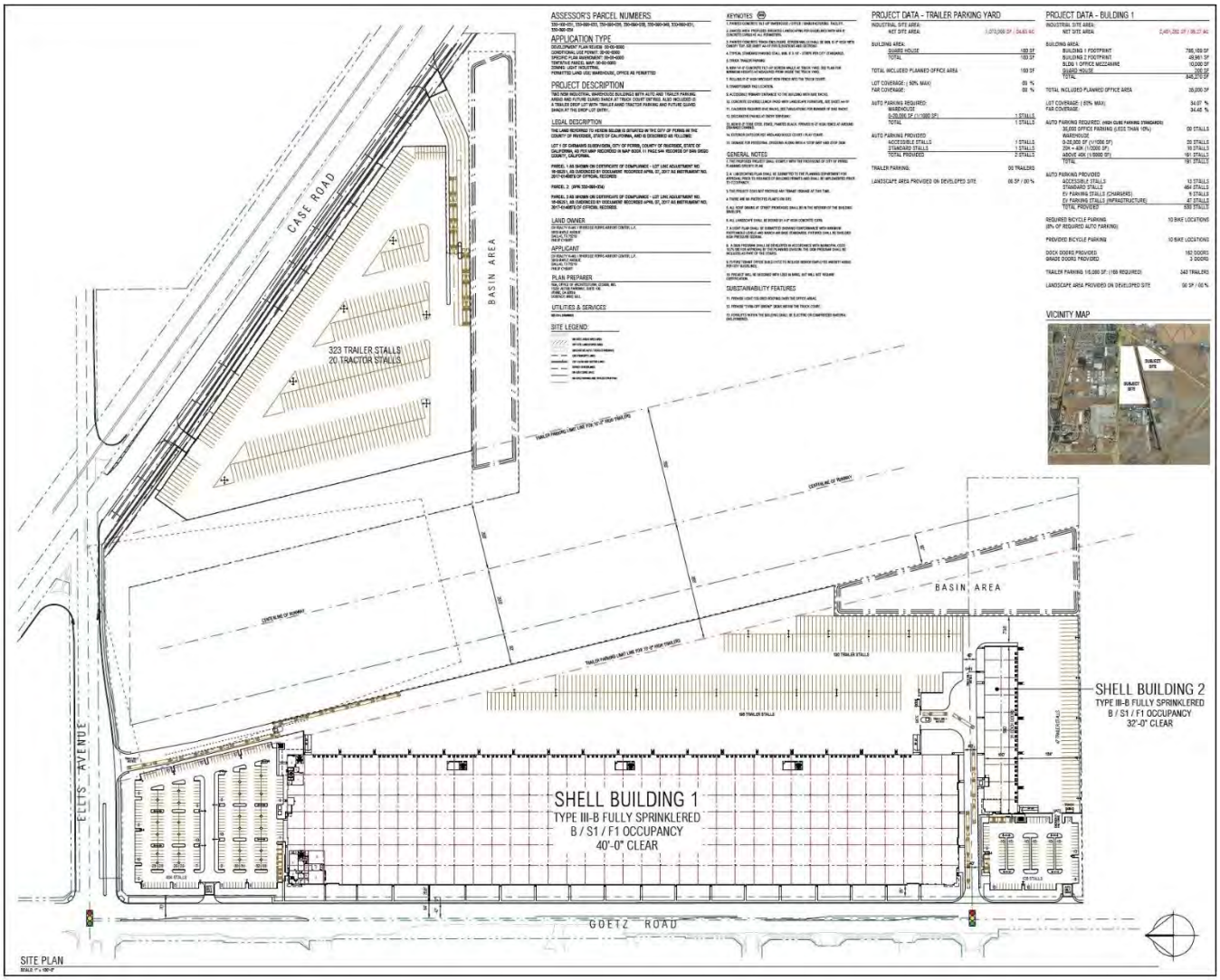
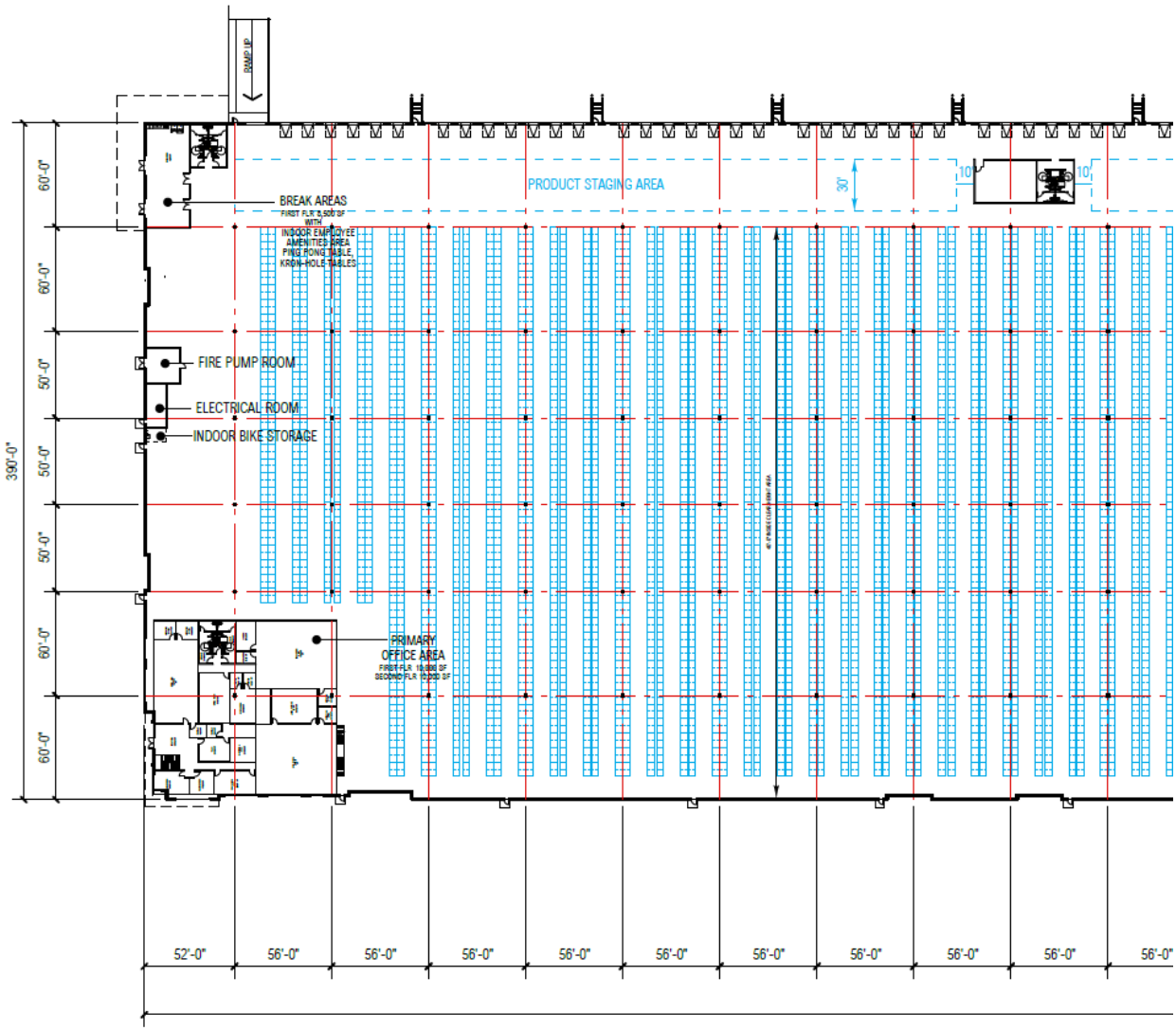


Figure 3 – Building 1 Racking System

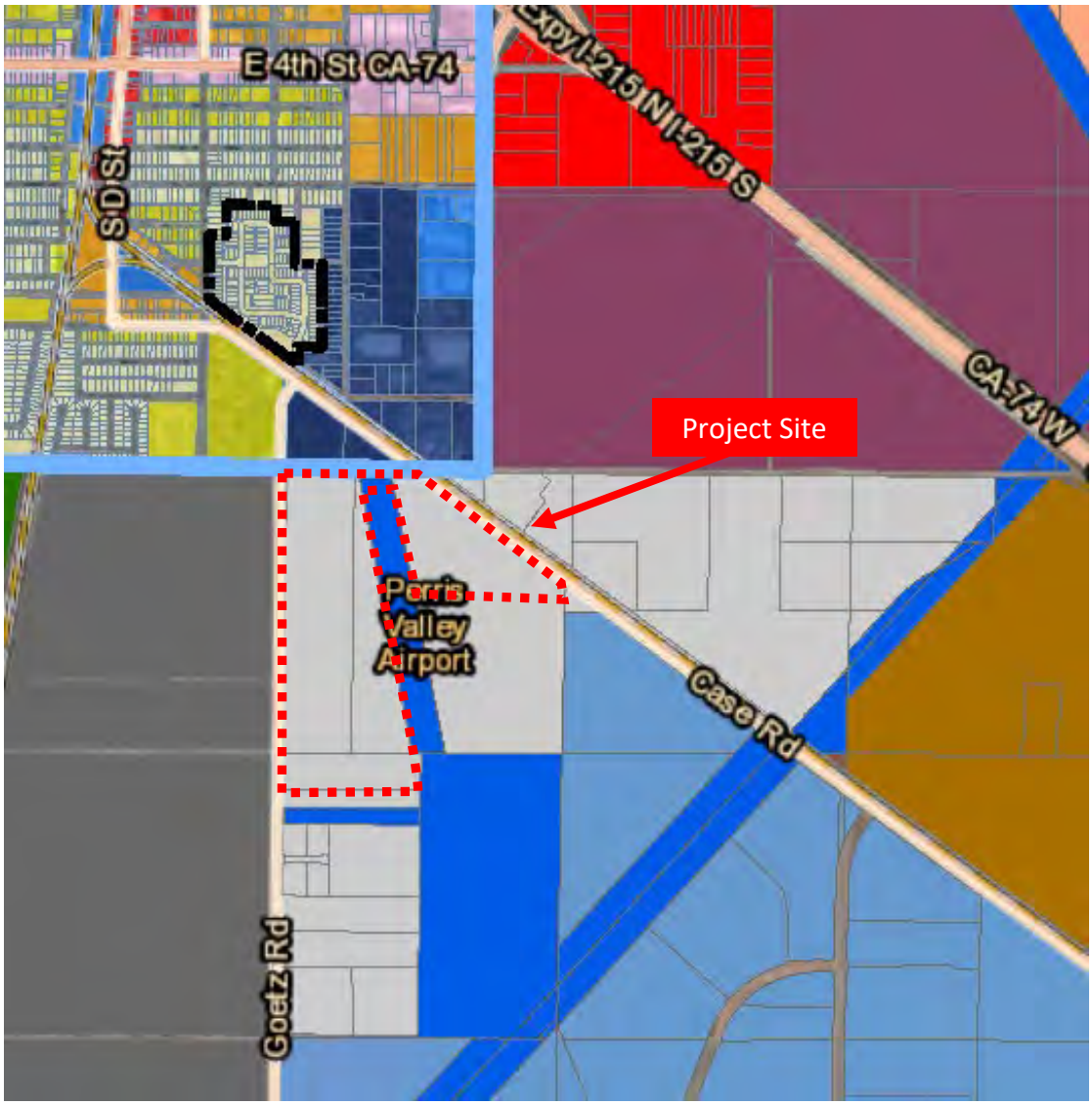


C. Land Use Jurisdiction and Compatibility

City of Perris General Plan

The City of Perris adopted the Land Use Element of its General Plan in 2005 and last amended the Land Use Element in 2016. The Project site is zoned Light Industrial, which includes limited assembly and packaging operations, self-storage warehouses, distribution centers, and business-to-business retail operations (Figure 4). The allowable floor area ratio (FAR) for light industrial is 0.75:1FAR and the minimum lot size is 10,000 square feet.

Figure 4 – Perris Valley General Plan Land Use Designations

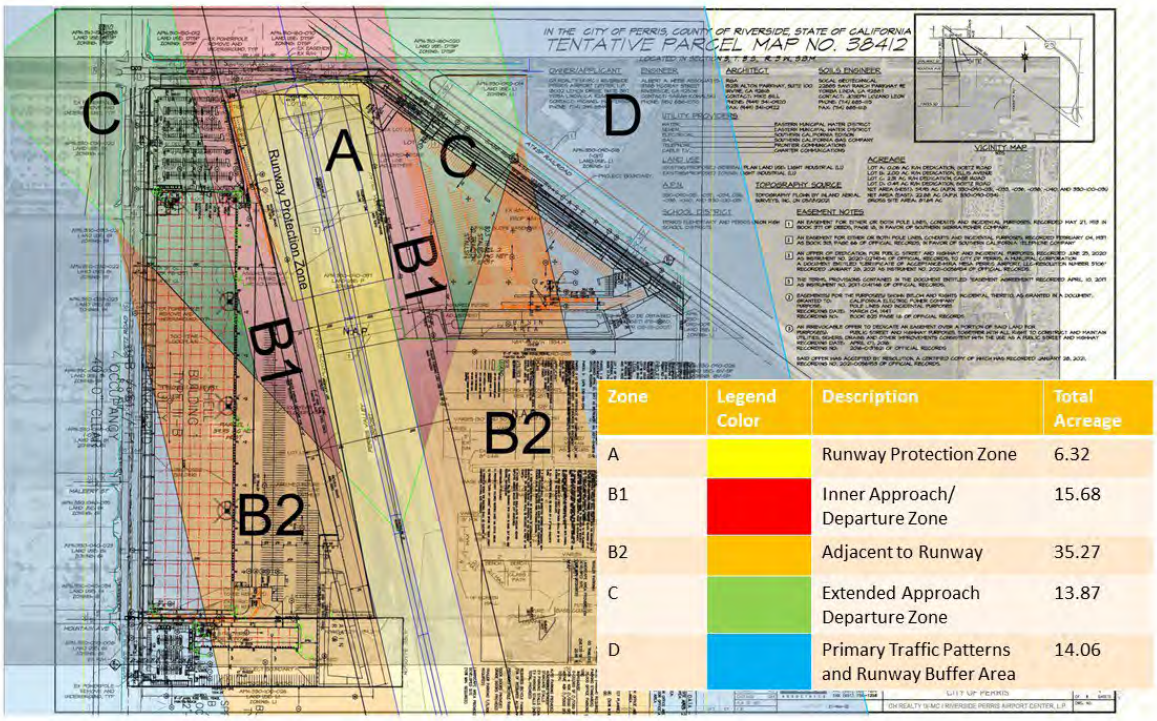


Perris Valley ALUCP

The Project is within the Perris Valley Airport AIA. The Perris Valley ALUCP was adopted by the ALUC in 2011 and provides specific airport land use guidance in addition to the ALUC's Countywide Policies adopted in 2004. The ALUCP is used to evaluate land use compatibility and development proposals in the vicinity of the Airport. The primary compatibility concerns are aircraft noise, the safety of people and property on the ground and in aircraft, the protection of airspace, and concerns related to overflights. The development restrictions associated with each zone consider the compatibility concerns of noise, safety, overflight, and airspace protection.

Because of its proximity to the runway, the Project site is within Compatibility Zones A through D (Figure 5). The warehouses, truck yard, employee parking, and retention basins are specifically in Zones B1 through D. Table 1 summarizes the noise, safety, and land use compatibility criteria in the ALUCP for Zones A through D. Warehouses and truck yards are permitted in Zones B1 through D.

Figure 5 – Property Safety Zone Split



Zone	Legend Color	Description	Total Acreage
A		Runway Protection Zone	6.32
B1		Inner Approach/ Departure Zone	15.68
B2		Adjacent to Runway	35.27
C		Extended Approach Departure Zone	13.87
D		Primary Traffic Patterns and Runway Buffer Area	14.06

With regards to the maximum density for "other uses", i.e. non-residential, the ALUCP allows a range depending on the zone. Zone B1 is most restrictive, allowing an average intensity (people per acre) of 25. This means the total number of people permitted on a project site at any time, except rare special events, must not exceed the indicated usage intensity times the gross acreage of the site. Zone D is less restrictive and has an average intensity of 100. The ALUCP allows a single acre intensity of 50 in Zone B1 and 300 in Zone D. Clustering of nonresidential development is permitted in Zones B1 through D; however no single acre of a project site shall exceed the indicated number of people per acre. Intensive manufacturing or office uses do not comply in Zone B1. An intensity bonus may be allowed if the building design includes features intended to reduce risks to occupants if an aircraft collides with the building:

The number of people permitted to occupy a single nonresidential building may be increased by a factor of up to 1.3 times the limitations set by the preceding policy on clustering if special measures are taken to reduce the risks to building occupants in the event that the building is struck by an aircraft.

Building design features which would enable application of an intensity bonus include, but are not limited to, the following: using concrete walls, limiting the number and size of windows, upgrading the strength of the building roof, avoiding skylights, enhancing the fire sprinkler system, limiting buildings to a single story, and increasing the number of emergency exits.

Zone B1 has an open land requirement of 30 percent. Zone C has an open land requirement of 20 percent and Zone D has open land requirement of 10 percent. All land in Zone A should be open as that is the intent of the RPZ. As per the ALUCP, to qualify as open land, an area should be: 1) Free of most structures and other major obstacles such as walls, large trees, or poles (greater than 4 inches in diameter, measured 4 feet above the ground), and overhead wires, and 2) Have minimum dimensions of approximately 75 feet by 300 feet. Roads and automobile parking lots are acceptable as open land areas if they meet the above criteria. Figure 6 shows the available open land in each zone. Based on the ALUCP, there is enough open land in each zone to accommodate the ALUCP requirements.

Figure 6 – Available Open Land

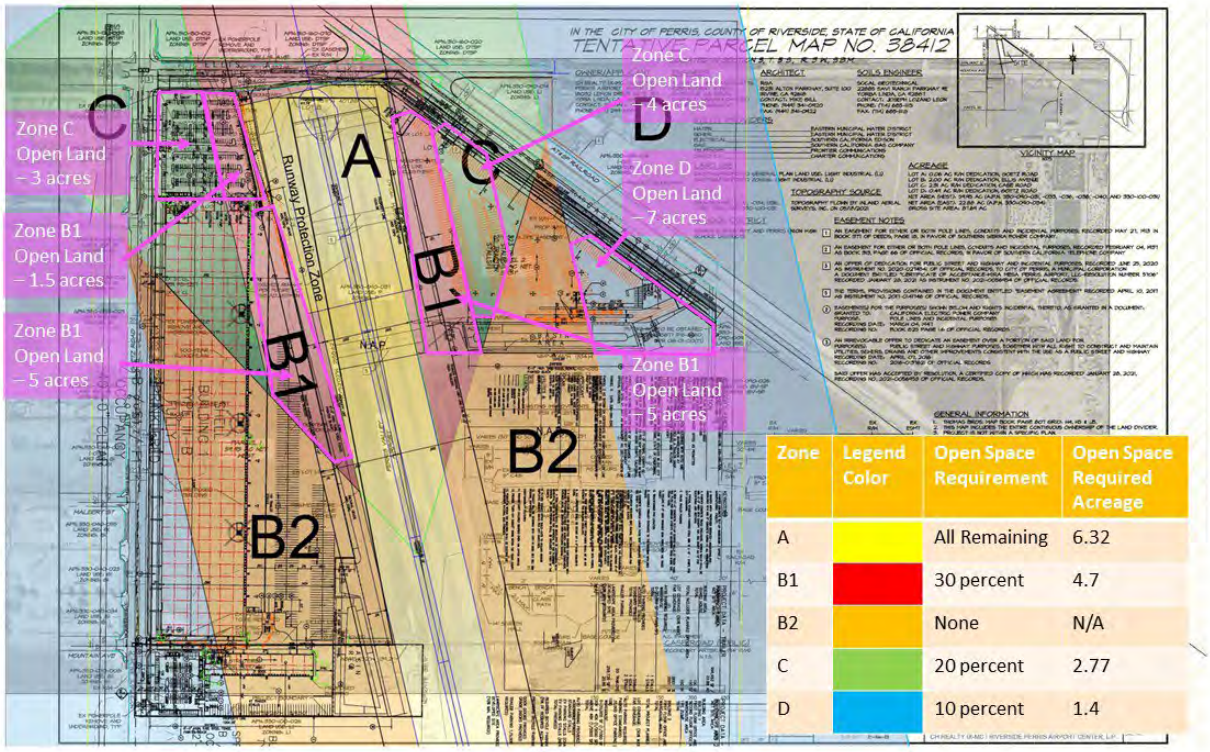


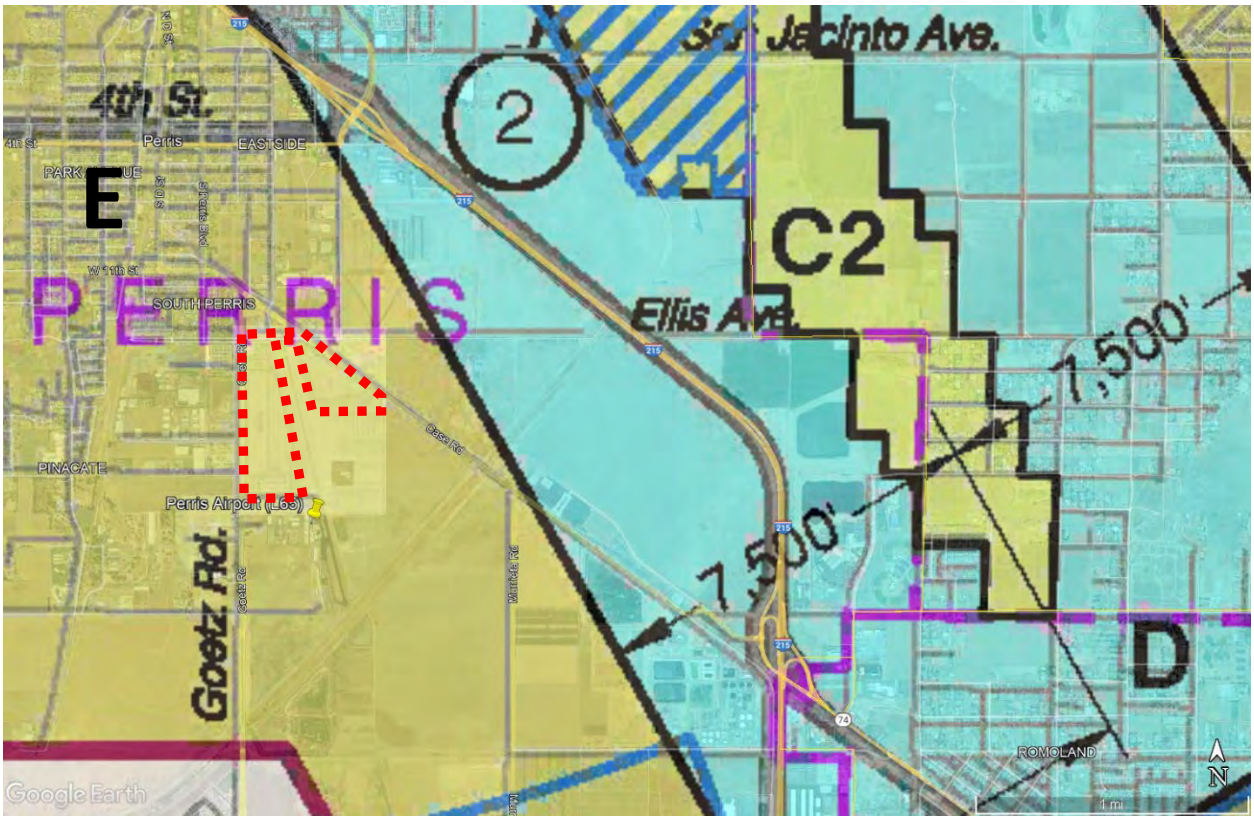
Table 1 – ALUCP Safety Zone Compatibility

Zone	Locations	Maximum Densities / Intensities					Additional Criteria	
		Residential (d.u./ac) [1]	Other Uses (people/ac) [2] Average [6]	Other Uses (people/ac) [2] Single Acre [7]	Other Uses (people/ac) [2] with Bonus [8]	Req'd Open Land [3]	Prohibited Uses [4]	Other Development Conditions [5]
A	Runway Protection Zone and within Building Restriction Line	0	0	0	0	All Remaining	› All structures except ones with location set by aeronautical function › Assemblages of people › Objects exceeding FAR Part 77 height limits › Storage of hazardous materials › Hazards to flight [9]	› Avigation easement dedication
B1	Inner Approach/ Departure Zone	0.05 (average parcel size ≥20.0 ac.)	25	50	65	30%	› Children's schools, day care centers, libraries › Hospitals, nursing homes › Places of worship › Bldgs with >2 aboveground habitable floors › Highly noise-sensitive outdoor nonresidential uses [10] › Aboveground bulk storage of hazardous materials [11] › Critical community infrastructure facilities [12] › Hazards to flight [9]	› Locate structures maximum distance from extended runway centerline › Minimum NLR of 25 dB in residences (including mobile homes) and office buildings [13] › Airspace review required for objects >35 feet tall [14] › Avigation easement dedication
B2	Adjacent to Runway	0.1 (average parcel size ≥10.0 ac.)	100	200	260	No Req't	Same as Zone B1	› Locate structures maximum distance from runway › Minimum NLR of 25 dB in residences (including mobile homes) and office buildings [13] › Airspace review required for objects >35 feet tall [14] › Avigation easement dedication
C	Extended Approach/ Departure Zone	0.2 (average parcel size ≥5.0 ac.)	75	150	195	20%	› Children's schools, day care centers, libraries › Hospitals, nursing homes › Bldgs with >3 aboveground habitable floors › Highly noise-sensitive outdoor nonresidential uses [10] › Hazards to flight [9]	› Minimum NLR of 20 dB in residences (including mobile homes) and office buildings [13] › Airspace review required for objects >70 feet tall [15] › Deed notice required
D	Primary Traffic Patterns and Runway Buffer Area	**(1)** ≤0.2 (average parcel size ≥5.0 ac.) *or* [16] **(2)** ≥5.0 (average parcel size ≤0.2 ac.)	100	300	390	10%	› Highly noise-sensitive outdoor nonresidential uses [10] › Hazards to flight [9]	› Airspace review required for objects >70 feet tall [15] › Children's schools, hospitals, nursing homes discouraged [17] › Deed notice required

March Air Reserve Base ALUCP

The Project is also within the March Air Reserve Base/Inland Port (MARB/IP) AIA (Figure 7). The MARB/IP ALUCP was adopted by the ALUC in 2014 and provides specific airport land use guidance in addition to the ALUC's Countywide Policies adopted in 2004. The Project is within Compatibility Zone E, which means noise impacts are low and the accident risk level is low. Zone E has no explicit upper limit on usage intensity and no open land requirements. Uses that attract very high concentrations of people in confined areas are discouraged near the arrival and departure flight tracks. Hazards to flight are prohibited (physical, visual, and electronic forms of interference with the safety of aircraft operations; practices that attract birds and the growth of certain crops). Based on the compatibility criteria associated within the MARB/IP Zone E and the proposed uses for the Project site (industrial, warehouse use), the Project is considered compatible.

Figure 7 – MARB/IP Zone E



D. Maximum Occupancy

The intended use of the Property is industrial. The Project consists of two warehouse buildings and a trailer parking yard (truck yard). One warehouse building has a total of 792,688 SF and includes 20,000 SF of office area. Building 1 has a racking system and product staging areas in front of the dock doors. The second warehouse building is 50,026 SF and includes 6,500 SF of office area. The site includes 530 parking stalls, parking for 338 trailers, and two bioretention basins (approximately 250,00 SF total).

The Perris Valley ALUCP provides methods for determining concentrations of people using either the number of parking spaces provided or the California Building Code. The following tables provide the occupancy levels for the two warehouse buildings. The total site intensity falls within the allowable parameters. The maximum single-acre intensity and average people per acre are also within the allowable parameters of the ALUCP.

Table 2 – Industrial Warehouse Occupancy

Industrial Building Occupancy

Industrial Building Zone	Land Use	Building Size (sqft)	Zone Site Area (acreage)	Single Acre Area	Occupancy Rate (sqft/occupant)[1]	ALUCP Single Acre Intensity (people/acre)[2]	Maximum Single Acre Intensity (people/acre)	ALUCP Average Intensity (people/acre)[3]	Occupancy (average people/acre)
B1	Warehouse 1	17,792	15.68	17,792	500	50	36	25	2.27
	Unoccupied Product Staging	7,928	15.68						
	Unoccupied Restroom	544	15.68						
	Office/ Breakroom 1	1,500	15.68	1,500	100	50	8	25	0.48
						TOTAL ZONE B1	**43**	**TOTAL ZONE B1**	**2.75**
B2	Warehouse 1	389,919	35.27	43,560	500	200	87	100	22.11
	Unoccupied Product Staging	37,181							
B2	Warehouse 2	42,565	35.27	42,565	500	200	85	100	2.41
						TOTAL ZONE B2	**172**	**TOTAL ZONE B2**	**24.52**
C	Warehouse 1	179,418	13.87	23,560	500	150	47	75	25.87
	Unoccupied Product Staging	12,841							
C	Office 1	10,000	13.87	10,000	100	150	50	75	3.60
C	Office Mezzanine 1	10,000	13.87	10,000	100	150	50	75	3.60
						TOTAL ZONE C	**147**	**TOTAL ZONE C**	**33.08**
D	Warehouse 1	125,565	14.06	43,560	500	300	87	100	17.86
D	Warehouse 2	961	14.06	961	500	300	2	100	0.14
D	Office 2	6,500	14.06	6,500	100	300	33	100	2.31
						TOTAL ZONE D	**122**	**TOTAL ZONE D**	**20.31**
	TOTAL BLDG SQFT	***842,714***							

1 - Occupancy rates as per Riverside County ALUCP California Building Code table (Appendix C)
2 - Single Acre Intensity Allowed as per Perris Valley ALUCP
3 - Average Intensity Allowed as per Perris Valley ALUCP

Table 3 – Industrial Warehouse Occupancy - Total on Site

Industrial Building Occupancy - TOTAL ON SITE

Industrial Building Zone	Land Use	Building Size (sqft)	Zone Site Area (acreage)	Single Acre Area	Occupancy Rate (sqft/occupant)[/1]	Maximum on Site Permitted (people)	Maximum on Site (people)
B1	Warehouse 1	17,792	15.68	17,792	500	392	36
	Unoccupied Product Staging	7,928					
	Unoccupied Restroom	544					
	Office/ Breakroom 1	1,500	15.68	1,500	100		15
B2	Warehouse 1	389,919	35.27	43,560	500	3,527	780
	Unoccupied Product Staging	37,181					
B2	Warehouse 2	42,565	35.27	42,565	500		85
C	Warehouse 1	179,418	13.87	23,560	500	1,040	359
	Unoccupied Product Staging	12,841					
C	Office 1	10,000	13.87	10,000	100		50
C	Office Mezzanine 1	10,000	13.87	10,000	100		50
D	Warehouse 1	125,565	14.06	43,560	500	1,406	251
D	Warehouse 2	961	14.06	961	500		2
D	Office 2	6,500	14.06	6,500	100		33
	TOTAL BLDG SQFT	***842,714***				***6,365***	***1,660***

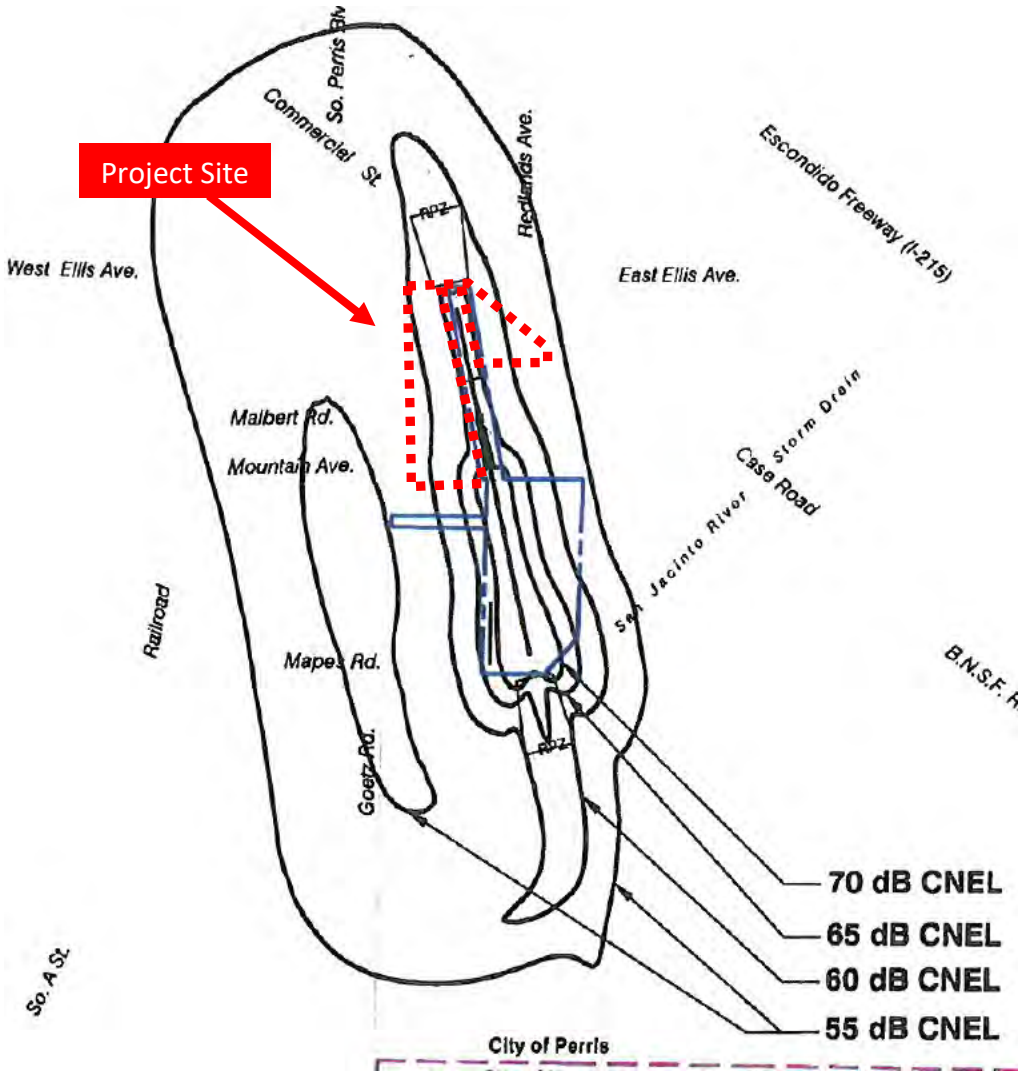
1 - Occupancy rates as per Riverside County ALUCP California Building Code table (Appendix C)

E. Aircraft Noise Impacts

Federal and state regulations set 65 decibels (dB) as the normally acceptable limit for aircraft noise, especially in urban areas. The ultimate noise contours presented in the ALUCP are based on 52,000 annual operations (141 average annual day). At the time of the ALUCP preparation (2010) this was considered a 53 percent increase over the estimated activity level of 34,000 operations. The most recent Airport Master Record (FAA Form 5010) notes 27,550 total operations (for 12 months ending December 2022). Highly noise-sensitive outdoor nonresidential uses such as amphitheaters and drive-in theaters are prohibited within Zones B1, B2, C, and D. A minimum NRL of 20 dB in residences and office buildings is required in Zones B1, B2, and C. The maximum, aircraft-related, interior noise level considered acceptable for office buildings is 45 dB CNEL.

As shown in Figure 8, the Property is within the 65-, 60-, and 55-dB community noise equivalent level (CNEL) contours. Since the property will be used for industrial purposes, no noise impacts are anticipated.

Figure 8 – 2011 Perris Valley ALUCP Noise Contours



F. Airspace Protection/Height Zoning/Hazards to Air Navigation

The FAA is responsible for protecting and preserving airspace from hazards to air navigation. Title 14 of the United States Code of Federal Regulations Part 77 defines the regulations and process for providing these protections. 14 CFR § 77.19 establishes civil airport imaginary surfaces around each runway to ensure that proposed temporary and permanent structures and activities near airports will be studied by the FAA for their effects on the safe and efficient use of navigable airspace.

The building height for the larger industrial warehouse (Building 1) ranges from 47 feet to 50 feet to parapet; for the smaller industrial warehouse (Building 2) it is 41 feet to 45 feet to parapet. Figures 9 and 10 show the elevation ranges for both buildings. The ALUCP states that Airspace review is required for objects greater than 35 feet tall in Zones B1 and B2 and for objects greater than 70 feet tall in Zones C and D, however, that is considered general guidance. An aeronautical study by the FAA was initiated for the buildings associated with the Property (Appendix A). The aeronautical study will assess the building locations, planned heights and whether there is a need for any associated lighting or markings to ensure that the buildings are conspicuous at night and during low visibility weather conditions. Within Zone B1 and B2, new buildings are limited to no more than two occupied floors above ground. Within Zone C, new buildings are limited to no more than three occupied floors above ground.

Avigation easements are required in Zones B1 and B2. A deed notice and disclosure are required within Zones C and D as a condition of residential development, which does not apply to this Project. Hazards to flight are prohibited in Zones B1, B2, C, and D; this includes physical, visual, and electronic forms of interference to aircraft operations, and land uses that attract birds. In Zones B1 and B2, aboveground bulk storage of hazardous materials and critical community infrastructure facilities are prohibited.

Figure 9 – Building 1 Elevation Range

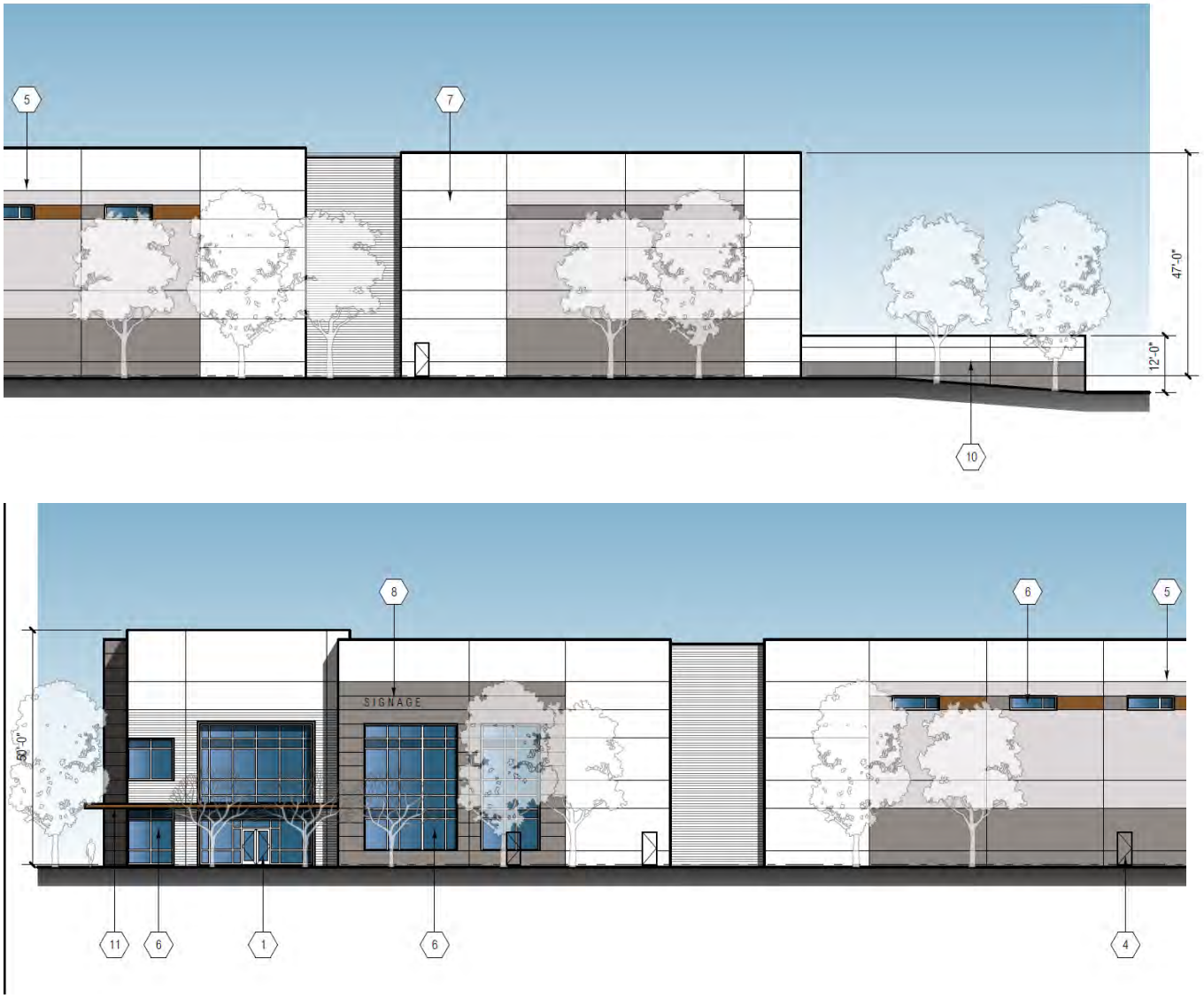


Figure 10 – Building 2 Elevation Range

G. Aircraft Overflight

Perris Valley Airport is a public-use, privately-owned airport, and known as a skydiving center. A variety of aircraft service the skydiving industry at L65; from DC-9s to smaller jump planes. There is also a high volume of ultralight aircraft operations. The Airport has one runway (Runway 15-33) that is 5,100 feet in length. There is also a separate turf strip in the southwestern corner of the property. Because of the nearby approach to March Air Reserve Base to the east, most aircraft approach and depart L65 to the west. Nearby land uses vary from agricultural to urban. Residential and commercial areas within central Perris lie within a couple of blocks of the runway end to the north and northwest. The City of Menifee also has residential about a mile south of Runway 15-33.

All property within the airport influence area (AIA) is subject to routine aircraft overflight. The outer edge of the Part 77 conical surface defines the AIA to the north, west, and south of the Airport. The designated traffic pattern is right traffic for Runway 15 and left traffic for Runway 33. This locates all local traffic on the west side of L65. The AIA to the east is not as broad and ends 5,000 feet from the runway centerline. The boundaries of Zone E define the AIA.

The Project site is not directly under the general traffic pattern envelope. However, because of its proximity to the runway, the Project site is within an area where aircraft departure and approach accident risk is greater.

H. Findings

The following airport land use compatibility findings for the Project are provided for consideration during the review process.

Findings of Fact

- The Project is a proposed industrial use, with two warehouse buildings and a truck yard, located within the AIA of Perris Valley Airport and located on either side of Runway 15-33.
- The Project site is zoned Light Industrial, which includes limited assembly and packaging operations, self-storage warehouses, distribution centers, and business-to-business retail operations. The Project is compatible with the General Plan and zoning.
- Because of its proximity to the runway, the Project site is within Compatibility Zones A through D. The warehouses, truck staging (long term parking), employee parking, and retention basins are specifically in Zones B1 through D. Zone B1 is most restrictive with regards to uses and maximum density and Zone D is less restrictive. Based on the proposed uses for the Project site (industrial, warehouse use), the Project is considered compatible within Zones B1 through D.
- Zone B1, C, and D have open land requirements. Based on the site layout, there is enough open land in each zone to accommodate the ALUCP requirement.
- The Perris Valley ALUCP provides methods for determining concentrations of people (occupancy). The total site intensity falls within the allowable parameters. The maximum single-acre intensity and average people per acre are also within the allowable parameters of the ALUCP.
- The Project is also within the MARB/IP AIA and Compatibility Zone E, which means noise impacts are low and the accident risk level is low. Zone E has no explicit upper limit on usage intensity and no open land requirements. The Project is considered compatible within this zone.
- Federal and state regulations set 65 decibels (dB) as the normally acceptable limit for aircraft noise, especially in urban areas. The Property is within the 65-, 60-, and 55-dB community noise

equivalent level (CNEL) contours. Since the property will be used for industrial purposes, no noise impacts are anticipated.

- The FAA is responsible for protecting and preserving airspace from hazards to air navigation. An aeronautical study by the FAA was initiated for the buildings associated with the Property (Appendix A). Avigation easements are required in Zones B1 and B2.
- All property within the airport influence area (AIA) is subject to routine aircraft overflight. the Project site is not directly under the general traffic pattern envelope. However, because of its proximity to the runway, the Project site is within an area where aircraft departure and approach accident risk is greater.

APPENDIX A

Federal Aviation Administration

« OE/AAA

Project Submission Success
Project Name: CH RE-000772835-23

Project CH RE-000772835-23 has been submitted successfully to the FAA.

Your filing is assigned Aeronautical Study Number (ASN):

2023-AWP-1817-OE
2023-AWP-1818-OE
2023-AWP-1819-OE
2023-AWP-1820-OE
2023-AWP-1821-OE
2023-AWP-1822-OE
2023-AWP-1823-OE
2023-AWP-1824-OE
2023-AWP-1825-OE
2023-AWP-1826-OE
2023-AWP-1827-OE
2023-AWP-1828-OE

Please refer to the assigned ASN on all future inquiries regarding this filing.

Please return to the system at a later date for status updates.

It is the responsibility of each e-filer to exercise due diligence to determine if coordination of the proposed construction or alteration is necessary with their state aviation department. Please use the link below to contact your state aviation department to determine their requirements:
State Aviation Contacts

To ensure e-mail notifications are delivered to your inbox please add noreply@faa.gov to your address book. Notifications sent from this address are system generated FAA e-mails and replies to this address will NOT be read or forwarded for review. Each system generated e-mail will contain specific FAA contact information in the text of the message.

Industrial Building Occupancy

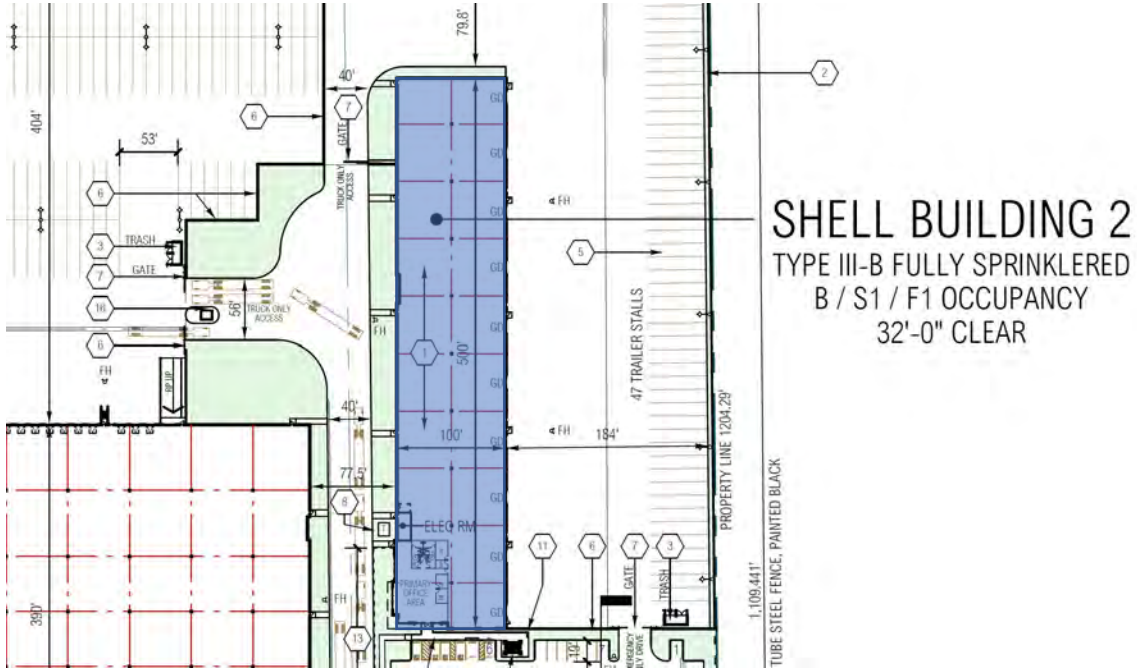
Industrial Building Zone	Land Use	Building Size (sqft)	Zone Site Area (acreage)	Single Acre Area	Occupancy Rate (sqft/occupant)[1]	ALUCP Single Acre Intensity (people/acre)[2]	Single Acre Occupancy (people/acre)	Maximum on Site Permitted (people)	Maximum Occupancy on Site (people)	ALUCP Average Intensity (people/acre)[3]	Average Occupancy (average people/acre)
B1	Warehouse 1	16,197	17.49	16,197	500	50	32	437	32	25	1.85
	Unoccupied Product Staging	8,113									
	Unoccupied Racking	1,123									
	Unoccupied Restroom	544									
	Office/ Breakroom 1	1,500	17.49	1,500	100	50	8			25	0.43
						TOTAL ZONE B1	**40**			**TOTAL ZONE B1**	**2.28**
B2	Warehouse 1	389,919	30.44	43,560	500	200	87	3,044	780	100	25.62
	Unoccupied Product Staging	37,181									
B2	Warehouse 2	60,315	30.44	42,500	500	200	85	3,044	121	100	3.96
						TOTAL ZONE B2	**172**			**TOTAL ZONE B2**	**29.58**
C	Warehouse 1	169,786	14.00	23,644	500	150	47	1,050	340	75	24.26
	Unoccupied Product Staging	12,841									
	Unoccupied Racking	9,916									
C	Office 1	10,000	14.00	10,000	100	150	50		50	75	3.57
C	Office Mezzanine 1	10,000	14.00	10,000	100	150	50			75	3.57
						TOTAL ZONE C	**147**			**TOTAL ZONE C**	**31.40**
D	Warehouse 1	127,989	19.09	43,560	500	300	87	1,909	256	100	13.41
D	Warehouse 2	5,146	19.09	961	500	300	2	1,909	10	100	0.54
D	Office 2	6,500	19.09	6,500	100	300	33		33	100	1.70
						TOTAL ZONE D	**122**			**TOTAL ZONE D**	**15.65**
	TOTAL BLDG SQFT	***867,070***						***11,393***	***1,621***		

1 - Occupancy rates as per Riverside County ALUCP California Building Code table (Appendix C)

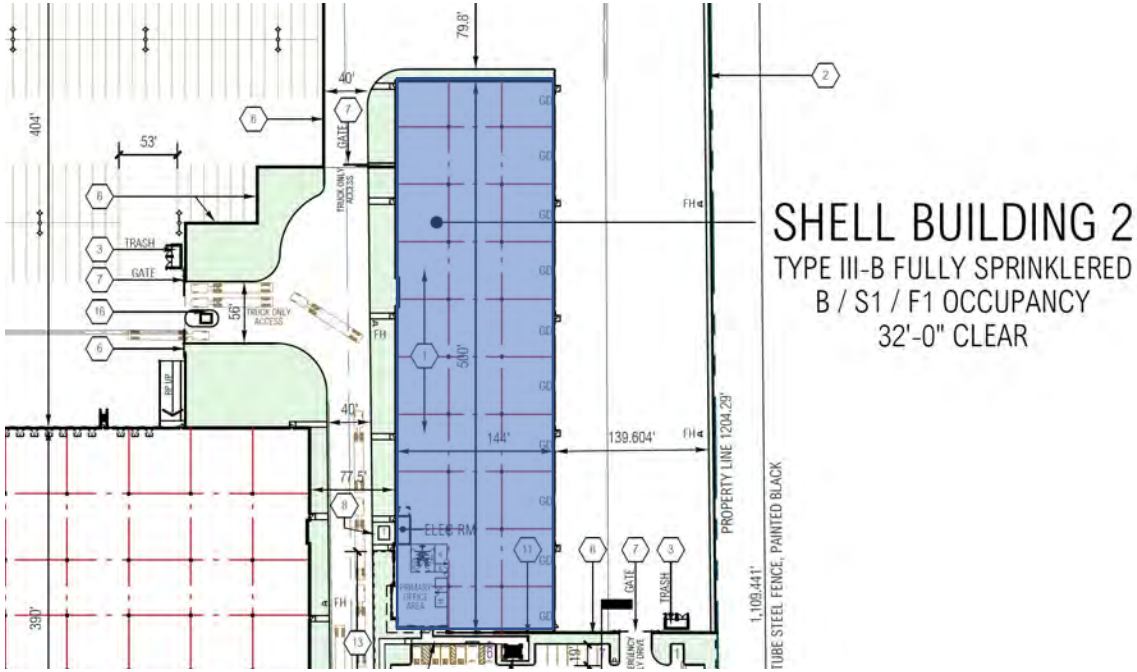
2 - Single Acre Intensity Allowed as per Perris Valley ALUCP

3 - Average Intensity Allowed as per Perris Valley ALUCP

ZAP1028PV23 – Landstar Companies Building 2 Revision



Original Building 2 – 49,961 sf
Approx. 500’ x 100’
42,565 sf Zone B1; 7,396 sf Zone D



Revised Building 2 – 71,961 sf
Approx. 500’ x 144’
+22,000 sf (+17,750 Zone B1; +4,250 Zone D)
Total – 60,315 sf Zone B1; 11,646 sf Zone D

ASSESSOR'S PARCEL NUMBERS

330-100-031, 330-090-033, 330-090-036, 330-090-038, 330-090-040, 330-090-031, 330-090-034

APPLICATION TYPE

DEVELOPMENT PLAN REVIEW 00-00-0000
TENTATIVE PARCEL MAP: 00-00-0000
ZONING: LIGHT INDUSTRIAL
PERMITTED LAND USE: WAREHOUSE, OFFICE AS PERMITTED

PROJECT DESCRIPTION

TWO NEW INDUSTRIAL WAREHOUSE BUILDINGS WITH AUTO AND TRAILER PARKING AREAS AND FUTURE GUARD SHACK AT TRUCK COURT ENTRIES. ALSO INCLUDED IS A TRAILER DROP LOT WITH TRAILER AAND TRACTOR PARKING AND FUTURE GUARD SHACK AT THE DROP LOT ENTRY.

LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF PERRIS IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

LOT 1 OF EHRMAN'S SUBDIVISION, CITY OF PERRIS, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN MAP BOOK 11 PAGE 544 RECORDS OF SAN DIEGO COUNTY, CALIFORNIA.

PARCEL 1 AS SHOWN ON CERTIFICATE OF COMPLIANCE - LOT LINE ADJUSTMENT NO. 16-05251, AS EVIDENCED BY DOCUMENT RECORDED APRIL 07, 2017 AS INSTRUMENT NO. 2017-0140879 OF OFFICIAL RECORDS

PARCEL 2: (APN 330-090-034)

PARCEL 3 AS SHOWN ON CERTIFICATE OF COMPLIANCE - LOT LINE ADJUSTMENT NO. 16-05251, AS EVIDENCED BY DOCUMENT RECORDED APRIL 07, 2017 AS INSTRUMENT NO. 2017-0140879 OF OFFICIAL RECORDS.

LAND OWNER

CH REALTY IX-MC I RIVERSIDE PERRIS AIRPORT CENTER, L.P.
3819 MAPLE AVENUE
DALLAS, TX 75219
PHILIP CYBURT

APPLICANT

CYBURT HOLDINGS REALTY PARTNERS LLC
18332 LEMON DRIVE, SUITE #367
YORBA LINDA, CA 92886
PHILIP CYBURT

PLAN PREPARER

RGA, OFFICE OF ARCHITECTURAL DESIGN, INC.
15231 ALTON PARKWAY, SUITE 100
IRVINE, CA 92618
CONTACT: MIKE GILL

UTILITIES & SERVICES

SEE CIVIL DRAWINGS

SITE LEGEND:

- ON-SITE LANDSCAPED AREA
- OFF-SITE LANDSCAPED AREA
- DECORATIVE AUTO / TRUCK DRIVEWAYS
- SITE PROPERTY LINES
- CITY CURB AND GUTTER LINES
- STREET CENTERLINES
- ON-SITE CURB LINES
- ON-SITE PARKING AND TRAILER STRIPPING

KEYNOTES

1. PAINTED CONCRETE TILT-UP WAREHOUSE / OFFICE / MANUFACTURING FACILITY.
2. SHADED AREA; PROPOSED IRRIGATED LANDSCAPING PER GUIDELINES WITH MIN 6" CONCRETE CURBS AT ALL PERIMETERS.
3. PAINTED CONCRETE TRASH ENCLOSURE. SCREEN WALLS SHALL BE MIN. 6'-0" HIGH WITH CANOPY TOP. SEE SHEET A4-1P FOR ELEVATIONS AND SECTIONS
4. TYPICAL STANDARD PARKING STALL MIN. 9' X 19' - STRIPE PER CITY STANDARDS.
5. TRUCK TRAILER PARKING
6. NEW 14'-0" CONCRETE TILT-UP SCREEN WALLS AT TRUCK YARD. SEE PLAN FOR MINIMUM HEIGHTS AS MEASURED FROM INSIDE THE TRUCK YARD.
7. ROLLING 8'-0" HIGH WROUGHT IRON FENCE INTO THE TRUCK COURT.
8. TRANSFORMER PAD LOCATION.
9. ACCESSIBLE PRIMARY ENTRANCE TO THE BUILDING WITH BIKE RACKS.
10. CONCRETE COVERED LUNCH PATIO WITH LANDSCAPE FURNITURE, SEE SHEET A4-1P
11. CALGREEN REQUIRED BIKE RACKS, SEE TABULATIONS FOR NUMBER OF BIKE RACKS
12. DECORATIVE PAVING AT ENTRY DRIVEWAY.
13. NEW 8'-0" TUBE STEEL FENCE, PAINTED BLACK. PROVIDE 6'-0" HIGH FENCE AT AROUND DRAINAGE CHANNEL
14. EXTERIOR OUTDOOR REST AREA.
15. SIGNAGE FOR PEDESTRIAN CROSSING WITH CROSSING LIGHTS ALONG WITH A "STOP BAR" AND STOP SIGN
16. PROPOSED ACCESSIBLE GUARDSHACK LOCATION WITH POWER, WATER AND SEWER.

GENERAL NOTES

1. THE PROPOSED PROJECT SHALL COMPLY WITH THE PROVISIONS OF CITY OF PERRIS PLANNING ZONING ORDIANCE
2. A LANDSCAPING PLAN SHALL BE SUBMITTED TO THE PLANNING DEPARTMENT FOR APPROVAL PRIOR TO ISSUANCE OF BUILDING PERMITS AND SHALL BE IMPLEMENTED PRIOR TO OCCUPANCY.
3. THE PROJECT DOES NOT PROPOSE ANY TENANT SIGNAGE AT THIS TIME.
4. THERE ARE NO PROTECTED PLANTS ON SITE.
5. ALL ROOF DRAINS AT STREET FRONTAGES SHALL BE IN THE INTERIOR OF THE BUILDING ENVELOPE.
6. ALL LANDSCAPE SHALL BE BOUND BY A 6" HIGH CONCRETE CURB.
7. A LIGHT PLAN SHALL BE SUBMITTED SHOWING CONFORMANCE WITH MINIMUM FOOTCANDLE LEVELS AND MARCH AIR BASE STANDARDS. FIXTURES SHALL BE SHIELDED HIGH PRESSURE SODIUM.
8. A SIGN PROGRAM SHALL BE DEVELOPED IN ACCORDANCE WITH MUNICIPAL CODE 19.75.190 FOR APPROVAL BY THE PLANNING DIVISION. THE SIGN PROGRAM SHALL BE INCLUDED AS PART OF THE CC&R'S.
9. FUTURE TENANT OFFICE BUILD-OUTS TO INCLUDE INDOOR EMPLOYEE AMENITY AREAS PER CITY GUIDELINES.
10. PROJECT WILL BE DESIGNED WITH LEED IN MIND, BUT WILL NOT REQUIRE CERTIFICATION.

SUBSTAINABILITY FEATURES

11. PROVIDE LIGHT COLORED ROOFING OVER THE OFFICE AREAS.
12. PROVIDE "TURN-OFF ENGINE" SIGNS WITHIN THE TRUCK COURT.
13. FORKLIFTS WITHIN THE BUILDING SHALL BE ELECTRIC OR COMPRESSED NATURAL GAS-POWERED.

PROJECT DATA - TRAILER PARKING YARD

INDUSTRIAL SITE AREA:	
NET SITE AREA:	996,653 SF / 22.88 AC
BUILDING AREA:	
GUARD HOUSE	100 SF
TOTAL	100 SF
TOTAL INCLUDED PLANNED OFFICE AREA	100 SF
LOT COVERAGE: (50% MAX)	.0001 %
FAR COVERAGE:	.0001 %
AUTO PARKING REQUIRED:	
WAREHOUSE	
0-20,000 SF (1/1000 SF)	1 STALLS
TOTAL	1 STALLS
AUTO PARKING PROVIDED	
ACCESSIBLE STALLS	1 STALLS
STANDARD STALLS	1 STALLS
TOTAL PROVIDED	2 STALLS
TRAILER PARKING:	00 TRAILERS
LANDSCAPE AREA PROVIDED ON DEVELOPED SITE (10% MIN. REQUIRED)	258,735 SF / 25.96 %

VICINITY MAP

PROJECT DATA - BULDING 1 AND 2

INDUSTRIAL SITE AREA:	
NET SITE AREA:	2,608,373 SF / 59.88 AC
BUILDING AREA:	
BUILDING 1	
FIRST FLOOR OFFICE AREA	18,500 SF
SECOND FLOOR OFFICE AREA	10,000 SF
WAREHOUSE AREA	766,409 SF
FIRE PUMP	200 SF
TOTAL	795,109 SF
BUILDING 2	
FIRST FLOOR OFFICE AREA	6,500 SF
WAREHOUSE AREA	65,461 SF
TOTAL	71,961 SF
TOTAL PROJECT PLANNED OFFICE AREA	35,000 SF
LOT COVERAGE: (50% MAX)	32.82 %
FAR COVERAGE:	33.20 %

BUILDING 1 PARKING REQUIRED:
AUTO PARKING REQUIRED: (HIGH CUBE PARKING STANDARDS)

35,000 OFFICE PARKING (LESS THAN 10%)	00 STALLS
WAREHOUSE	
0-20,000 SF (1/1000 SF)	20 STALLS
20K + 40K (1/2000 SF)	10 STALLS
ABOVE 40K (1/5000 SF)	151 STALLS
TOTAL	181 STALLS

BUILDING 1 PARKING PROVIDED:
AUTO PARKING PROVIDED

ACCESSIBLE STALLS	9 STALLS
STANDARD STALLS	281 STALLS
EV PARKING STALLS (CHARGERS)	22 STALLS
EV PARKING STALLS (INFRASTRUCTURE)	64 STALLS
TOTAL PROVIDED	376 STALLS

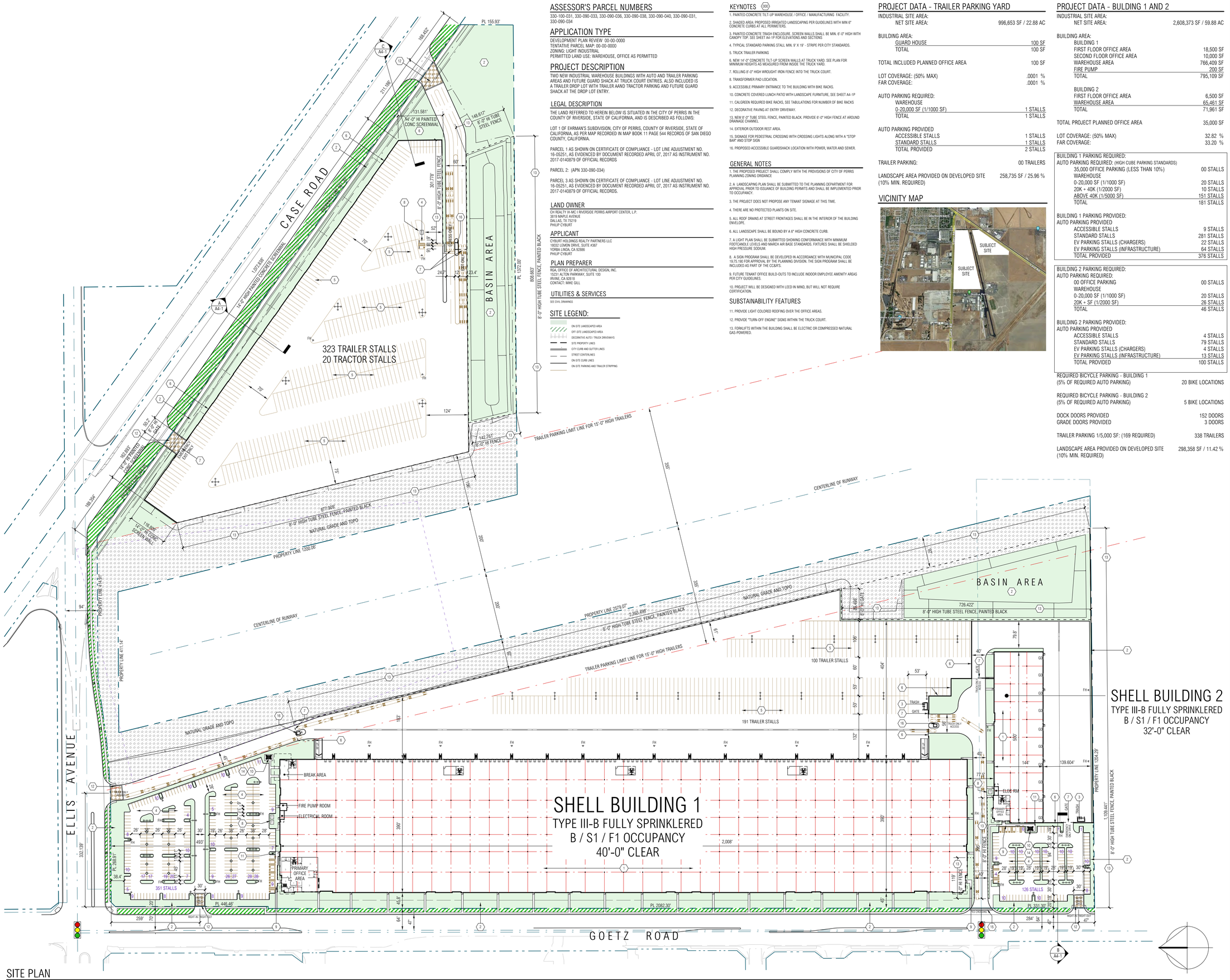
BUILDING 2 PARKING REQUIRED:
AUTO PARKING REQUIRED:

00 OFFICE PARKING	00 STALLS
WAREHOUSE	
0-20,000 SF (1/1000 SF)	20 STALLS
20K + SF (1/2000 SF)	26 STALLS
TOTAL	46 STALLS

BUILDING 2 PARKING PROVIDED:
AUTO PARKING PROVIDED

ACCESSIBLE STALLS	4 STALLS
STANDARD STALLS	79 STALLS
EV PARKING STALLS (CHARGERS)	4 STALLS
EV PARKING STALLS (INFRASTRUCTURE)	13 STALLS
TOTAL PROVIDED	100 STALLS

REQUIRED BICYCLE PARKING - BUILDING 1 (5% OF REQUIRED AUTO PARKING)	20 BIKE LOCATIONS
REQUIRED BICYCLE PARKING - BUILDING 2 (5% OF REQUIRED AUTO PARKING)	5 BIKE LOCATIONS
DOCK DOORS PROVIDED	152 DOORS
GRADE DOORS PROVIDED	3 DOORS
TRAILER PARKING 1/5,000 SF: (169 REQUIRED)	338 TRAILERS
LANDSCAPE AREA PROVIDED ON DEVELOPED SITE (10% MIN. REQUIRED)	298,358 SF / 11.42 %



SITE PLAN
SCALE: 1" = 100'-0"

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PERRIS AIRPORT LOGISTICS CENTER

00000 GOETZ ROAD
CITY OF PERRIS, CA

CH REALTY PARTNERS LLC
REAL ESTATE GROUP

CH REALTY IX-MC I RIVERSIDE
PERRIS AIRPORT CENTER, L.P.
3819 MAPLE AVENUE
DALLAS, TX 75219
PHILIP CYBURT

CD		
BID		
PC		
DD		
SD	4/1/2023	SCHEMATIC DESIGN
MARK	DATE	DESCRIPTION

RGA PROJECT NO:	22138.00
OWNER PROJECT NO:	00000.00
CAD FILE NAME:	22138-00-1-A1-1P
DRAWN BY:	MG
CHK'D BY:	DR

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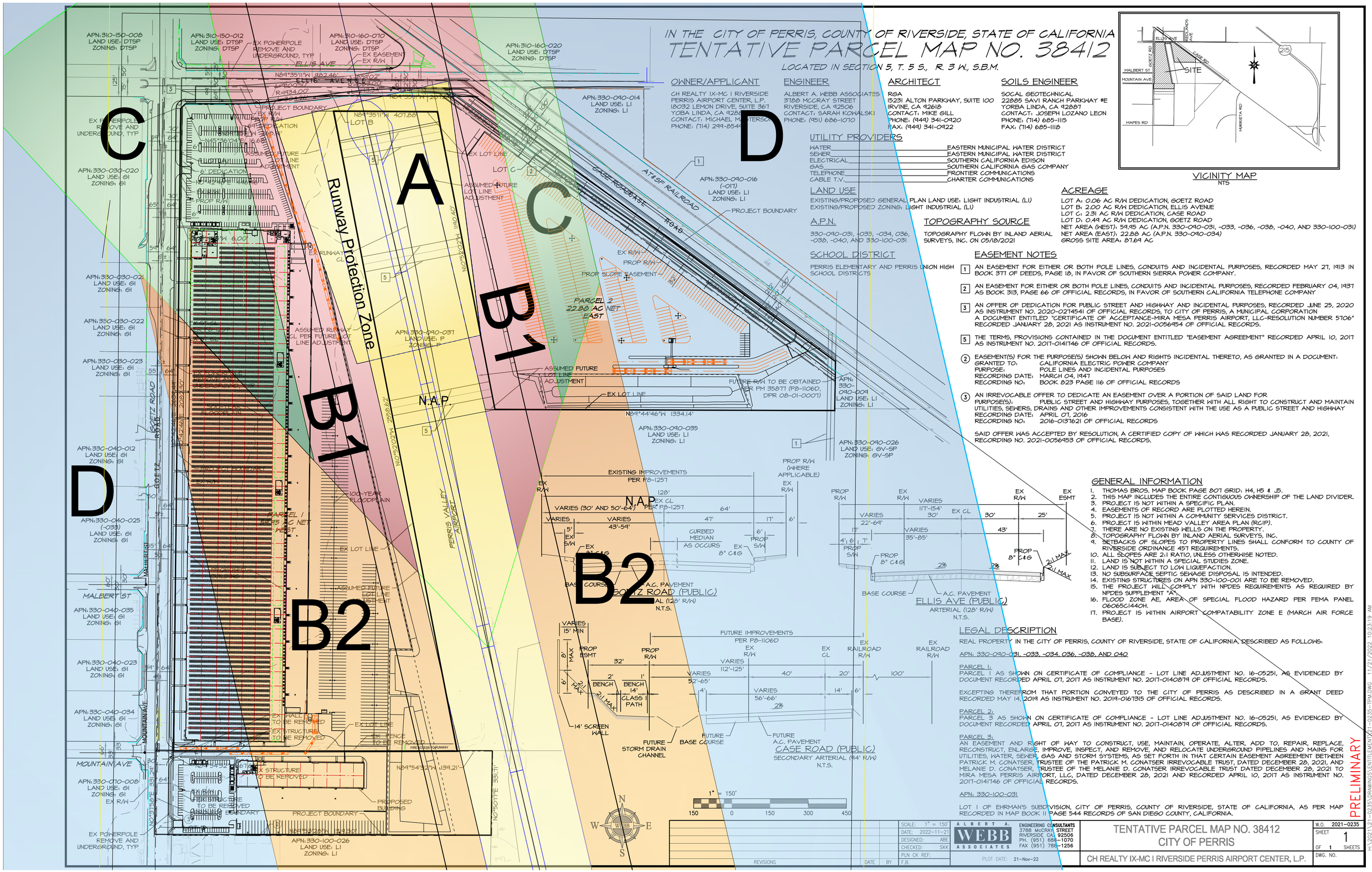
SHEET TITLE
SITE PLAN

SHEET: A1-1P

IN THE CITY OF PERRIS, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

TENTATIVE PARCEL MAP NO. 38412

LOCATED IN SECTION 5, T. 5 S., R. 3 W., S.B.M.



OWNER/APPLICANT

CH REALTY IX-MC I RIVERSIDE PERRIS AIRPORT CENTER, L.P.
18032 LEMON DRIVE, SUITE 367
YORBA LINDA, CA 92886
CONTACT: MICHAEL MASTERSON
PHONE: (714) 299-8546

ENGINEER

ALBERT A. WEBB ASSOCIATES
3788 MCCRAY STREET
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PHONE: (951) 686-1070

ARCHITECT

RGA
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SOILS ENGINEER

SOCAL GEOTECHNICAL
22885 SAVI RANCH PARKWAY #E
YORBA LINDA, CA 92887
CONTACT: JOSEPH LOZANO LEON
PHONE: (714) 685-1115
FAX: (714) 685-1118

UTILITY PROVIDERS

WATER	EASTERN MUNICIPAL WATER DISTRICT
SEWER	EASTERN MUNICIPAL WATER DISTRICT
ELECTRICAL	SOUTHERN CALIFORNIA EDISON
GAS	SOUTHERN CALIFORNIA GAS COMPANY
TELEPHONE	FRONTIER COMMUNICATIONS
CABLE T.V.	CHARTER COMMUNICATIONS

LAND USE

EXISTING/PROPOSED GENERAL PLAN LAND USE: LIGHT INDUSTRIAL (LI)
EXISTING/PROPOSED ZONING: LIGHT INDUSTRIAL (LI)

A.P.N.

330-090-031, -033, -034, 036, -038, -040, AND 330-100-031

SCHOOL DISTRICT

PERRIS ELEMENTARY AND PERRIS UNION HIGH SCHOOL DISTRICTS

VICINITY MAP
NTS

ACREAGE

LOT A: 0.06 AC R/W DEDICATION, GOETZ ROAD
LOT B: 2.00 AC R/W DEDICATION, ELLIS AVENUE
LOT C: 2.31 AC R/W DEDICATION, CASE ROAD
LOT D: 0.49 AC R/W DEDICATION, GOETZ ROAD
NET AREA (WEST): 54.95 AC (A.P.N. 330-040-031, -033, -036, -038, -040, AND 330-100-031)
NET AREA (EAST): 22.88 AC (A.P.N. 330-090-034)
GROSS SITE AREA: 81.69 AC

TOPOGRAPHY SOURCE

TOPOGRAPHY FLOWN BY INLAND AERIAL SURVEYS, INC. ON 05/18/2021

EASEMENT NOTES

1. AN EASEMENT FOR EITHER OR BOTH POLE LINES, CONDUITS AND INCIDENTAL PURPOSES, RECORDED MAY 27, 1913 IN BOOK 377 OF DEEDS, PAGE 18, IN FAVOR OF SOUTHERN SIERRA POWER COMPANY.
2. AN EASEMENT FOR EITHER OR BOTH POLE LINES, CONDUITS AND INCIDENTAL PURPOSES, RECORDED FEBRUARY 04, 1937 AS BOOK 313, PAGE 66 OF OFFICIAL RECORDS, IN FAVOR OF SOUTHERN CALIFORNIA TELEPHONE COMPANY
3. AN OFFER OF DEDICATION FOR PUBLIC STREET AND HIGHWAY AND INCIDENTAL PURPOSES, RECORDED JUNE 25, 2020 AS INSTRUMENT NO. 2020-0274541 OF OFFICIAL RECORDS, TO CITY OF PERRIS, A MUNICIPAL CORPORATION
   A DOCUMENT ENTITLED "CERTIFICATE OF ACCEPTANCE-MIRA MESA PERRIS AIRPORT, LLC-RESOLUTION NUMBER 5706" RECORDED JANUARY 28, 2021 AS INSTRUMENT NO. 2021-0056454 OF OFFICIAL RECORDS.
5. THE TERMS, PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "EASEMENT AGREEMENT" RECORDED APRIL 10, 2017 AS INSTRUMENT NO. 2017-0141746 OF OFFICIAL RECORDS.
2. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
   GRANTED TO: CALIFORNIA ELECTRIC POWER COMPANY
   PURPOSE: POLE LINES AND INCIDENTAL PURPOSES
   RECORDING DATE: MARCH 04, 1947
   RECORDING NO: BOOK 823 PAGE 116 OF OFFICIAL RECORDS
3. AN IRREVOCABLE OFFER TO DEDICATE AN EASEMENT OVER A PORTION OF SAID LAND FOR
   PURPOSE(S): PUBLIC STREET AND HIGHWAY PURPOSES, TOGETHER WITH ALL RIGHT TO CONSTRUCT AND MAINTAIN UTILITIES, SEWERS, DRAINS AND OTHER IMPROVEMENTS CONSISTENT WITH THE USE AS A PUBLIC STREET AND HIGHWAY
   RECORDING DATE: APRIL 07, 2016
   RECORDING NO: 2016-0131621 OF OFFICIAL RECORDS

SAID OFFER WAS ACCEPTED BY RESOLUTION, A CERTIFIED COPY OF WHICH WAS RECORDED JANUARY 28, 2021, RECORDING NO. 2021-0056453 OF OFFICIAL RECORDS.

GENERAL INFORMATION

1. THOMAS BROS. MAP BOOK PAGE 807 GRID: H4, H5 & J5.
2. THIS MAP INCLUDES THE ENTIRE CONTIGUOUS OWNERSHIP OF THE LAND DIVIDER.
3. PROJECT IS NOT WITHIN A SPECIFIC PLAN.
4. EASEMENTS OF RECORD ARE PLOTTED HEREIN.
5. PROJECT IS NOT WITHIN A COMMUNITY SERVICES DISTRICT.
6. PROJECT IS WITHIN MEAD VALLEY AREA PLAN (RCIP).
7. THERE ARE NO EXISTING WELLS ON THE PROPERTY.
8. TOPOGRAPHY FLOWN BY INLAND AERIAL SURVEYS, INC.
9. SETBACKS OF SLOPES TO PROPERTY LINES SHALL CONFORM TO COUNTY OF RIVERSIDE ORDINANCE 457 REQUIREMENTS.
10. ALL SLOPES ARE 2:1 RATIO, UNLESS OTHERWISE NOTED.
11. LAND IS NOT WITHIN A SPECIAL STUDIES ZONE.
12. LAND IS SUBJECT TO LOW LIQUEFACTION.
13. NO SUBSURFACE SEPTIC SEWAGE DISPOSAL IS INTENDED.
14. EXISTING STRUCTURES ON APN 330-100-001 ARE TO BE REMOVED.
15. THE PROJECT WILL COMPLY WITH NPDES REQUIREMENTS AS REQUIRED BY NPDES SUPPLEMENT "A".
16. FLOOD ZONE AE, AREA OF SPECIAL FLOOD HAZARD PER FEMA PANEL 06065C1440H.
17. PROJECT IS WITHIN AIRPORT COMPATABILITY ZONE E (MARCH AIR FORCE BASE).

LEGAL DESCRIPTION

REAL PROPERTY IN THE CITY OF PERRIS, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

APN: 330-090-031, -033, -034, 036, -038, AND 040

PARCEL 1:
PARCEL 1 AS SHOWN ON CERTIFICATE OF COMPLIANCE - LOT LINE ADJUSTMENT NO. 16-05251, AS EVIDENCED BY DOCUMENT RECORDED APRIL 07, 2017 AS INSTRUMENT NO. 2017-0140874 OF OFFICIAL RECORDS.

EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE CITY OF PERRIS AS DESCRIBED IN A GRANT DEED RECORDED MAY 14, 2019 AS INSTRUMENT NO. 2019-0161315 OF OFFICIAL RECORDS.

PARCEL 2:
PARCEL 3 AS SHOWN ON CERTIFICATE OF COMPLIANCE - LOT LINE ADJUSTMENT NO. 16-05251, AS EVIDENCED BY DOCUMENT RECORDED APRIL 07, 2017 AS INSTRUMENT NO. 2017-0140874 OF OFFICIAL RECORDS.

PARCEL 3:
AN EASEMENT AND RIGHT OF WAY TO CONSTRUCT, USE, MAINTAIN, OPERATE, ALTER, ADD TO, REPAIR, REPLACE, RECONSTRUCT, ENLARGE, IMPROVE, INSPECT, AND REMOVE, AND RELOCATE UNDERGROUND PIPELINES AND MAINS FOR UTILITIES, WATER, SEWER, GAS AND STORM SYSTEMS, AS SET FORTH IN THAT CERTAIN EASEMENT AGREEMENT BETWEEN PATRICK M. CONATSER, TRUSTEE OF THE PATRICK M. CONATSER IRREVOCABLE TRUST, DATED DECEMBER 28, 2021, AND MELANIE D. CONATSER, TRUSTEE OF THE MELANIE D. CONATSER IRREVOCABLE TRUST DATED DECEMBER 28, 2021 TO MIRA MESA PERRIS AIRPORT, LLC, DATED DECEMBER 28, 2021 AND RECORDED APRIL 10, 2017 AS INSTRUMENT NO. 2017-0141746 OF OFFICIAL RECORDS.

APN: 330-100-031

LOT 1 OF EHRMAN'S SUBDIVISION, CITY OF PERRIS, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN MAP BOOK 11 PAGE 544 RECORDS OF SAN DIEGO COUNTY, CALIFORNIA.

REVISIONS	DATE	BY
F.B.		

SCALE: 1" = 150'
DATE: 2022-11-21
DESIGNED: ABE
CHECKED: SKK
PLN CK REF:
PLOT DATE: 21-Nov-22

ALBERT A. WEBB ASSOCIATES
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3788 McCRAY STREET
RIVERSIDE, CA 92506
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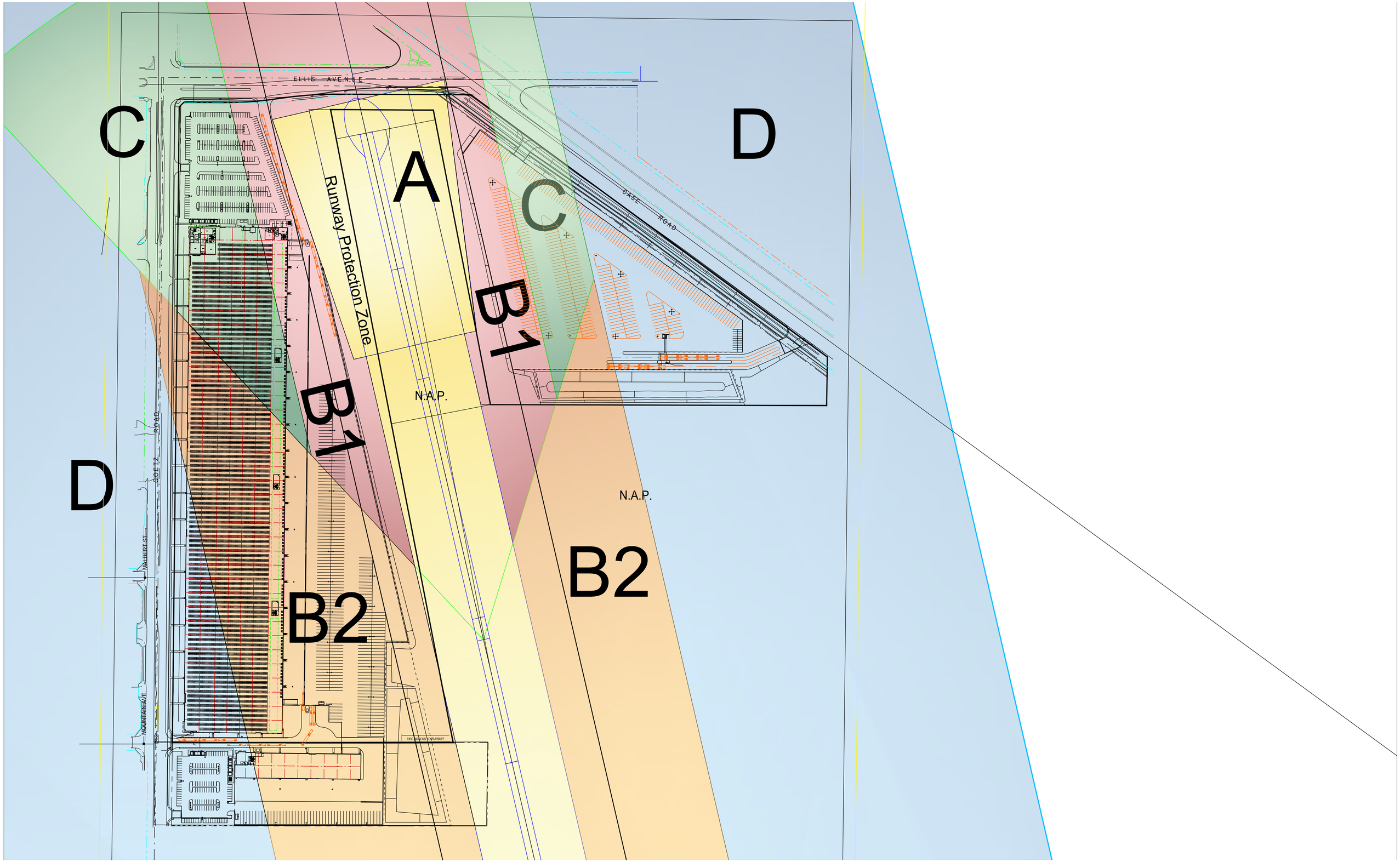
TENTATIVE PARCEL MAP NO. 38412
CITY OF PERRIS

CH REALTY IX-MC I RIVERSIDE PERRIS AIRPORT CENTER, L.P.

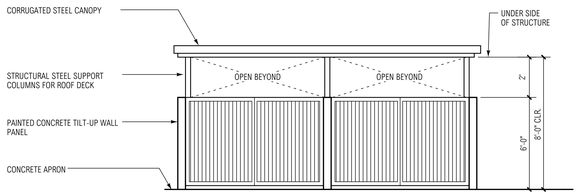
W.O. 2021-0235
SHEET 1 OF 1 SHEETS
DWG. NO.

PRELIMINARY

H:\2021\21-0235\DRAWINGS\ENTITLEMENT\21-0235-TPM.DWG 11/21/2022 10:23:19 AM

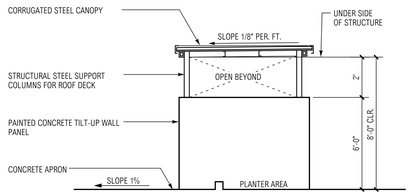


C
D
A
Runway Protection Zone
C
B1
B1
N.A.P.
N.A.P.
D
B2
B2
ELLIS AVENUE
CASE ROAD
GOETZ ROAD
MALBERT ST
MOUNTAIN AVE
FIRE ACCESS TO RUNWAY



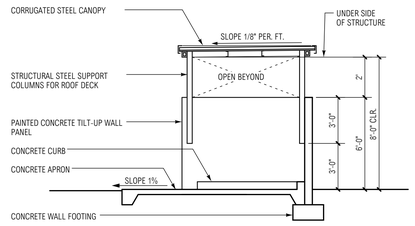
TRASH ENCLOSURE FRONT ELEVATIONS

SCALE: 1/4" = 1'-0"



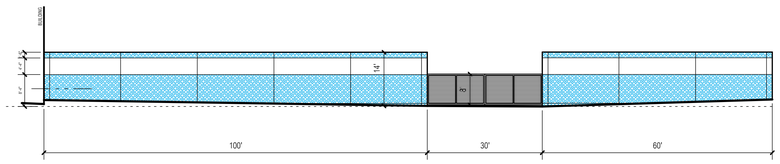
TRASH ENCLOSURE SIDE ELEVATIONS

SCALE: 1/4" = 1'-0"



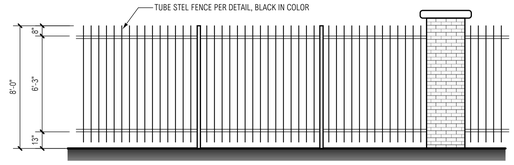
TYPICAL TRASH ENCLOSURE SECTION

SCALE: 1/4" = 1'-0"



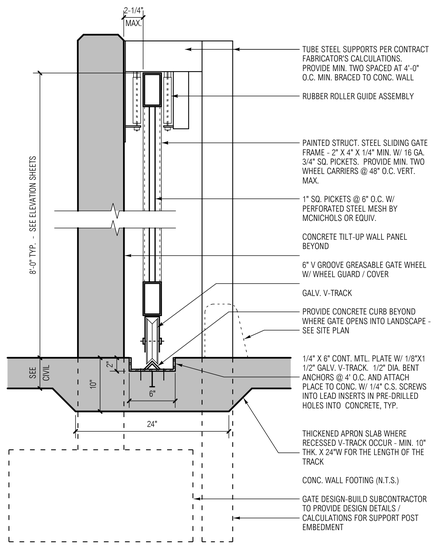
TYPICAL SCREEN ELEVATION AND GATE (BUILDING 2)

SCALE: 1/16" = 1'-0"



TYPICAL TUBE STEEL FENCE ELEVATION

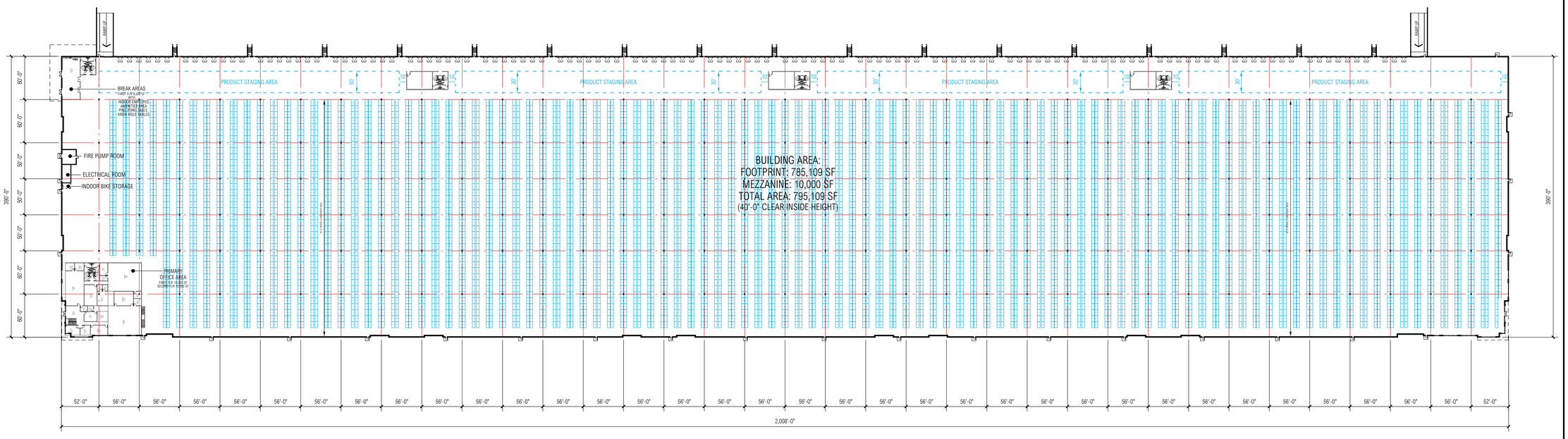
SCALE: 1/4" = 1'-0"



NOTES:
1. PERFORATED MESH, WHERE PROVIDED, SHALL BE BY MCNICHOLS OR EQUIV. PAINTED BLACK TO MATCH THE GATE.
2. PROVIDE SHOP DRAWINGS & STRUCTURAL DETAILS & CALCULATIONS INCLUDING WIND-LOAD CRITERA FOR ALL GATES PRIOR TO FABRICATION FOR REVIEW AND APPROVAL BY ARCHITECT.
3. COORDINATE GATE HEIGHTS WITH GRADE ELEVATIONS PER CIVIL DWGS.
4. SHOP FINISH W/ MINIMUM ONE COAT OF PRIMER AND ONE COAT BLACK SATIN ENAMEL U.N.O. PROVIDE ALTERNATE FOR POWDER COAT FINISH.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF ALL GATE SUPPORTS AND SAFETY MECHANISMS.
6. BUILDING OWNER SHALL BE RESPONSIBLE FOR MAINTAINING GATE TRACK FREE FROM DEBRIS TO ALLOW FOR SAFE OPERATION OF GATE.
7. SLIDING VEHICLE GATES INTENDED FOR AUTOMATION SHALL COMPLY WITH CBC SECTION 3110.3 AND ASTM F2200, INCLUDING:
   A. COVER GATE WHEELS W/ COVER GUARDS.
   B. PROVIDE MESH OR PICKET SPACING WITH MAX. OPENINGS LESS THAN 2.25".
   C. PROVIDE POSITIVE STOPS AT BOTH FULLY OPEN AND FULLY CLOSED POSITIONS.
   D. GATE DOES NOT MOVE / SLIDE / FALL OVER ON ITS OWN IF DISCONNECTED FROM OPERATOR.
8. VEHICLE GATE OPERATORS, WHERE PROVIDED, SHALL BE LISTED IN ACCORDANCE WITH UL 325.
9. VEHICLE GATE OPERATORS, WHERE PROVIDED, SHALL BE PROVIDED WITH KNOX KEY SWITCH ACCESS FOR EMERGENCY VEHICLE ACCESS.

SINGLE ROLLING GATE

SCALE: 1-1/2" = 1'-0"



FLOOR PLAN

SCALE: 1" = 60'-0"

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CH REALTY IX-MC I RIVERSIDE
PERRIS AIRPORT CENTER, L.P.
3819 MAPLE AVENUE
DALLAS, TX 75219
PHILIP CYBURT

MARK	DATE	DESCRIPTION
CD		
BID		
PC		
DD		
SD	11/18/2022	SCHEMATIC DESIGN

RGA PROJECT NO:	22138.00
OWNER PROJECT NO:	00000.00
CAD FILE NAME:	22138-00-1-A2-1P
DRAWN BY:	MG
CHK'D BY:	DR

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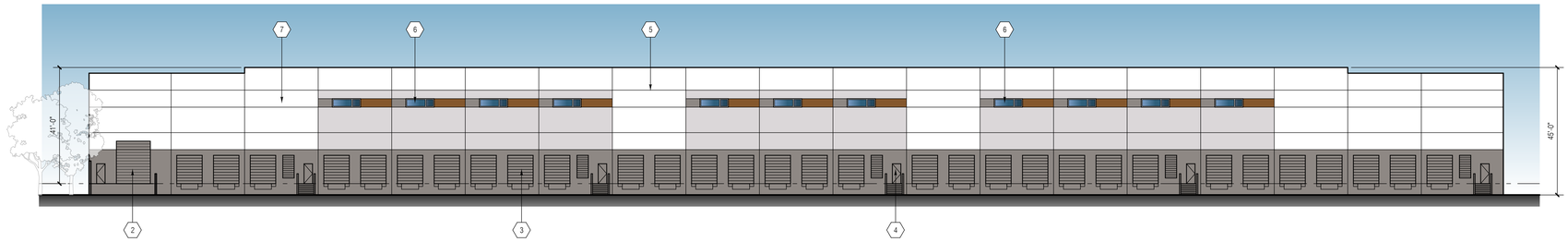
RGA, OFFICE OF ARCHITECTURAL DESIGN

SHEET TITLE

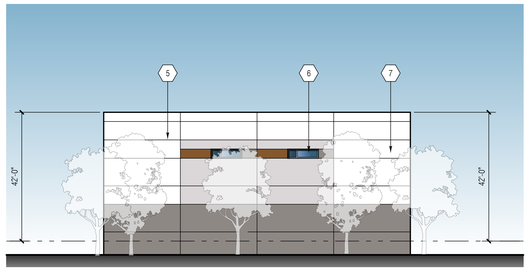
FLOOR PLAN
BUILDING 1

SHEET: A2-1P



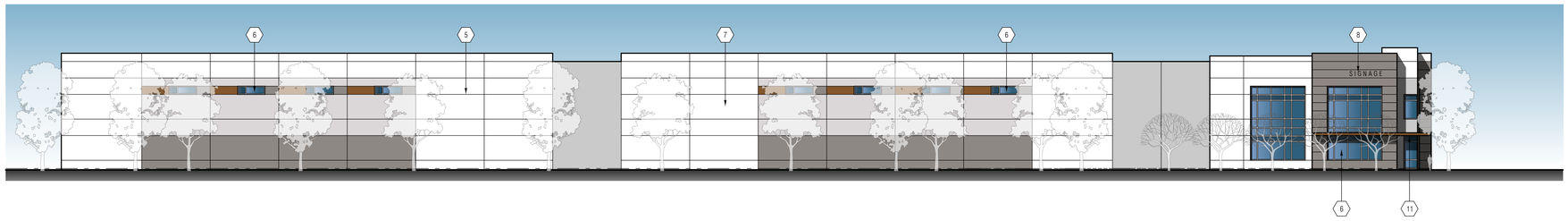
SOUTH ELEVATION

SCALE: 1" = 20'-0"



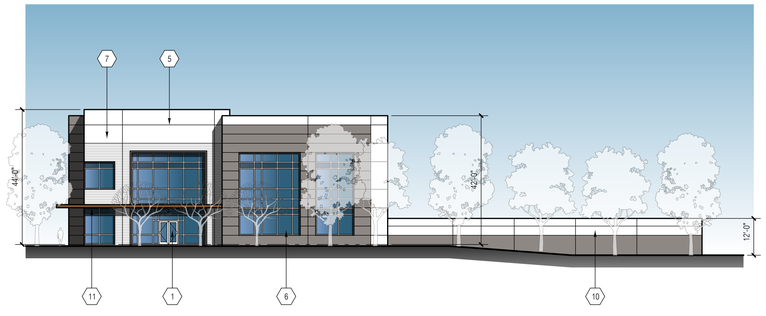
EAST ELEVATION

SCALE: 1" = 20'-0"



NORTH ELEVATION

SCALE: 1" = 20'-0"



WEST ELEVATION

SCALE: 1" = 20'-0"

FINISH SCHEDULE

1. FIELD COLOR - PURE WHITE - SHERWIN WILLIAMS SW 7005
2. ACCENT COLOR - LIQUORICE TINT - SHERWIN WILLIAMS SW 7016
3. ACCENT COLOR - SABLE - SHERWIN WILLIAMS SW 7015
4. ACCENT COLOR -
5. VISION GLAZING - PILKINGTON EVERGREEN U-FACTOR 0.47, SHGC 0.40, VLT 59% 1" INSULATED GLASS UNIT W 1/2" AIRSPACE AND (2) 1/4" LITES. SEE KEYNOTES FOR LOCATIONS OF INSULATED UNITS.

KEYNOTES (XXX)

1. PRIMARY ENTRANCE.
2. PAINTED 12' WIDE X 15' HIGH LEVEL VERTICAL LIFT TRUCK DOOR.
3. PAINTED 9' WIDE X 10' HIGH VERTICAL LIFT TRUCK DOOR.
4. 3' X 7' PAINTED METAL MAN DOOR.
5. 2" WIDE X 3/4" DEEP HORIZONTAL / VERTICAL REVEAL.
6. REFLECTIVE GLASS IN STOREFRONT FRAME SYSTEM.
7. PAINTED CONCRETE TILT-UP EXTERIOR WALL CONSTRUCTION.
8. PROPOSED FUTURE TENANT SIGNAGE LOCATION (FOUR LOCATIONS).
9. 8' HIGH BLACK TUBULAR STEEL ROLLING GATE - TYP. AT YARD ENTRANCES. SEE SITE PLAN.
10. TYP. PAINTED CONCRETE SCREENWALL ELEVATION W/ ACCENT REVEALS AND PAINTED ACCENTS TO MATCH BUILDING ARCHITECTURE.
11. METAL CLAD CANOPY STRUCTURE.

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PERRIS AIRPORT
LOGISTICS CENTER

00000 GOETZ ROAD
CITY OF PERRIS, CA

CH REALTY PARTNERS LLC
REAL ESTATE GROUP

CH REALTY IX-MC I RIVERSIDE
PERRIS AIRPORT CENTER, L.P.
3819 MAPLE AVENUE
DALLAS, TX 75219
PHILIP CYBURT

MARK	DATE	DESCRIPTION
SD	11/18/2022	SCHEMATIC DESIGN
DD		
PC		
BID		
CD		

RGA PROJECT NO:	22138.00
OWNER PROJECT NO:	00000.00
CAD FILE NAME:	22138-00-1-A3-2P
DRAWN BY:	MG
CHK'D BY:	DR

COPYRIGHT
RGA, OFFICE OF ARCHITECTURAL DESIGN

SHEET TITLE

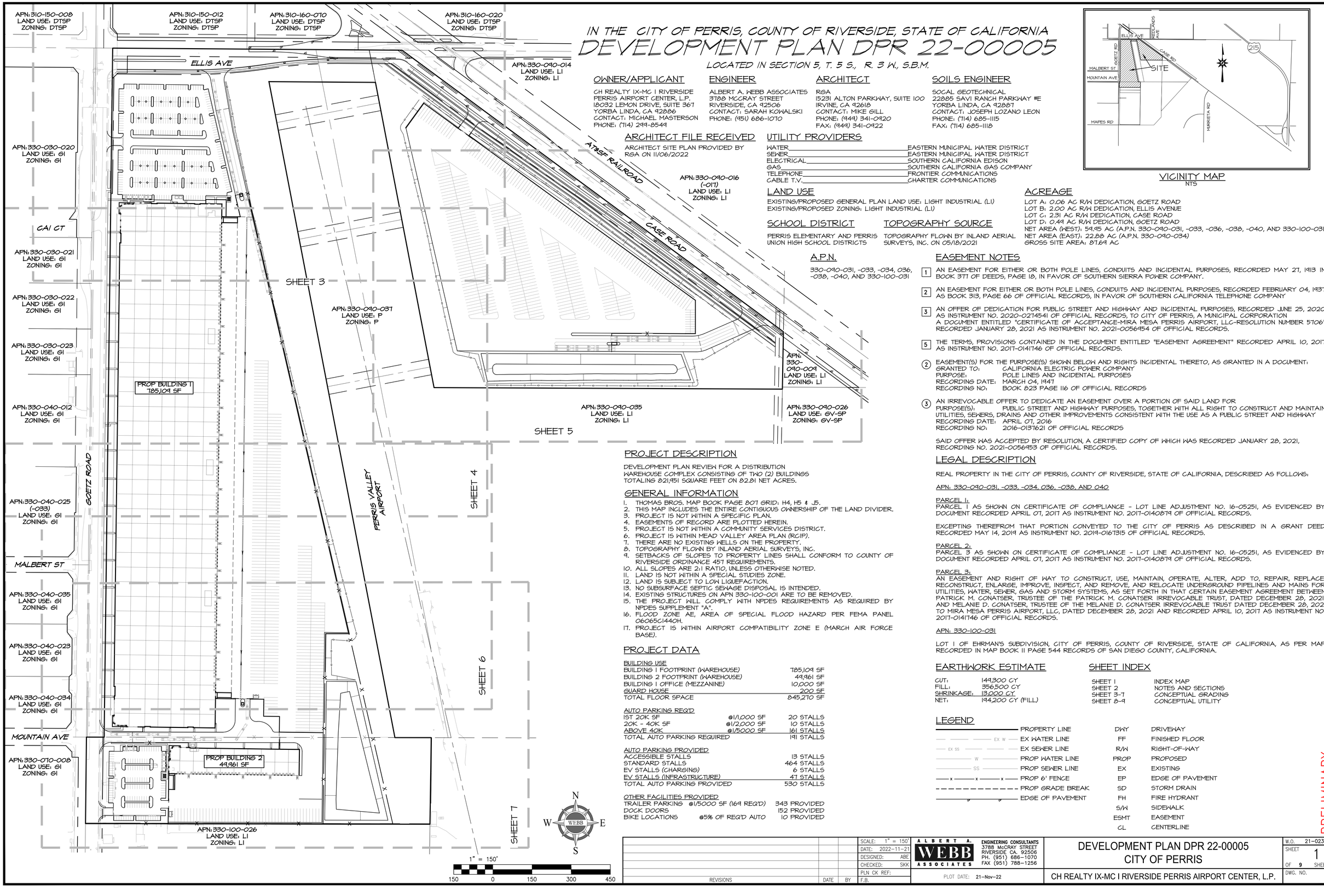
EXTERIOR ELEVATIONS
BUILDING 2

SHEET: A3-2P

IN THE CITY OF PERRIS, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

DEVELOPMENT PLAN DPR 22-00005

LOCATED IN SECTION 5, T. 5 S., R. 3 W., S.B.M.



VICINITY MAP
NTS

OWNER/APPLICANT

CH REALTY IX-MC I RIVERSIDE PERRIS AIRPORT CENTER, L.P.
18032 LEMON DRIVE, SUITE 367
YORBA LINDA, CA 92886
CONTACT: MICHAEL MASTERSON
PHONE: (714) 299-8549

ENGINEER

ALBERT A. WEBB ASSOCIATES
3788 MCCRAY STREET
RIVERSIDE, CA 92506
CONTACT: SARAH KOWALSKI
PHONE: (951) 686-1070

ARCHITECT

RGA
15231 ALTON PARKWAY, SUITE 100
IRVINE, CA 92618
CONTACT: MIKE GILL
PHONE: (949) 341-0920
FAX: (949) 341-0922

SOILS ENGINEER

SOCAL GEOTECHNICAL
22885 SAVI RANCH PARKWAY #E
YORBA LINDA, CA 92887
CONTACT: JOSEPH LOZANO LEON
PHONE: (714) 685-1115
FAX: (714) 685-1118

ARCHITECT FILE RECEIVED

ARCHITECT SITE PLAN PROVIDED BY RGA ON 11/06/2022

UTILITY PROVIDERS

WATER	EASTERN MUNICIPAL WATER DISTRICT
SEWER	EASTERN MUNICIPAL WATER DISTRICT
ELECTRICAL	SOUTHERN CALIFORNIA EDISON
GAS	SOUTHERN CALIFORNIA GAS COMPANY
TELEPHONE	FRONTIER COMMUNICATIONS
CABLE T.V.	CHARTER COMMUNICATIONS

LAND USE

EXISTING/PROPOSED GENERAL PLAN LAND USE: LIGHT INDUSTRIAL (LI)
EXISTING/PROPOSED ZONING: LIGHT INDUSTRIAL (LI)

SCHOOL DISTRICT

PERRIS ELEMENTARY AND PERRIS UNION HIGH SCHOOL DISTRICTS

TOPOGRAPHY SOURCE

TOPOGRAPHY FLOWN BY INLAND AERIAL SURVEYS, INC. ON 05/18/2021

ACREAGE

LOT A: 0.06 AC R/W DEDICATION, GOETZ ROAD
LOT B: 2.00 AC R/W DEDICATION, ELLIS AVENUE
LOT C: 2.31 AC R/W DEDICATION, CASE ROAD
LOT D: 0.49 AC R/W DEDICATION, GOETZ ROAD
NET AREA (WEST): 59.95 AC (A.P.N. 330-090-031, -033, -036, -038, -040, AND 330-100-031)
NET AREA (EAST): 22.88 AC (A.P.N. 330-090-034)
GROSS SITE AREA: 87.69 AC

A.P.N.

330-090-031, -033, -034, 036, -038, -040, AND 330-100-031

EASEMENT NOTES

1. AN EASEMENT FOR EITHER OR BOTH POLE LINES, CONDUITS AND INCIDENTAL PURPOSES, RECORDED MAY 27, 1913 IN BOOK 371 OF DEEDS, PAGE 18, IN FAVOR OF SOUTHERN SIERRA POWER COMPANY.
2. AN EASEMENT FOR EITHER OR BOTH POLE LINES, CONDUITS AND INCIDENTAL PURPOSES, RECORDED FEBRUARY 04, 1937 AS BOOK 313, PAGE 66 OF OFFICIAL RECORDS, IN FAVOR OF SOUTHERN CALIFORNIA TELEPHONE COMPANY
3. AN OFFER OF DEDICATION FOR PUBLIC STREET AND HIGHWAY AND INCIDENTAL PURPOSES, RECORDED JUNE 25, 2020 AS INSTRUMENT NO. 2020-0274541 OF OFFICIAL RECORDS, TO CITY OF PERRIS, A MUNICIPAL CORPORATION
   A DOCUMENT ENTITLED "CERTIFICATE OF ACCEPTANCE-MIRA MESA PERRIS AIRPORT, LLC-RESOLUTION NUMBER 5706" RECORDED JANUARY 28, 2021 AS INSTRUMENT NO. 2021-0056454 OF OFFICIAL RECORDS.
5. THE TERMS, PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "EASEMENT AGREEMENT" RECORDED APRIL 10, 2017 AS INSTRUMENT NO. 2017-0141746 OF OFFICIAL RECORDS.
2. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
   GRANTED TO: CALIFORNIA ELECTRIC POWER COMPANY
   PURPOSE: POLE LINES AND INCIDENTAL PURPOSES
   RECORDING DATE: MARCH 04, 1947
   RECORDING NO: BOOK 823 PAGE 116 OF OFFICIAL RECORDS
3. AN IRREVOCABLE OFFER TO DEDICATE AN EASEMENT OVER A PORTION OF SAID LAND FOR
   PURPOSE(S): PUBLIC STREET AND HIGHWAY PURPOSES, TOGETHER WITH ALL RIGHT TO CONSTRUCT AND MAINTAIN UTILITIES, SEWERS, DRAINS AND OTHER IMPROVEMENTS CONSISTENT WITH THE USE AS A PUBLIC STREET AND HIGHWAY
   RECORDING DATE: APRIL 07, 2016
   RECORDING NO: 2016-0131621 OF OFFICIAL RECORDS

   SAID OFFER WAS ACCEPTED BY RESOLUTION, A CERTIFIED COPY OF WHICH WAS RECORDED JANUARY 28, 2021, RECORDING NO. 2021-0056453 OF OFFICIAL RECORDS.

PROJECT DESCRIPTION

DEVELOPMENT PLAN REVIEW FOR A DISTRIBUTION WAREHOUSE COMPLEX CONSISTING OF TWO (2) BUILDINGS TOTALING 821,951 SQUARE FEET ON 82.81 NET ACRES.

GENERAL INFORMATION

1. THOMAS BROS. MAP BOOK PAGE 807 GRID: H4, H5 & J5.
2. THIS MAP INCLUDES THE ENTIRE CONTIGUOUS OWNERSHIP OF THE LAND DIVIDER.
3. PROJECT IS NOT WITHIN A SPECIFIC PLAN.
4. EASEMENTS OF RECORD ARE PLOTTED HEREIN.
5. PROJECT IS NOT WITHIN A COMMUNITY SERVICES DISTRICT.
6. PROJECT IS WITHIN MEAD VALLEY AREA PLAN (RCIP).
7. THERE ARE NO EXISTING WELLS ON THE PROPERTY.
8. TOPOGRAPHY FLOWN BY INLAND AERIAL SURVEYS, INC.
9. SETBACKS OF SLOPES TO PROPERTY LINES SHALL CONFORM TO COUNTY OF RIVERSIDE ORDINANCE 457 REQUIREMENTS.
10. ALL SLOPES ARE 2:1 RATIO, UNLESS OTHERWISE NOTED.
11. LAND IS NOT WITHIN A SPECIAL STUDIES ZONE.
12. LAND IS SUBJECT TO LOW LIQUEFACTION.
13. NO SUBSURFACE SEPTIC SEWAGE DISPOSAL IS INTENDED.
14. EXISTING STRUCTURES ON APN 330-100-001 ARE TO BE REMOVED.
15. THE PROJECT WILL COMPLY WITH NPDES REQUIREMENTS AS REQUIRED BY NPDES SUPPLEMENT "A".
16. FLOOD ZONE AE, AREA OF SPECIAL FLOOD HAZARD PER FEMA PANEL 06065C1440H.
17. PROJECT IS WITHIN AIRPORT COMPATIBILITY ZONE E (MARCH AIR FORCE BASE).

PROJECT DATA

BUILDING USE		
BUILDING 1 FOOTPRINT (WAREHOUSE)		785,109 SF
BUILDING 2 FOOTPRINT (WAREHOUSE)		49,961 SF
BUILDING 1 OFFICE (MEZZANINE)		10,000 SF
GUARD HOUSE		200 SF
TOTAL FLOOR SPACE		845,270 SF
AUTO PARKING REQ'D		
1ST 20K SF	@1/1,000 SF	20 STALLS
20K - 40K SF	@1/2,000 SF	10 STALLS
ABOVE 40K	@1/5000 SF	161 STALLS
TOTAL AUTO PARKING REQUIRED		191 STALLS
AUTO PARKING PROVIDED		
ACCESSIBLE STALLS		13 STALLS
STANDARD STALLS		464 STALLS
EV STALLS (CHARGING)		6 STALLS
EV STALLS (INFRASTRUCTURE)		47 STALLS
TOTAL AUTO PARKING PROVIDED		530 STALLS
OTHER FACILITIES PROVIDED		
TRAILER PARKING	@1/5000 SF (169 REQ'D)	343 PROVIDED
DOCK DOORS		152 PROVIDED
BIKE LOCATIONS	@5% OF REQ'D AUTO	10 PROVIDED

LEGAL DESCRIPTION

REAL PROPERTY IN THE CITY OF PERRIS, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

APN: 330-090-031, -033, -034, 036, -038, AND 040

PARCEL 1:
PARCEL 1 AS SHOWN ON CERTIFICATE OF COMPLIANCE - LOT LINE ADJUSTMENT NO. 16-05251, AS EVIDENCED BY DOCUMENT RECORDED APRIL 07, 2017 AS INSTRUMENT NO. 2017-0140879 OF OFFICIAL RECORDS.

EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE CITY OF PERRIS AS DESCRIBED IN A GRANT DEED RECORDED MAY 14, 2019 AS INSTRUMENT NO. 2019-0167315 OF OFFICIAL RECORDS.

PARCEL 2:
PARCEL 3 AS SHOWN ON CERTIFICATE OF COMPLIANCE - LOT LINE ADJUSTMENT NO. 16-05251, AS EVIDENCED BY DOCUMENT RECORDED APRIL 07, 2017 AS INSTRUMENT NO. 2017-0140879 OF OFFICIAL RECORDS.

PARCEL 3:
AN EASEMENT AND RIGHT OF WAY TO CONSTRUCT, USE, MAINTAIN, OPERATE, ALTER, ADD TO, REPAIR, REPLACE, RECONSTRUCT, ENLARGE, IMPROVE, INSPECT, AND REMOVE, AND RELOCATE UNDERGROUND PIPELINES AND MAINS FOR UTILITIES, WATER, SEWER, GAS AND STORM SYSTEMS, AS SET FORTH IN THAT CERTAIN EASEMENT AGREEMENT BETWEEN PATRICK M. CONATSER, TRUSTEE OF THE PATRICK M. CONATSER IRREVOCABLE TRUST, DATED DECEMBER 28, 2021, AND MELANIE D. CONATSER, TRUSTEE OF THE MELANIE D. CONATSER IRREVOCABLE TRUST DATED DECEMBER 28, 2021 TO MIRA MESA PERRIS AIRPORT, LLC, DATED DECEMBER 28, 2021 AND RECORDED APRIL 10, 2017 AS INSTRUMENT NO. 2017-0141746 OF OFFICIAL RECORDS.

APN: 330-100-031

LOT 1 OF EHRMAN'S SUBDIVISION, CITY OF PERRIS, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN MAP BOOK 11 PAGE 544 RECORDS OF SAN DIEGO COUNTY, CALIFORNIA.

EARTHWORK ESTIMATE

CUT:	149,300 CY
FILL:	356,500 CY
SHRINKAGE:	13,000 CY
NET:	194,200 CY (FILL)

SHEET INDEX

SHEET 1	INDEX MAP
SHEET 2	NOTES AND SECTIONS
SHEET 3-7	CONCEPTUAL GRADING
SHEET 8-9	CONCEPTUAL UTILITY

LEGEND

PROPERTY LINE	DWY	DRIVEWAY
EX W — EX WATER LINE	FF	FINISHED FLOOR
EX SS — EX SEWER LINE	R/W	RIGHT-OF-WAY
W — PROP WATER LINE	PROP	PROPOSED
SS — PROP SEWER LINE	EX	EXISTING
PROP 6' FENCE	EP	EDGE OF PAVEMENT
PROP GRADE BREAK	SD	STORM DRAIN
EDGE OF PAVEMENT	FH	FIRE HYDRANT
	S/W	SIDEWALK
	ESMT	EASEMENT
	CL	CENTERLINE

PRELIMINARY

REVISIONS	DATE	BY

SCALE: 1" = 150'
DATE: 2022-11-21
DESIGNED: ABE
CHECKED: SKK
PLN CK REF:
F.B.

ALBERT A. WEBB ASSOCIATES
ENGINEERING CONSULTANTS
3788 McCRAY STREET
RIVERSIDE CA. 92506
PH. (951) 686-1070
FAX (951) 788-1256

PLOT DATE: 21-Nov-22

DEVELOPMENT PLAN DPR 22-00005
CITY OF PERRIS

CH REALTY IX-MC I RIVERSIDE PERRIS AIRPORT CENTER, L.P.

W.O. 21-0235
SHEET 1 OF 9 SHEETS
DWG. NO.

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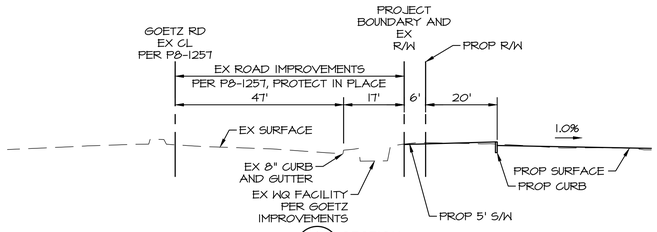

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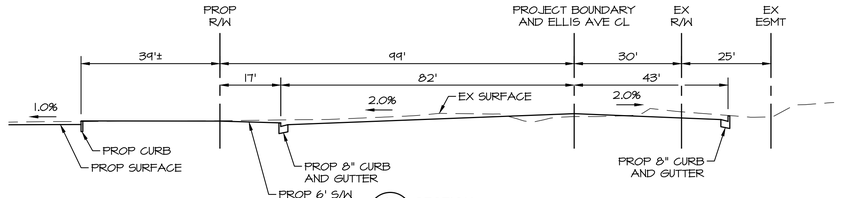

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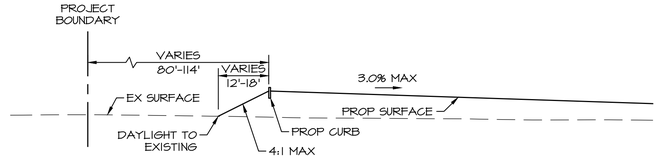

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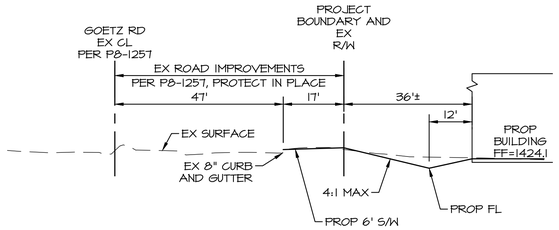

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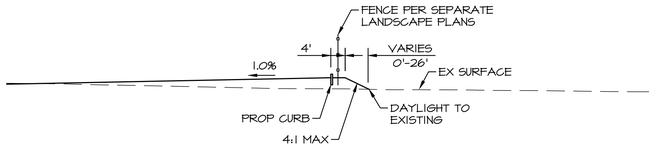

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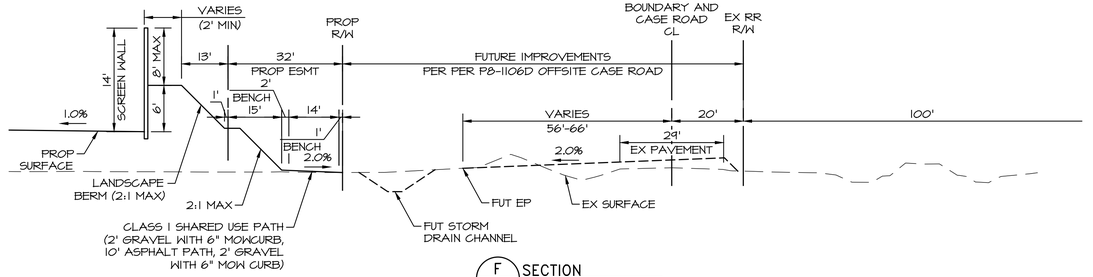

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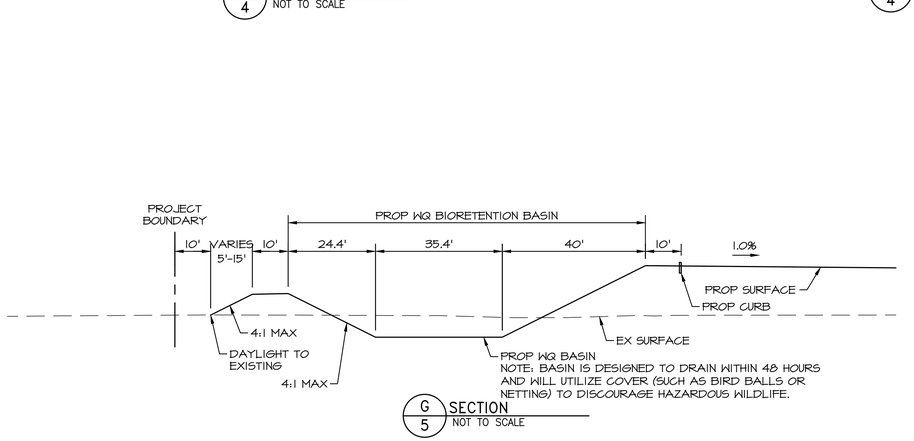

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NOT TO SCALE

H 7 SECTION
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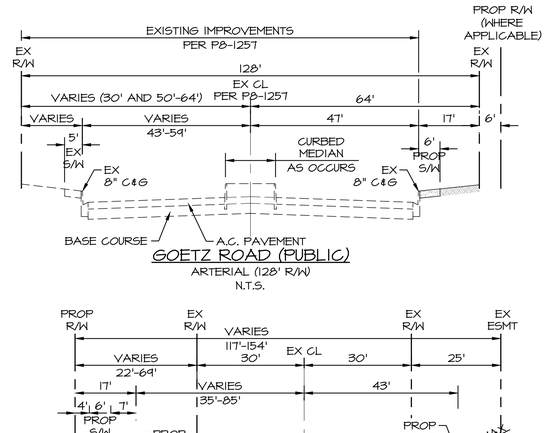

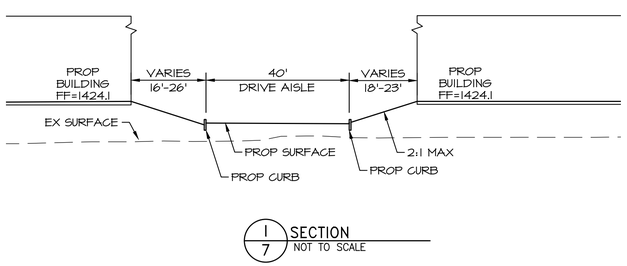

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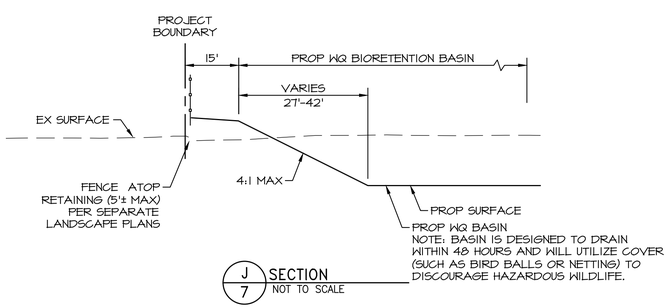

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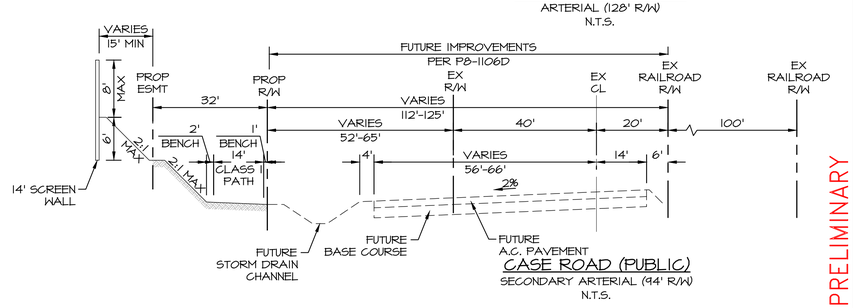

PRELIMINARY

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REVISIONS	DATE	BY

SCALE: 1"=60'
DATE: 2022-11-21
DESIGNED: ABE
CHECKED: SKK
PLN CK REF:
F.B.

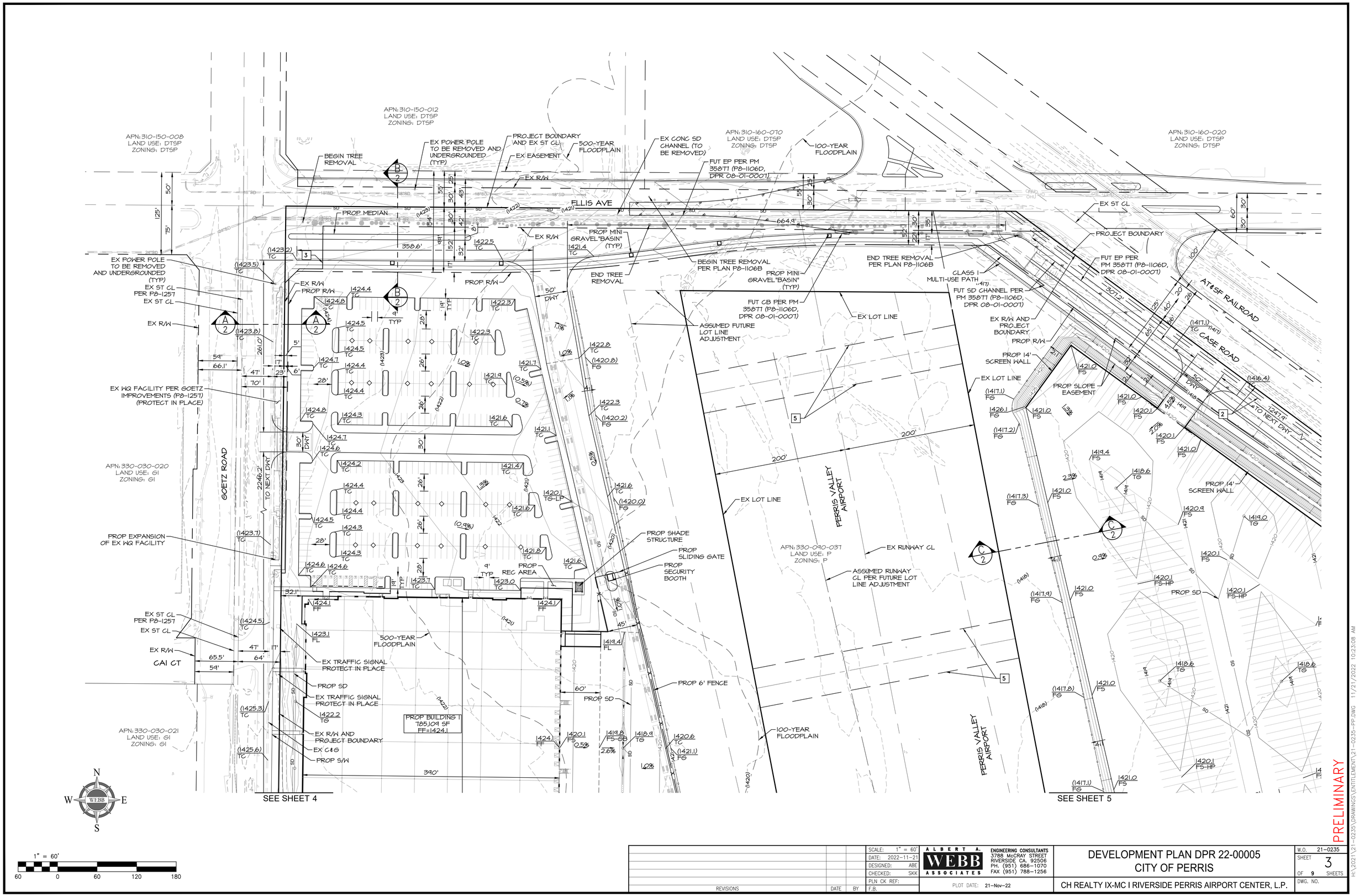
ALBERT A. WEBB ASSOCIATES
ENGINEERING CONSULTANTS
3788 McCRAY STREET
RIVERSIDE, CA. 92506
PH. (951) 686-1070
FAX (951) 788-1256

PLOT DATE: 21-Nov-22

DEVELOPMENT PLAN DPR 22-00005
CITY OF PERRIS

CH REALTY IX-MC I RIVERSIDE PERRIS AIRPORT CENTER, L.P.

W.O. 21-0235
SHEET 2
OF 9 SHEETS
DWG. NO.



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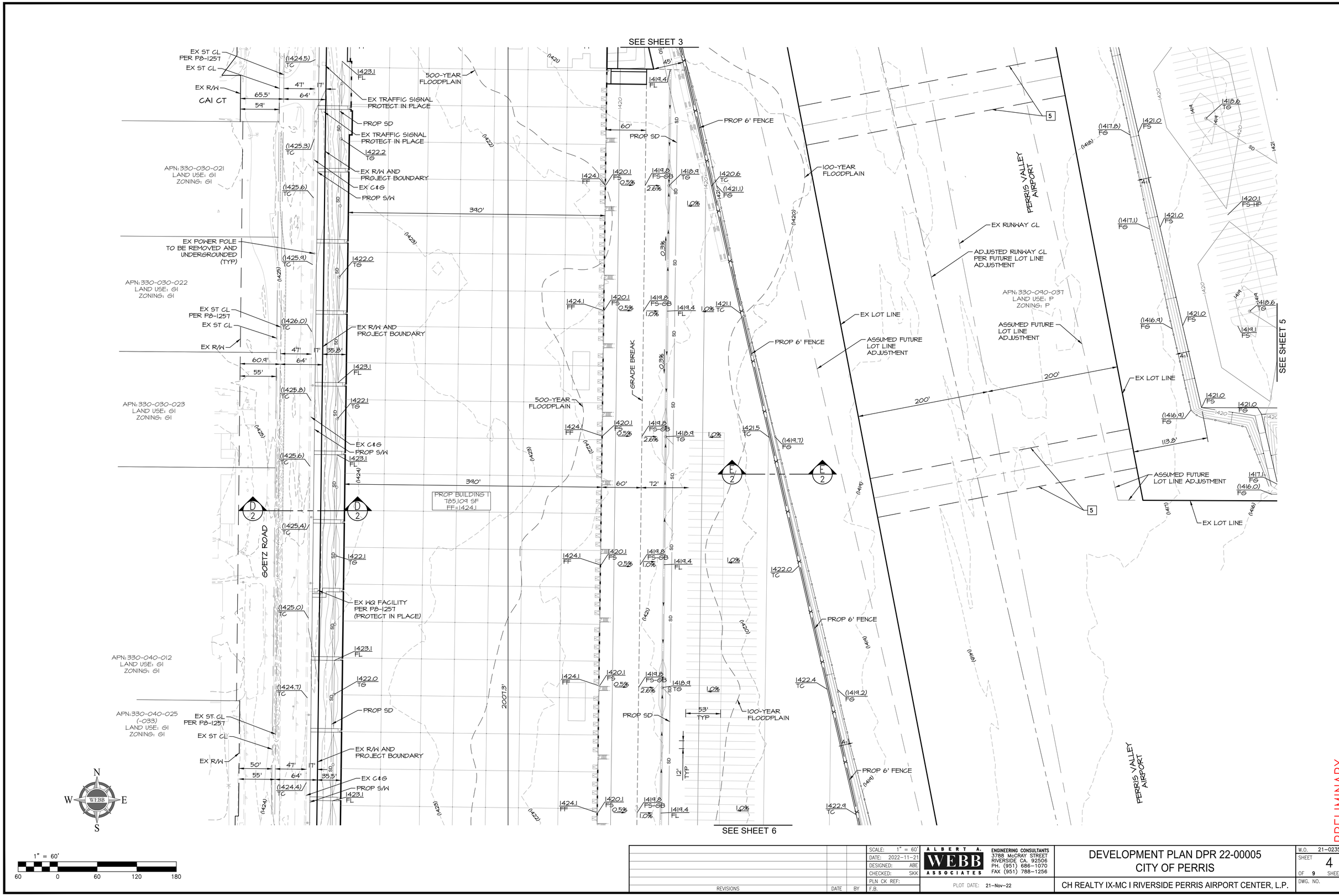

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REVISIONS	DATE	BY	SCALE: 1" = 60' DATE: 2022-11-21 DESIGNED: ABE CHECKED: SKK PLN CK REF: F.B.	ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS 3788 McCRAY STREET RIVERSIDE CA. 92506 PH. (951) 686-1070 FAX (951) 788-1256 PLOT DATE: 21-Nov-22	DEVELOPMENT PLAN DPR 22-00005 CITY OF PERRIS CH REALTY IX-MC I RIVERSIDE PERRIS AIRPORT CENTER, L.P.

W.O. 21-0235
SHEET 4 OF 9 SHEETS
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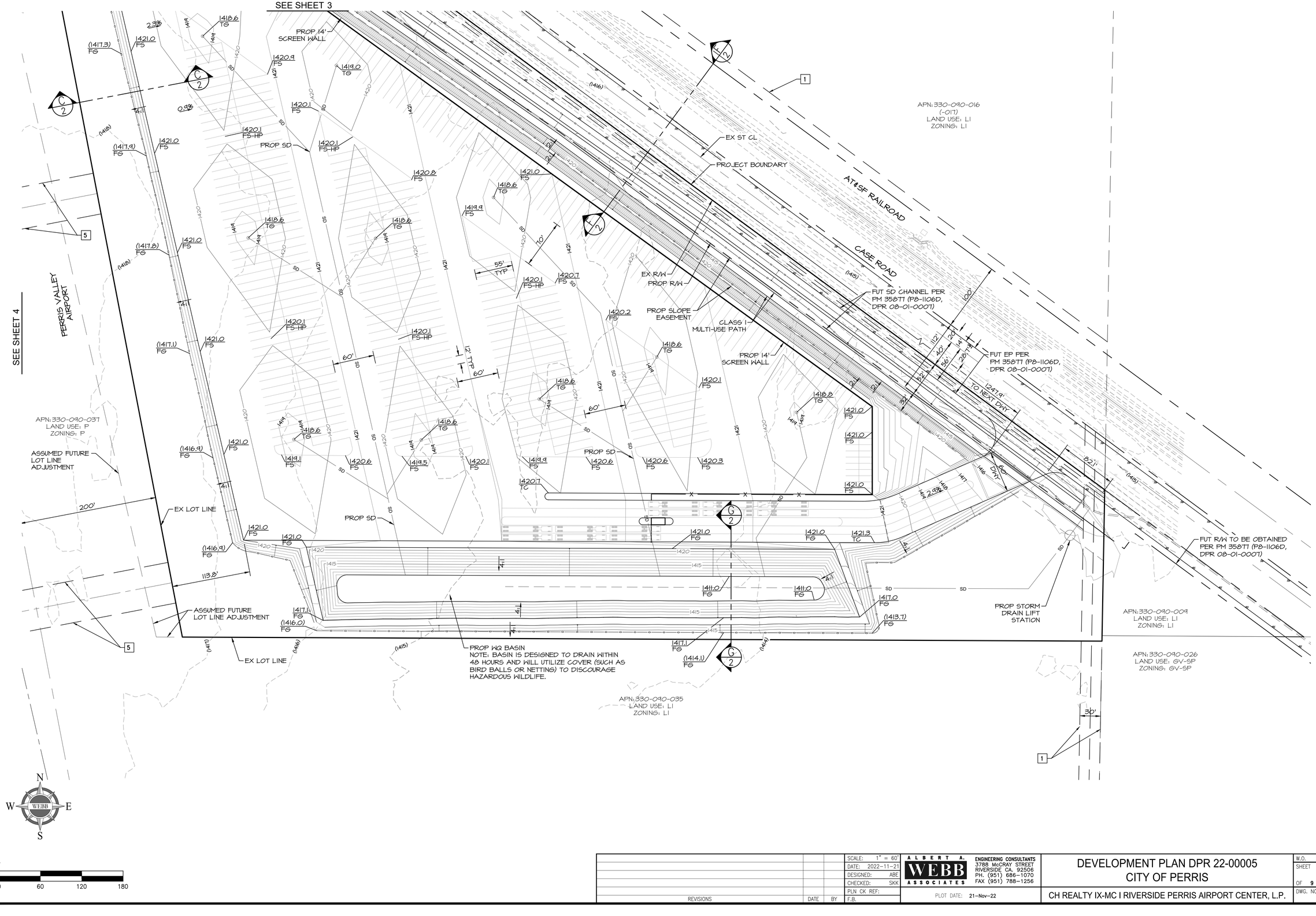

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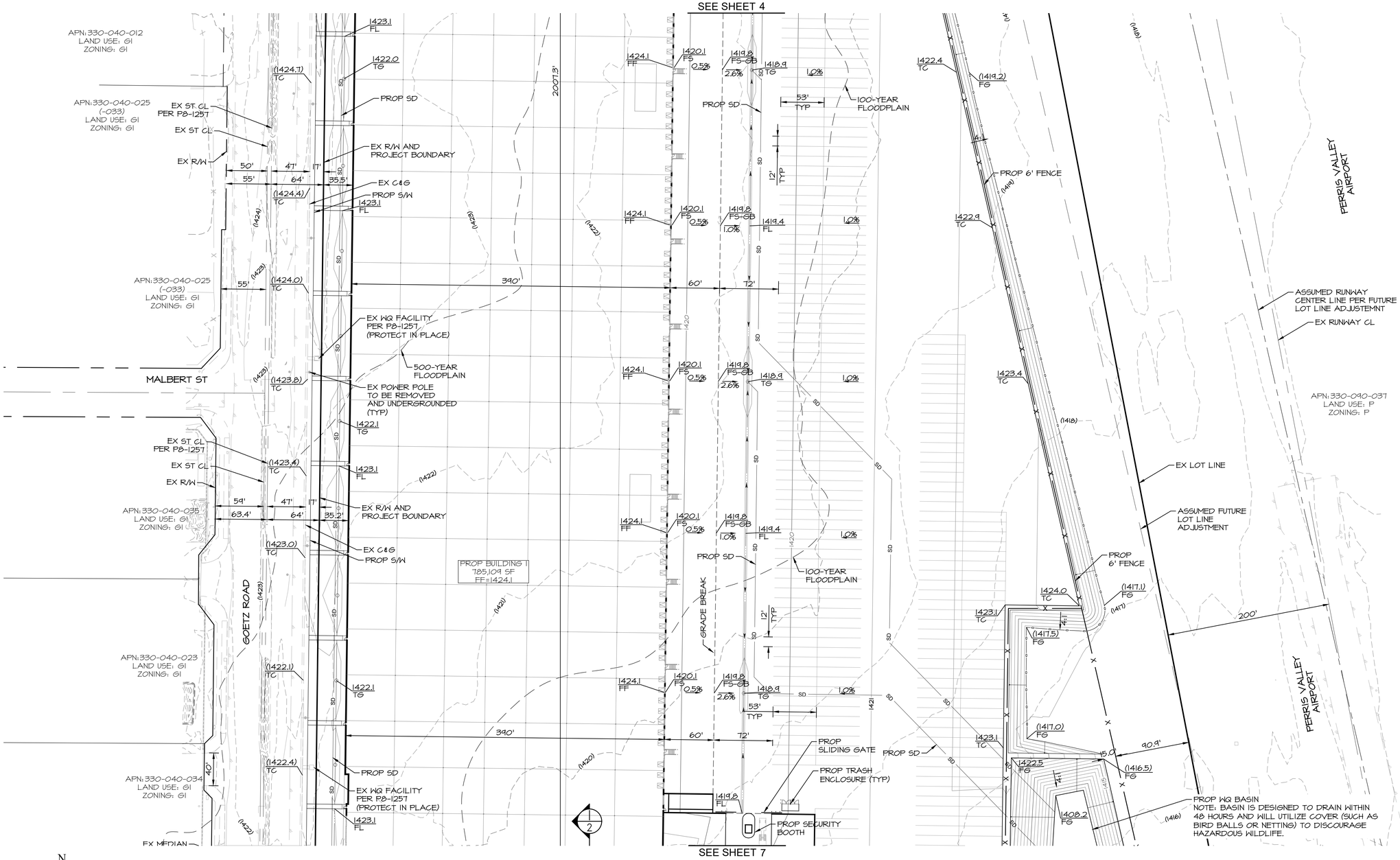

PRELIMINARY

N
W WEBB E
S

1" = 60'
60 0 60 120 180

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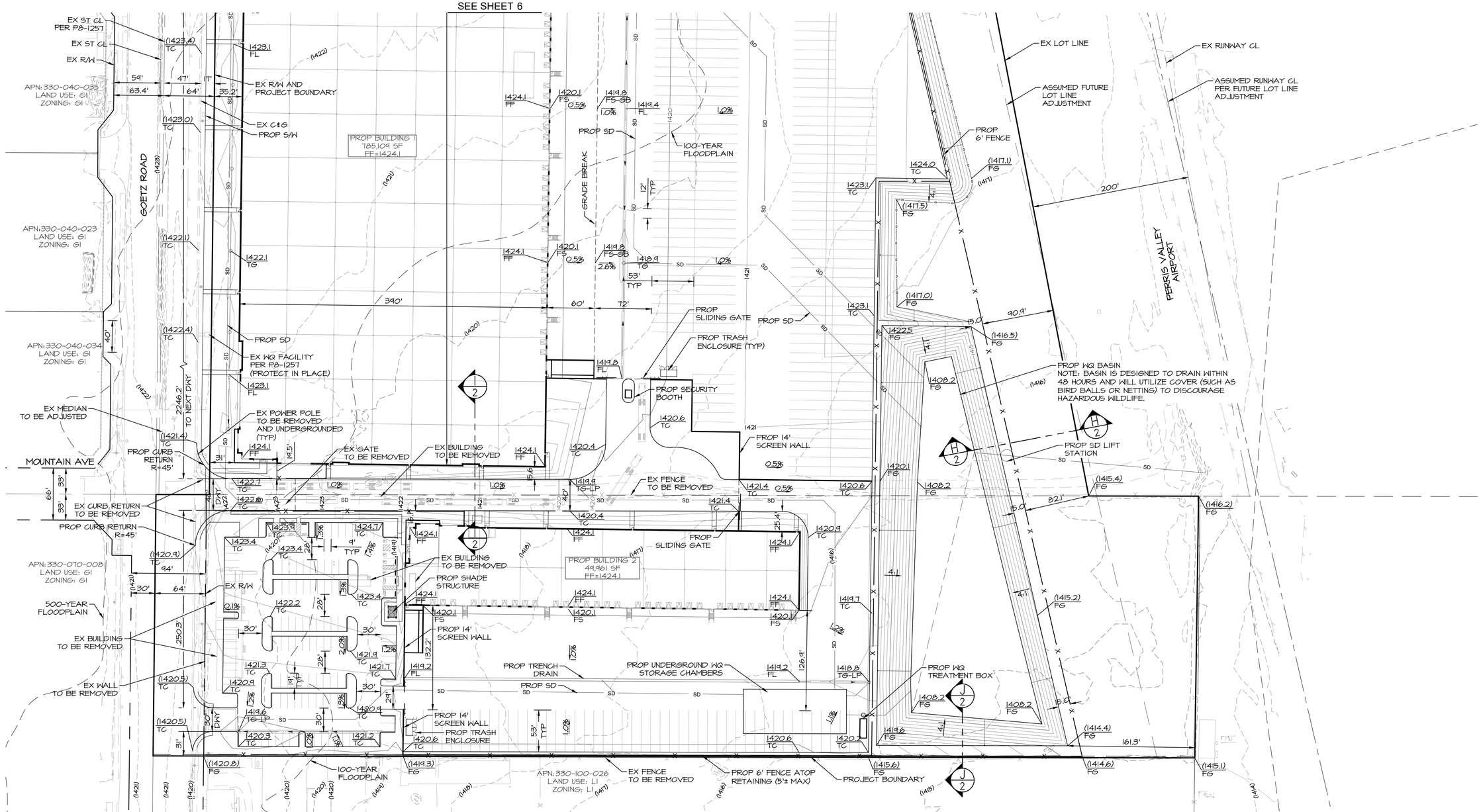

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OF	9 SHEETS
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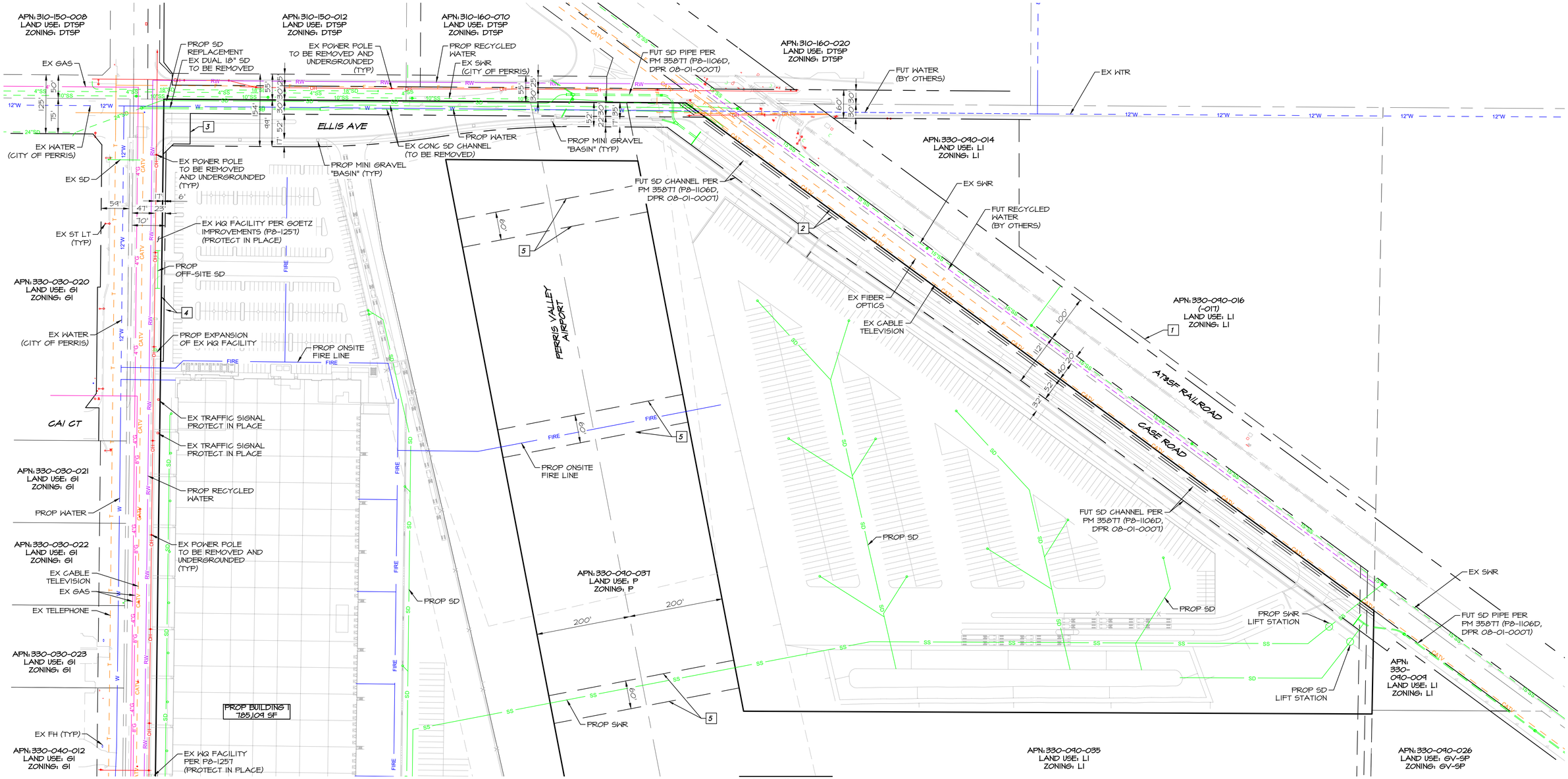

LEGEND

R/W	
EX ROAD CL	
EX ESMT LINE	
PROP SD	
EX SD	
EX GAS	
PROP WATER	
EX WATER	
FUT WATER (BY OTHERS)	
PROP SEWER	
EX SEWER	
PROP RECYCLED WATER	
FUT RECYCLED WATER (BY OTHERS)	
PROP ONSITE FIRE LINE	
EX F.O.	
EX CABLE TELEVISION	
EX TELEPHONE CABLE	
PROJECT BOUNDARY	
EX FH	
EX POWER POLE	

ABBREVIATIONS

CL	CENTER LINE
CONC	CONCRETE
EX	EXISTING
ESMT	EASEMENT
F.O.	FIBER OPTICS
FH	FIRE HYDRANT
FUT	FUTURE
LT	LIGHT
PROP	PROPOSED
R/W	RIGHT OF WAY
SD	STORM DRAIN
ST LT	STREET LIGHT
SWR	SEWER
TYP	TYPICAL
WATR	WATER
WQ	WATER QUALITY

UTILITY PROVIDERS

WATER	EASTERN MUNICIPAL WATER DISTRICT
SEWER	EASTERN MUNICIPAL WATER DISTRICT
ELECTRICAL	SOUTHERN CALIFORNIA EDISON
GAS	SOUTHERN CALIFORNIA GAS COMPANY
TELEPHONE	FRONTIER COMMUNICATIONS
CABLE T.V.	CHARTER COMMUNICATIONS

N W WEBB E S

1" = 100'

100 0 100 200 300

PRELIMINARY

REVISIONS	DATE	BY

SCALE: 1" = 100'
DATE: 2022-11-21
DESIGNED: SKK
CHECKED: ABE
PLN CK REF:
F.B.

ALBERT A. WEBB ASSOCIATES
ENGINEERING CONSULTANTS
3788 McCRAY STREET
RIVERSIDE, CA. 92506
PH. (951) 686-1070
FAX (951) 788-1256

PLOT DATE: 21/11/2022

DEVELOPMENT PLAN DPR 22-00005
CITY OF PERRIS

CH REALTY IX-MC I RIVERSIDE PERRIS AIRPORT CENTER, L.P.

W.O. 21-0235
SHEET 8
OF 9 SHEETS
DWG. NO.

H:\2021\21-0235\DRAWINGS\ENTITLEMENT\21-0235-PP-CONCEPTUAL UTILITY.DWG 11/21/2022 10:28:55 AM Adamg

SEE SHEET 8

APN: 330-030-023
LAND USE: GI
ZONING: GI

APN: 330-040-012
LAND USE: GI
ZONING: GI

APN: 330-040-025
(-033)
LAND USE: GI
ZONING: GI

APN: 330-040-035
LAND USE: GI
ZONING: GI

APN: 330-040-023
LAND USE: GI
ZONING: GI

APN: 330-040-034
LAND USE: GI
ZONING: GI

APN: 330-070-008
LAND USE: GI
ZONING: GI

APN: 330-100-026
LAND USE: LI
ZONING: LI

GOETZ ROAD

MALBERT ST

MOUNTAIN AVE

PERRIS VALLEY AIRPORT

PROP BUILDING 1
785,109 SF

PROP BUILDING 2
49,961 SF

EX FH (TYP)

EX WQ FACILITY
PER PB-1257
(PROTECT IN PLACE)

EX CABLE TELEVISION

EX GAS

EX TELEPHONE

EX POWER POLE
TO BE REMOVED
AND UNDERGROUNDED
(TYP)

PROP RECYCLED WATER

PROP WATER

PROP ONSITE FIRE LINE

PROP SD

PROP SWR

PROP SD LIFT STATION

PROP UNDERGROUND WQ STORAGE CHAMBERS

PROP TRENCH DRAIN

PROP WQ TREATMENT BOX

LEGEND

R/W	
EX ROAD CL	
EX ESMT LINE	
PROP SD	
EX SD	
EX GAS	
PROP WATER	
EX WATER	
FUT WATER (BY OTHERS)	
PROP SEWER	
EX SEWER	
PROP RECYCLED WATER	
FUT RECYCLED WATER (BY OTHERS)	
PROP ONSITE FIRE LINE	
EX F.O.	
EX CABLE TELEVISION	
EX TELEPHONE CABLE	
PROJECT BOUNDARY	
EX FH	
EX POWER POLE	

ABBREVIATIONS

CL	CENTER LINE
CONC	CONCRETE
EX	EXISTING
ESMT	EASEMENT
F.O.	FIBER OPTICS
FH	FIRE HYDRANT
FUT	FUTURE
LT	LIGHT
PROP	PROPOSED
R/W	RIGHT OF WAY
SD	STORM DRAIN
ST LT	STREET LIGHT
SWR	SEWER
TYP	TYPICAL
WATR	WATER
WQ	WATER QUALITY

UTILITY PROVIDERS

WATER	EASTERN MUNICIPAL WATER DISTRICT
SEWER	EASTERN MUNICIPAL WATER DISTRICT
ELECTRICAL	SOUTHERN CALIFORNIA EDISON
GAS	SOUTHERN CALIFORNIA GAS COMPANY
TELEPHONE	FRONTIER COMMUNICATIONS
CABLE T.V.	CHARTER COMMUNICATIONS

N W E S WEBB

1" = 100'
100 0 100 200 300

PRELIMINARY

H:\2021\21-0235\DRAWINGS\ENTITLEMENT\21-0235-PP-CONCEPTUAL UTILITY.DWG 11/21/2022 10:28:55 AM Adamg

REVISIONS	DATE	BY

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ALBERT A. WEBB ASSOCIATES
ENGINEERING CONSULTANTS
3788 McCRAY STREET
RIVERSIDE, CA. 92506
PH. (951) 686-1070
FAX (951) 788-1256

PLOT DATE: 21/11/2022

DEVELOPMENT PLAN DPR 22-00005
CITY OF PERRIS

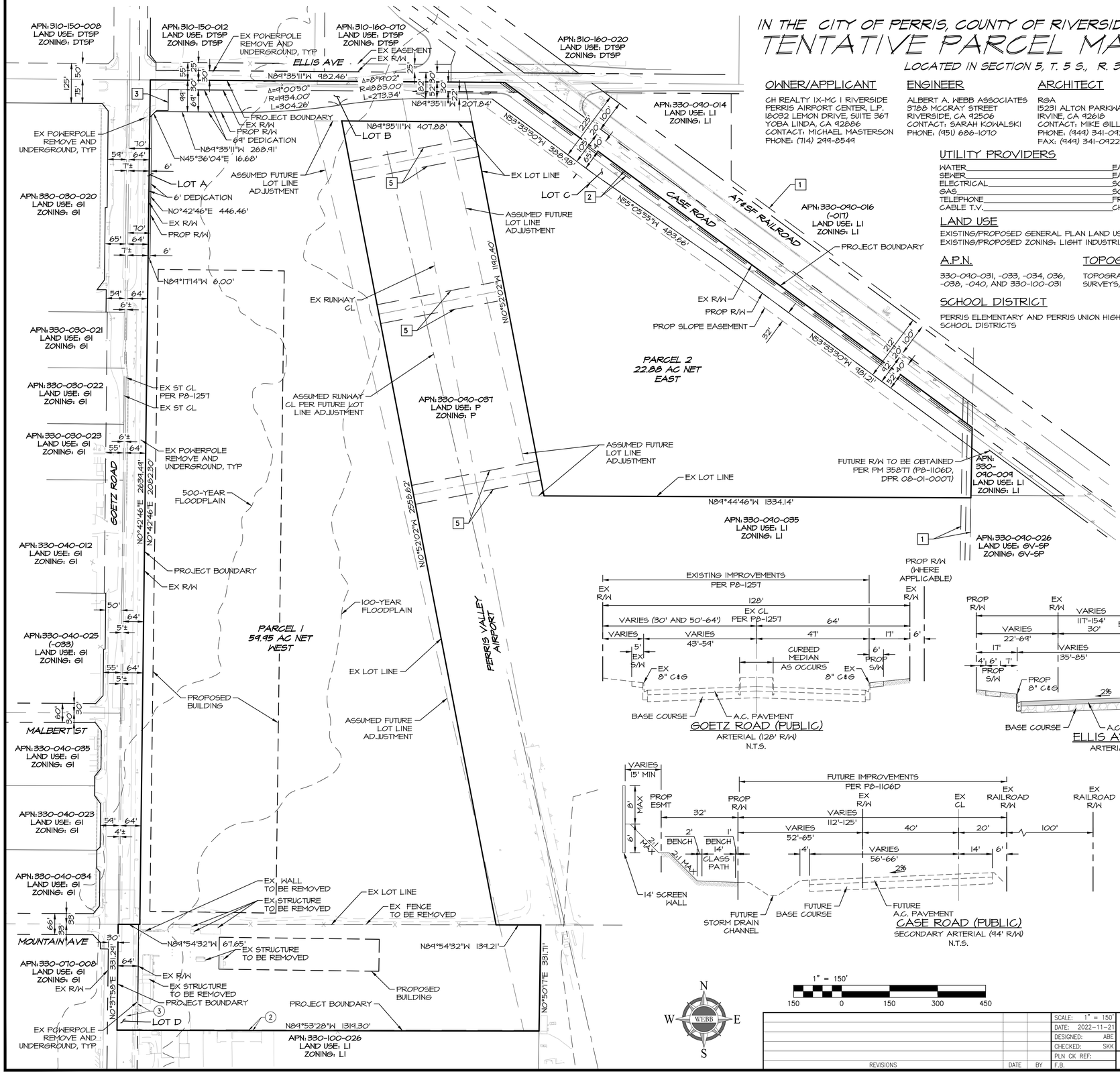
CH REALTY IX-MC I RIVERSIDE PERRIS AIRPORT CENTER, L.P.

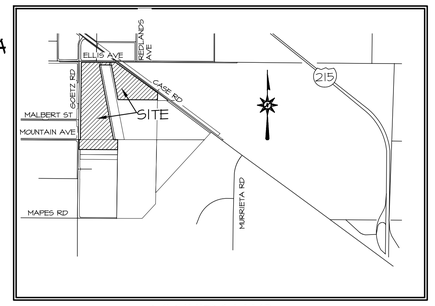
W.O. 21-0235
SHEET 9
OF 9 SHEETS
DWG. NO.

IN THE CITY OF PERRIS, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

TENTATIVE PARCEL MAP NO. 38412

LOCATED IN SECTION 5, T. 5 S., R. 3 W., S.B.M.





VICINITY MAP
NTS

OWNER/APPLICANT

CH REALTY IX-MC I RIVERSIDE PERRIS AIRPORT CENTER, L.P.
18032 LEMON DRIVE, SUITE 367
YORBA LINDA, CA 92886
CONTACT: MICHAEL MASTERSON
PHONE: (714) 299-8549

ENGINEER

ALBERT A. WEBB ASSOCIATES
3788 MCCRAY STREET
RIVERSIDE, CA 92506
CONTACT: SARAH KOWALSKI
PHONE: (951) 686-1070

ARCHITECT

RGA
15231 ALTON PARKWAY, SUITE 100
IRVINE, CA 92618
CONTACT: MIKE GILL
PHONE: (949) 341-0920
FAX: (949) 341-0922

SOILS ENGINEER

SOCAL GEOTECHNICAL
22885 SAVI RANCH PARKWAY #E
YORBA LINDA, CA 92887
CONTACT: JOSEPH LOZANO LEON
PHONE: (714) 685-1115
FAX: (714) 685-1118

UTILITY PROVIDERS

WATER	EASTERN MUNICIPAL WATER DISTRICT
SEWER	EASTERN MUNICIPAL WATER DISTRICT
ELECTRICAL	SOUTHERN CALIFORNIA EDISON
GAS	SOUTHERN CALIFORNIA GAS COMPANY
TELEPHONE	FRONTIER COMMUNICATIONS
CABLE T.V.	CHARTER COMMUNICATIONS

LAND USE

EXISTING/PROPOSED GENERAL PLAN LAND USE: LIGHT INDUSTRIAL (LI)
EXISTING/PROPOSED ZONING: LIGHT INDUSTRIAL (LI)

A.P.N.

330-040-031, -033, -034, 036, -038, -040, AND 330-100-031

TOPOGRAPHY SOURCE

TOPOGRAPHY FLOWN BY INLAND AERIAL SURVEYS, INC. ON 05/18/2021

ACREAGE

LOT A: 0.06 AC R/W DEDICATION, GOETZ ROAD
LOT B: 2.00 AC R/W DEDICATION, ELLIS AVENUE
LOT C: 2.31 AC R/W DEDICATION, CASE ROAD
LOT D: 0.49 AC R/W DEDICATION, GOETZ ROAD
NET AREA (WEST): 59.45 AC (A.P.N. 330-090-031, -033, -036, -038, -040, AND 330-100-031)
NET AREA (EAST): 22.88 AC (A.P.N. 330-090-034)
GROSS SITE AREA: 87.69 AC

SCHOOL DISTRICT

PERRIS ELEMENTARY AND PERRIS UNION HIGH SCHOOL DISTRICTS

EASEMENT NOTES

1. AN EASEMENT FOR EITHER OR BOTH POLE LINES, CONDUITS AND INCIDENTAL PURPOSES, RECORDED MAY 27, 1913 IN BOOK 371 OF DEEDS, PAGE 18, IN FAVOR OF SOUTHERN SIERRA POWER COMPANY.
2. AN EASEMENT FOR EITHER OR BOTH POLE LINES, CONDUITS AND INCIDENTAL PURPOSES, RECORDED FEBRUARY 04, 1937 AS BOOK 313, PAGE 66 OF OFFICIAL RECORDS, IN FAVOR OF SOUTHERN CALIFORNIA TELEPHONE COMPANY
3. AN OFFER OF DEDICATION FOR PUBLIC STREET AND HIGHWAY AND INCIDENTAL PURPOSES, RECORDED JUNE 25, 2020 AS INSTRUMENT NO. 2020-0274541 OF OFFICIAL RECORDS, TO CITY OF PERRIS, A MUNICIPAL CORPORATION
   A DOCUMENT ENTITLED "CERTIFICATE OF ACCEPTANCE-MIRA MESA PERRIS AIRPORT, LLC-RESOLUTION NUMBER 5706" RECORDED JANUARY 28, 2021 AS INSTRUMENT NO. 2021-0056454 OF OFFICIAL RECORDS.
5. THE TERMS, PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "EASEMENT AGREEMENT" RECORDED APRIL 10, 2017 AS INSTRUMENT NO. 2017-0141746 OF OFFICIAL RECORDS.
2. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
   GRANTED TO: CALIFORNIA ELECTRIC POWER COMPANY
   PURPOSE: POLE LINES AND INCIDENTAL PURPOSES
   RECORDING DATE: MARCH 04, 1947
   RECORDING NO: BOOK 823 PAGE 116 OF OFFICIAL RECORDS
3. AN IRREVOCABLE OFFER TO DEDICATE AN EASEMENT OVER A PORTION OF SAID LAND FOR
   PURPOSE(S): PUBLIC STREET AND HIGHWAY PURPOSES, TOGETHER WITH ALL RIGHT TO CONSTRUCT AND MAINTAIN UTILITIES, SEWERS, DRAINS AND OTHER IMPROVEMENTS CONSISTENT WITH THE USE AS A PUBLIC STREET AND HIGHWAY
   RECORDING DATE: APRIL 07, 2016
   RECORDING NO: 2016-0131621 OF OFFICIAL RECORDS

SAID OFFER WAS ACCEPTED BY RESOLUTION, A CERTIFIED COPY OF WHICH WAS RECORDED JANUARY 28, 2021, RECORDING NO. 2021-0056453 OF OFFICIAL RECORDS.

GENERAL INFORMATION

1. THOMAS BROS. MAP BOOK PAGE 807 GRID: H4, H5 & J5.
2. THIS MAP INCLUDES THE ENTIRE CONTIGUOUS OWNERSHIP OF THE LAND DIVIDER.
3. PROJECT IS NOT WITHIN A SPECIFIC PLAN.
4. EASEMENTS OF RECORD ARE PLOTTED HEREIN.
5. PROJECT IS NOT WITHIN A COMMUNITY SERVICES DISTRICT.
6. PROJECT IS WITHIN MEAD VALLEY AREA PLAN (RCIP).
7. THERE ARE NO EXISTING WELLS ON THE PROPERTY.
8. TOPOGRAPHY FLOWN BY INLAND AERIAL SURVEYS, INC.
9. SETBACKS OF SLOPES TO PROPERTY LINES SHALL CONFORM TO COUNTY OF RIVERSIDE ORDINANCE 457 REQUIREMENTS.
10. ALL SLOPES ARE 2:1 RATIO, UNLESS OTHERWISE NOTED.
11. LAND IS NOT WITHIN A SPECIAL STUDIES ZONE.
12. LAND IS SUBJECT TO LOW LIQUEFACTION.
13. NO SUBSURFACE SEPTIC SEWAGE DISPOSAL IS INTENDED.
14. EXISTING STRUCTURES ON APN 330-100-001 ARE TO BE REMOVED.
15. THE PROJECT WILL COMPLY WITH NPDES REQUIREMENTS AS REQUIRED BY NPDES SUPPLEMENT "A".
16. FLOOD ZONE AE, AREA OF SPECIAL FLOOD HAZARD PER FEMA PANEL 06065C1440H.
17. PROJECT IS WITHIN AIRPORT COMPATABILITY ZONE E (MARCH AIR FORCE BASE).

LEGAL DESCRIPTION

REAL PROPERTY IN THE CITY OF PERRIS, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

APN: 330-090-031, -033, -034, 036, -038, AND 040

PARCEL 1:
PARCEL 1 AS SHOWN ON CERTIFICATE OF COMPLIANCE - LOT LINE ADJUSTMENT NO. 16-05251, AS EVIDENCED BY DOCUMENT RECORDED APRIL 07, 2017 AS INSTRUMENT NO. 2017-0140819 OF OFFICIAL RECORDS.

EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE CITY OF PERRIS AS DESCRIBED IN A GRANT DEED RECORDED MAY 14, 2019 AS INSTRUMENT NO. 2019-0167315 OF OFFICIAL RECORDS.

PARCEL 2:
PARCEL 3 AS SHOWN ON CERTIFICATE OF COMPLIANCE - LOT LINE ADJUSTMENT NO. 16-05251, AS EVIDENCED BY DOCUMENT RECORDED APRIL 07, 2017 AS INSTRUMENT NO. 2017-0140819 OF OFFICIAL RECORDS.

PARCEL 3:
AN EASEMENT AND RIGHT OF WAY TO CONSTRUCT, USE, MAINTAIN, OPERATE, ALTER, ADD TO, REPAIR, REPLACE, RECONSTRUCT, ENLARGE, IMPROVE, INSPECT, AND REMOVE, AND RELOCATE UNDERGROUND PIPELINES AND MAINS FOR UTILITIES, WATER, SEWER, GAS AND STORM SYSTEMS, AS SET FORTH IN THAT CERTAIN EASEMENT AGREEMENT BETWEEN PATRICK M. CONATSER, TRUSTEE OF THE PATRICK M. CONATSER IRREVOCABLE TRUST, DATED DECEMBER 28, 2021, AND MELANIE D. CONATSER, TRUSTEE OF THE MELANIE D. CONATSER IRREVOCABLE TRUST DATED DECEMBER 28, 2021 TO MIRA MESA PERRIS AIRPORT, LLC, DATED DECEMBER 28, 2021 AND RECORDED APRIL 10, 2017 AS INSTRUMENT NO. 2017-0141746 OF OFFICIAL RECORDS.

APN: 330-100-031

LOT 1 OF EHRMAN'S SUBDIVISION, CITY OF PERRIS, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN MAP BOOK 11 PAGE 544 RECORDS OF SAN DIEGO COUNTY, CALIFORNIA.

PRELIMINARY

REVISIONS	DATE	BY

SCALE: 1" = 150'
DATE: 2022-11-21
DESIGNED: ABE
CHECKED: SKK
PLN CK REF:
F.B.

ALBERT A. WEBB ASSOCIATES
ENGINEERING CONSULTANTS
3788 McCRAY STREET
RIVERSIDE CA. 92506
PH. (951) 686-1070
FAX (951) 788-1256

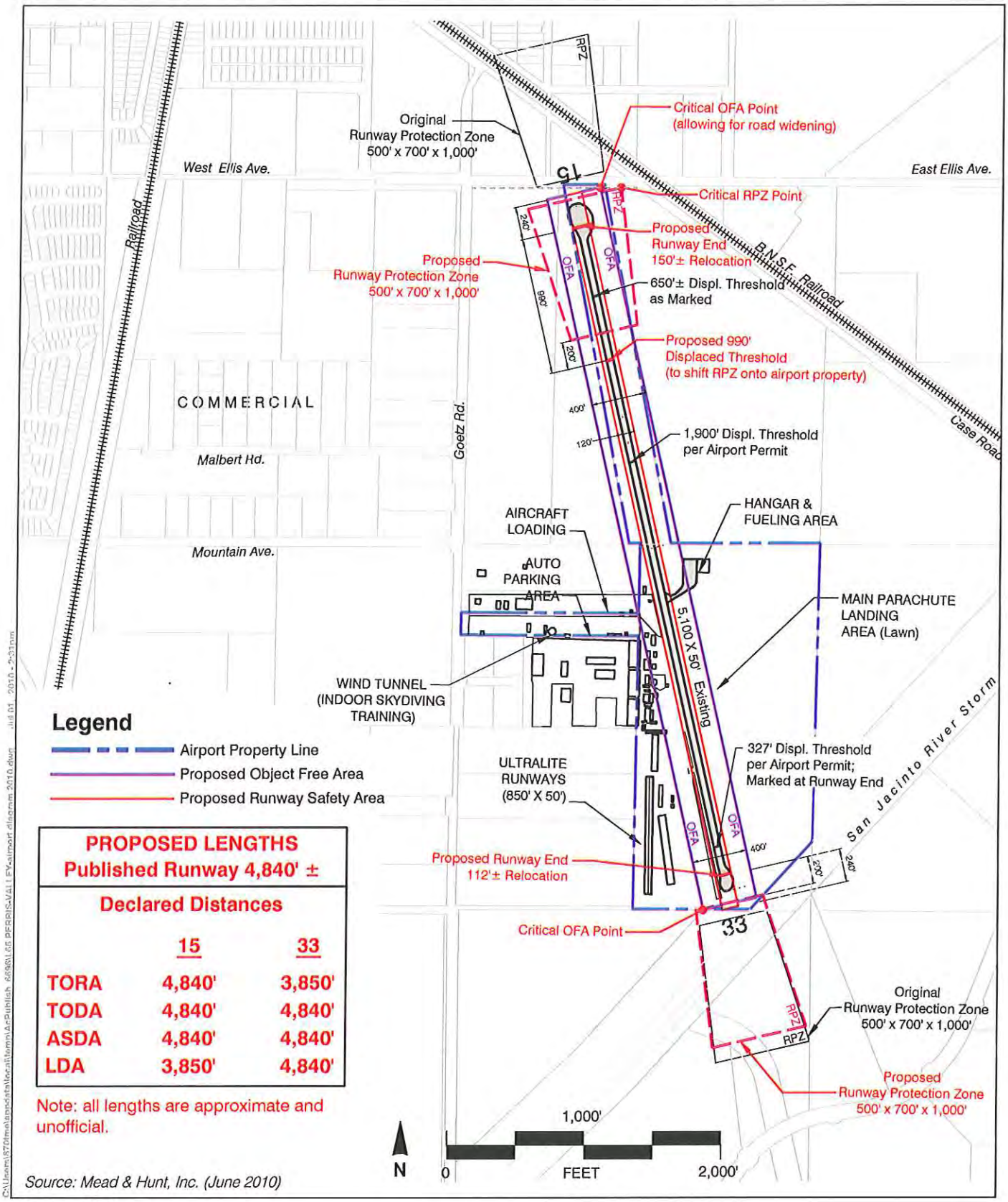
PLOT DATE: 21-Nov-22

TENTATIVE PARCEL MAP NO. 38412
CITY OF PERRIS

CH REALTY IX-MC I RIVERSIDE PERRIS AIRPORT CENTER, L.P.

W.O. 2021-0235
SHEET 1 OF 1 SHEETS
DWG. NO.

H:\2021\21-0235\DRAWINGS\ENTITLEMENT\21-0235-TPM.DWG 11/21/2022 10:23:19 AM



PROPOSED LENGTHS
Published Runway 4,840' ±

Declared Distances

	15	33
TORA	4,840'	3,850'
TODA	4,840'	4,840'
ASDA	4,840'	4,840'
LDA	3,850'	4,840'

Note: all lengths are approximate and unofficial.

Source: Mead & Hunt, Inc. (June 2010)

Exhibit PV-2

Airport Diagram

Perris Valley Airport

NOTICE OF PUBLIC HEARING

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

www.rcaluc.org

A PUBLIC HEARING has been scheduled before the Riverside County Airport Land Use Commission (ALUC) to consider the applications described below.

Any person may submit written comments to the ALUC before the hearing or may appear and be heard in support of or opposition to the project at the time of hearing. **Information on how to participate in the hearing will be available on the ALUC website at www.rcaluc.org.** The ALUC holds hearings for local discretionary permits within the Airport Influence Area, reviewing for aeronautical safety, noise and obstructions. ALUC reviews a proposed plan or project solely to determine whether it is consistent with the applicable Airport Land Use Compatibility Plan. For more information please contact **ALUC Planner Paul Rull at (951) 955-6893**.

The City of Perris Planning Department should be contacted on non-ALUC issues. For more information please contact City of Perris Planner Kenneth Phung at (951) 943-5003.

The proposed project application may be viewed by a prescheduled appointment and on the ALUC website www.rcaluc.org. Written comments may be submitted at the Riverside County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, California 92501, Monday through Friday from 8:00 a.m. to 3:30 p.m., or by e-mail to prull@rivco.org. Individuals with disabilities requiring reasonable modifications or accommodations, please contact Barbara Santos at (951) 955-5132.

PLACE OF HEARING: **Riverside County Administration Center**
4080 Lemon Street, 1st Floor Board Chambers
Riverside California

DATE OF HEARING: **July 13, 2023**

TIME OF HEARING: **9:30 A.M.**

CASE DESCRIPTION:

ZAP1028PV23 – Landstar Companies (Representative: Johnson Aviation) – City of Perris Case Nos. PLN22-05046 (DPR22-00005 [Development Plan Review], TPM38412 [Tentative Parcel Map]). A proposal to construct two industrial warehouse buildings with mezzanines totaling 867,070 square feet and a 343 tractor-trailer truck yard (on a separate 22.88 acre parcel) on a total 82.83 acres, located southerly of Ellis Avenue, westerly of Case Road, easterly of Goetz Road. The applicant also proposes a tentative parcel map merging the site into two parcels (Airport Compatibility Zones A, B1, B2, C, and D of the Perris Valley Airport Influence Area, and Zone E of March Air Reserve Base/Inland Port Airport Influence Area).

RIVERSIDE COUNTY
AIRPORT LAND USE COMMISSION

APPLICATION FOR MAJOR LAND USE ACTION REVIEW

ALUC STAFF ONLY

ALUC Case Number: ZAP1091BD23 Date Submitted: 4/18/23

AIA: Bermuda Dunes Zone: E Public Hearing ☐ Staff Review ☑

Applicant

Applicant Full Name: Omar Hussein

Applicant Address: 69-930 Hwy 111, Ste 203 Rancho Mirage, CA 92270

Phone: (214) 923-3246 **Email:** omar@beaconrealtyadvisors.com

Representative/ Property Owner Contact Information

Representative: Luis Gomez (goUrban Development) **Email:** lagomez@gourbandev.com

Phone: (562) 895-3392

Address: 1 World Trade Center, 8th Floor, Long Beach CA 90831

Property Owner: AABC Beacon Jefferson Square, LLC, a North Carolina limited liability company **Email:** omar@beaconrealtyadvisors.com

Phone: (214) 923-3246

Address: 69-930 Hwy 111, Ste 203 Rancho Mirage, CA 92270

Local Jurisdiction Agency

Agency Name: City of La Quinta Phone: (760) 341-4800

Staff Contact: Nicole Criste **Email:** consultingplanner@laquintaca.gov

Address: 78495 Calle Tampico, La Quinta, CA 92253

Local Agency Case No.: Master Project # 2023-0001, SP2022-0004,TTM2022-0003,SDP22022-0015

Project Location

Street Address: N/A Gross Parcel Size.: 5.1 Acres

Assessor's Parcel No.: 604-521-013, 604-521-014

Solar

Is the project proposing solar Panels? Yes ☑ No ☐ If yes, please provide solar glare study. (only if in Zone C or higher)

Data

Site Elevation:(above mean sea level): 59 ft

Height of Building or structures: 45' 4"

What type of drainage basins are being proposed and the square footage: 2 above-ground retention basins (8,100 SF + 14,400 SF) and 1 underground retention basin (4,800 SF)

Notice

A. NOTICE: Failure of an applicant to submit complete or adequate information pursuant to Sections 65940 to 65948 inclusive of the California Government Code, MAY constitute grounds for disapproval of actions, regulations, or permits.

B. REVIEW TIME: Estimated time for "staff level review" is approximately 30 days from date of submittal. Estimated time for "commission level review" is approximately 45 days from date of a complete application submittal to the next available commission hearing meeting.

C. SUBMISSION PACKAGE:

Please submit all application items DIGITALLY via USB or CD:

- Completed ALUC Application Form
- Plans Package: site plans, floor plans, building elevations, grading plans, subdivision maps
- Exhibits of change of zone, general plan amendment, specific plan amendment
- Project description of existing and proposed use

Additionally, please provide:

- ALUC fee payment (Checks made out to Riverside County ALUC)
- Gummed address labels of all surrounding property owners within a 300-foot radius of project site. (Only required if the project is scheduled for a public hearing).

Riverside County Airport Land Use Commission, County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, CA 92501, Phone: 951-955-5132 Fax: 951-955-5177 Website: www.rcaluc.org

RIVERSIDE COUNTY
AIRPORT LAND USE COMMISSION

STAFF REPORT

ADMINISTRATIVE ITEMS

5.1 Director's Approvals

A. During the period of May 16, 2023, through June 15, 2023, ALUC Director Paul Rull reviewed two local jurisdiction non-impact legislative cases pursuant to ALUC Resolution No. 2011-02, and issued determinations of consistency.

ZAP1073RG23 (Countywide) pertains to County of Riverside Case No. CZ21000001 (Change of Zone), an amendment to Section 19.4 of County Ordinance No. 348 regarding On-Site Advertising Structures and Signs, that will establish locations, development, operation standards, and a permitting process to allow for on-site digital signage. The intent of the digital signage is to provide information about onsite, associated businesses only and is not for general advertising. The proposed amendments do not involve changes in development standards or allowable land uses that would be in conflict with the underlying compatibility criteria. Therefore, these amendments will not impact the safety of air navigation within County of Riverside.

ALUC Director Paul Rull issued a determination of consistency for this project on May 22, 2023.

****

ZAP1127FV23 (Citywide) pertains to City of Murrieta Case Nos. DCA2021-2396 (Development Code Amendment), MCA2023-00001 (Municipal Code Amendment), MCA2023-00002 (Municipal Code Amendment), a proposal to amend the City's Development and Municipal Codes regarding updates to the: 1) Hillside Ordinance, 2) Electric Vehicle Charging and Housing Element Implementation Ordinance, and 3) Multi-Family Design Guidelines. There are no development standard changes or changes to zoning and land use that would increase residential density or non-residential intensity within the proposed amendments. Therefore, these amendments have no possibility for having an impact on the safety of air navigation within the portions of the French Valley Airport Influence Area located within the City of Murrieta.

ALUC Director Paul Rull issued a determination of consistency for this project on June 2, 2023.

5.2 Update March Air Reserve Base Compatibility Use Study (CUS)
Presentation by Project Director Simon Housman or his designee.

X:\ALUC Administrative Items\Admin. 2023\ADmin Item 7-13-23.doc

RIVERSIDE COUNTY
AIRPORT LAND USE COMMISSION

May 22, 2023

Rosana Franco, Project Planner
County of Riverside Planning Department
4080 Lemon Street, 12th Floor
Riverside CA 92501

CHAIR
Steve Manos
Lake Elsinore

VICE CHAIR
Russell Betts
Desert Hot Springs

COMMISSIONERS

John Lyon
Riverside

Steven Stewart
Palm Springs

Richard Stewart
Moreno Valley

Michael Geller
Riverside

Vernon Poole
Murrieta

STAFF

Director
Paul Rull

Simon Housman
Jackie Vega
Barbara Santos

County Administrative Center
4080 Lemon St.,14th Floor.
Riverside, CA 92501
(951) 955-5132

www.rcaluc.org

RE: AIRPORT LAND USE COMMISSION (ALUC) DEVELOPMENT REVIEW – DIRECTOR'S DETERMINATION

File No.:	ZAP1073RG23
Related File No.:	CZ2000001 (Change of Zone)
APN:	Countywide

Dear Ms. Franco,

As authorized by the Riverside County Airport Land Use Commission (ALUC) pursuant to its Resolution No. 2011-02, as ALUC Director, I have reviewed County of Riverside Case No. CZ2000001 (Change of Zone), an amendment to Section 19.4 of County Ordinance No. 348 regarding On-Site Advertising Structures and Signs, that will establish locations, development, operation standards, and a permitting process to allow for on-site digital signage. The intent of the digital signage is to provide information about onsite, associated businesses only and is not for general advertising.

The proposed amendments do not involve changes in development standards or allowable land uses that would be in conflict with the underlying compatibility criteria. Therefore, these amendments will not impact the safety of air navigation within County of Riverside.

As ALUC Director, I hereby find the above-referenced project **CONSISTENT**, with all Riverside County Airport Land Use Compatibility Plans.

This determination of consistency relates to airport compatibility issues and does not necessarily constitute an endorsement of the proposed amendment.

If you have any questions, please contact me at (951) 955-6893.

Sincerely,
RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

Paul Rull, ALUC Director

cc: ALUC Case File

X:\AIRPORT CASE FILES\Regional\ZAP1073RG23\ZAP1073RG23.LTR.doc

ORDINANCE NO. 348.4978
ORDINANCE OF THE COUNTY OF RIVERSIDE PROVIDING FOR LAND USE PLANNING AND ZONING REGULATIONS AND RELATED FUNCTIONS.
ARTICLE XIX ADVERTISING REGULATIONS

ARTICLE XIX ADVERTISING REGULATIONS

SECTION 19.1. PURPOSE AND INTENT.

Because Riverside County is a large, diverse and rapidly expanding jurisdiction, the Board of Supervisors finds that proper sign control is necessary for aesthetic and safety reasons. More specifically, proper sign control is necessary to provide for the preservation and protection of open space and scenic areas, the many natural and man-made resources, and the established rural communities within Riverside County. Proper sign control also safeguards the life, health, property and public welfare of Riverside County residents by providing the means to adequately identify businesses and other sign users, by prohibiting, regulating and controlling the design, location and maintenance of signs, and by providing for the removal and limitation of sign use. It is the intent of this ordinance to provide for such control. All displays and signs described herein shall conform to the applicable provisions of this article. If any specific zoning classification within this ordinance shall impose more stringent requirements than are set forth within this article, the more stringent provisions shall prevail.

SECTION 19.2. DEFINITIONS.

For purposes of this ordinance, the following words or phrases shall have the following definitions.

A. "ABANDONED" means either:

1. Any outdoor advertising display that is allowed to continue for more than one year without a poster, bill, printing, painting, or other form of advertisement or message; or,

2. Any outdoor advertising display that does not appear on the inventory required by Section 19.3.B.12.; or,

3. Any on-site advertising structure or sign that is allowed to continue for more than 90 days without a poster, bill, printing, painting, or other form of advertising or message for the purposes set forth in Section 19.2.M. hereof.

B. "DIGITAL DISPLAY". An electronic message display that advertises the business name, business conducted, services rendered, or goods produced or sold upon the property on which the display placed and exhibits static images through the use of grid lights, cathode ray projections, light emitting diode displays, plasma screens, liquid crystal displays, fiber optics, or other electronic media or technology, that may be changed remotely through electronic means. The ability to have a digital display only applies to on-site advertising structures or signs, which are defined in Section 19.2.M.

DRAFT

C. "DISPLAY FACE" means the surface area of an outdoor advertising display available for the purpose of displaying an advertising message. Display Face does not include the structural supports or lighting.

Amended Effective:
07-23-99 (Ord. 348.3881) Ord. 348.4641 Item 16.2 of 07/14/09 (Effective Date: 08/13/09)

~~C~~D. "EDGE OF A RIGHT-OF-WAY" means a measurement from the edge of a right-of-way horizontally along a line normal or perpendicular to the centerline of the freeway or highway.

~~D~~E. "FREE STANDING SIGN" means any sign which is supported by one or more columns or uprights imbedded in the ground, and which is not attached to any building or structure.

~~E~~F. "FREEWAY" means a divided arterial highway for through traffic with full control of access and with grade separations at intersections.

~~F~~G. "HIGHWAY" means roads, streets, boulevards, lanes, courts, places, commons, trails, ways or other rights-of-way or easements used for or laid out and intended for the public passage of vehicles or persons.

~~G~~H. "ILLEGAL OUTDOOR ADVERTISING DISPLAY" means any of the following:

1. An outdoor advertising structure or outdoor advertising sign erected without first complying with all applicable county ordinances and regulations in effect at the time of its construction, erection or use.

2. An outdoor advertising structure or outdoor advertising sign that was legally erected but whose use has ceased, or the structure upon which the advertising display is placed has been abandoned by its owner, and not maintained or used for a period of not less than one year.

3. An outdoor advertising structure or outdoor advertising sign that was legally erected which later became nonconforming as a result of the adoption of an ordinance; the amortization period for the display provided by the ordinance rendering the display nonconforming has expired; and conformance has not been accomplished.

4. An outdoor advertising structure or outdoor advertising sign which does not comply with this Article, the Outdoor Advertising Display Permit referenced in Section 19.3.A. hereof, the State Outdoor Advertising Permit referenced in Section 19.3.B.4. hereof or any related building permit.

5. An outdoor advertising structure or outdoor advertising sign which is a danger to the public or is unsafe.

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~~H~~I. "ILLEGAL ON-SITE ADVERTISING STRUCTURE OR SIGN" means any of the following.

1. An on-site advertising structure or sign erected without first complying with all applicable County ordinances and regulations in effect at the time of its construction, erection or use.

2. An on-site advertising structure or sign that was legally erected, but whose use has ceased, or the structure upon which the advertising display is placed has been abandoned by its owner, and not maintained or used to identify or advertise an ongoing business for a period of not less than 90 days.

3. An on-site advertising structure or sign that was legally erected which later became nonconforming as a result of the adoption of an ordinance; the amortization period for the display provided by the ordinance rendering the display nonconforming has expired; and conformance has not been accomplished.

~~I~~J. "MAXIMUM HEIGHT" means the highest point of the structure or sign measured from the average natural ground level at the base of the supporting structure. Provided, however, within the boundaries of the R-VC Zone (Rubidoux-Village Commercial), maximum height shall mean the height measured from the average adjacent finish grade (excluding artificial berms and raised planters) to the uppermost portion of the border of the surface area of the sign, except that:

1. Structural supports and non-sign architectural features may project above the maximum height limit to the limits prescribed in the applicable zoning ordinances and,

2. Signs affixed to the building may be placed at any height as long as the sign conforms to the other regulations of this ordinance.

K~~J~~. "NOISE ATTENUATION BARRIER" means a sound wall or other structure built by the California Department of Transportation to reduce noise impacts.

~~K~~L. "NON-COMMERCIAL STRUCTURE OR SIGN" means any structure, housing, sign, device, figure, statuary, painting, display, message, placard or other contrivance, which is designed, constructed, created, engineered, intended or used to provide data or information that does not do any of the following:

1. Advertise a product or service for profit or for a business purpose;

2. Propose a commercial transaction; or,

3. Relate solely to economic interests.

~~L~~M. "ON-SITE ADVERTISING STRUCTURE OR SIGN" means any structure, housing, sign,

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device, figure, statuary, painting, display, message placard, or other contrivance, or any part thereof, which is designed, constructed, created, engineered, intended, or used to advertise, or to provide data or information that does either of the following:

1. Designates, identifies, or indicates the name of the business of the owner or occupant of the premises upon which the structure or sign is located.

2. Advertises the business conducted, services available or rendered, or the goods produced, sold, or available for sale, upon the premises where the structure or sign is located.

~~M~~N. "OUTDOOR ADVERTISING DISPLAY" means an outdoor advertising structure or outdoor advertising sign used for outdoor advertising purposes, not including on-site advertising signs as herein defined and directional sign structures as provided in Riverside County Ordinance No. 679. An outdoor advertising display may be commonly known or referred to as an "off-site" or an "off-premises" billboard.

~~N~~O. "OUTDOOR ADVERTISING SIGN" means any card, cloth, paper, metal, painted, plastic or wooden sign of any character placed for outdoor advertising purposes and affixed to an outdoor advertising display or structure.

~~O~~P. "OUTDOOR ADVERTISING STRUCTURE" means a structure of any kind or character erected, used or maintained for outdoor advertising purposes, upon which any poster, bill, printing, painting or other advertisement of any kind whatsoever may be placed, including statuary, for outdoor advertising purposes. Such structure shall be constructed or erected upon a permanent foundation or shall be attached to a structure having a permanent foundation.

~~P~~Q. "SCENIC HIGHWAY" means any officially designated state or county scenic highway as defined in Streets and Highway Code Sections 154 and 261 et seq.

~~Q~~R. "SHOPPING CENTER" means a parcel of land not less than three acres in size, on which there exists four or more separate business uses that have mutual parking facilities.

~~R~~S. Repealed.

~~S~~T. "SIGNIFICANT RESOURCES" means any County, State or Federal site which has significant or potentially significant social, cultural, historical, archaeological, recreational or scenic resources, or which plays or potentially could play a significant role in promoting tourism. For the purposes of this article, the term significant resources shall include, but not be limited to, the following:

1. Riverside National Cemetery. A strip, 660 feet in width, measured from the edge of the right-of-way line on both sides of I-215 from the intersection of Van Buren Boulevard

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southerly to Nance Road, and on both sides of Van Buren Boulevard from the intersection of I-215 westerly to Wood Road.

2. Scenic Highways.

3. A corridor 500 feet in width adjacent to both sides of all highways within three-tenths (3/10) of a mile of any Regional, State or Federal park or recreation area.

4. A corridor 500 feet in width adjacent to both sides of State Highway 74 (State Route 74) extending from its intersection with Interstate 15 to its intersection with Winchester Road (State Route 79), and from there easterly to the city limits of the City of Hemet, on both sides of the road.

5. A corridor 500 feet in width adjacent to both sides of I-15 from the Riverside/ San Diego County line northerly to the city limits of the City of Temecula.

6. A corridor 500 feet in width adjacent to both sides of Grand Avenue from the city limits of the City of Lake Elsinore, just northerly of Bonnie Lea Drive, to Clinton Keith Road, and adjacent to both sides of Clinton Keith Road from Interstate 15 to the city limits of the City of Murrieta.

7. A corridor 550 feet in width, measured from the edge of the right-of-way line adjacent to both sides of Interstate 15, extending from its intersection with state Highway 60 southerly to the city limits of the City of Norco.

~~T~~U. Repealed.

Amended Effective:
07-23-99 (Ord. 348.3881)
11-31-00 (Ord. 348.3964)
02-23-04 (Ord. 348.4110)
08-13-09 (Ord. 348.4641)

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ORDINANCE NO. 348.4978
ORDINANCE OF THE COUNTY OF RIVERSIDE PROVIDING FOR LAND USE PLANNING AND ZONING REGULATIONS AND RELATED FUNCTIONS.
ARTICLE XIX ADVERTISING REGULATIONS

SECTION 19.3. OUTDOOR ADVERTISING DISPLAYS. (No changes to this section)

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ORDINANCE NO. 348.4978
ORDINANCE OF THE COUNTY OF RIVERSIDE PROVIDING FOR LAND USE PLANNING AND ZONING REGULATIONS AND RELATED FUNCTIONS.
ARTICLE XIX ADVERTISING REGULATIONS

SECTION 19.4. ON-SITE ADVERTISING STRUCTURES AND SIGNS.

No person shall erect an on-site advertising structure or sign in the unincorporated area of the County that is in violation of the provisions contained within any specific zoning classification in this ordinance or that is in violation of the following provisions.

A. PERMIT PROCEDURES

1. Application

In addition to all other applicable Federal, State, and local laws, rules, regulations and ordinances, no on-site advertising structure or sign shall be placed, erected, used, or maintained until an On-Site Advertising Structure or Sign Permit therefore has been issued by the County Planning Director, on the form provided by the County Planning Department accompanied by the filing fee set forth in Ordinance No. 671. The application shall consist of a plot plan drawn to scale, containing the name, address or telephone number of the applicant, and a general description of the property upon which the on-site advertising structure or sign is proposed to be placed. The plot plan shall show the precise location, type, and size of the proposed on-site advertising structure or sign, all property lines, zoning, and the dimensions, location of and distance to the nearest advertising displays, building, business districts, significant resources as defined by Section 19.2.T. of this ordinance, public and private roads, and other rights-of-way, building setback lines, and specifically planned future road right-of-way lines, and any and all other information required by the Planning Director such that the proposed structure or sign may be readily ascertained, identified, and evaluated. On-site advertising applications shall be processed as a plot plan.

Plot plans for on-site digital displays will be processed as a nondiscretionary permit unless the on-site digital display exceeds 50 square feet or is located within 300 feet of residentially zoned properties. For on-site digital displays exceeding the parameters listed above, the plot plan will be approved through a Director's Hearing. No permit for an on-site advertising display shall be approved unless it is consistent with the General Plan and all other applicable plans, including but not limited to Area Plans and the Multiple Species Habitat Conservation Plan (MSHCP).

2. Issuance/Denial. The Planning Director shall, within forty-five (45) days of the filing of a complete permit application, approve and issue the On-Site Advertising Structure or Sign permit if the standards and requirements of this ordinance have been met; otherwise, the permit shall be denied.

3. Assuming the Planning Director issues an On-Site Advertising Structure or Sign Permit, no person shall place, erect, use, maintain, alter, repair or relocate an on-site or connect an on-site advertising structure or sign to a power supply without first obtaining a building permit from the Department of Building and Safety.

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4. Revocation. Any On-Site Advertising Structure or Sign Permit which has been issued as a result of a material misrepresentation of fact by the applicant or his agent, whether or not a criminal prosecution is initiated therefore, or which does not comply with this Article, or any related building permit may be revoked by the Planning Director. The Planning Director shall forthwith give written notice of revocation to the applicant. Unless the permittee files with the Planning Department a written request for a hearing within 10 days of the date the notice was mailed, the Planning Director's decision to revoke will be considered final. Failure to timely file a written request for a hearing constitutes a waiver of the right to a hearing. Notice of the hearing shall be given by mail to the permittee. The timely filing of a written notice to appeal shall stay the revocation until such time as the Planning Director issues their decision to grant or deny the appeal. Within 30 days after notice is given, or if a hearing is requested, within 30 days from the date of mailing the Planning Director's decision to deny the appeal, any on-site advertising structure or sign authorized by the On-Site Advertising Structure or Sign Permit shall be removed at the permittee's expense. Failure to remove the display within 30 days shall be deemed a separate violation of this ordinance.

B. FREE-STANDING SIGNS.

1. Located within 660 feet of the nearest edge of a freeway right of way line.

a. The maximum height of a sign shall not exceed ~~45~~ 50 feet. However, if the grade of the freeway precludes visibility, a variance may be sought through the variance process.

b. The maximum surface area of a sign shall not exceed 150 square feet except that for those project sites having an area in excess of 15 acres, the allowable area of a sign shall be 10 square feet per acre of the project site, up to no more than 400 square feet in surface area. The entire allowable area of a sign can be comprised of a digital display.

c. On-site advertising structures or signs may not be placed so that they interfere with the effectiveness of, or obscure any official traffic sign, device, or signal. Furthermore, they may not obstruct or physically interfere with the vision of drivers in approaching, merging, or intersecting traffic.

d. On-advertising advertising structures or signs must meet all other requirements as required by Federal and State regulations pertaining to advertising signs within 660 feet of a freeway.

2. Commercial Zones and Industrial Zones ~~Shopping Centers~~ - All Locations.

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The standard for free standing on-site advertising signs in commercial zones and industrial zones is established as follows: ~~Notwithstanding the provisions of sub-paragraphs 1 and 2, an alternate standard for free standing on-site advertising signs for shopping centers is established as follows:~~

a. The maximum height of a sign shall not exceed 20 feet.

b. The maximum surface area of a sign shall not exceed 50 square feet or 0.25 percent (¼ of 1 percent) of the total existing build ing floor area in a shopping center, whichever is greater, except that in any event, no sign shall exceed ~~200~~ 300 square feet in surface area. The entire allowable area of a sign can be comprised of a digital display.

~~b. The maximum height of a sign shall not exceed 20 feet.~~

3. All Other Locations.

a. The maximum height of a sign shall not exceed 20 feet.

~~b.~~ b. The maximum surface area of a sign shall not exceed 50 square feet. The entire allowable area of a sign can be comprised of a digital display.

C. NUMBER OF ON-SITE FREE-STANDING SIGNS, BOTH DIGITAL AND NON-DIGITAL-ALL LOCATIONS ~~Number of Free-standing Signs – All Locations.~~

~~Not more than one free-standing sign shall be permitted on a parcel of land, except that if a shopping center has frontage on two or more streets, the shopping center shall be permitted two free-standing signs, provided that the two signs are not located on the same street; are at least 100 feet apart and the second sign does not exceed 100 square feet in surface area and 20 feet in height.~~

1. Not more than one free-standing sign shall be permitted on a parcel of land, except that if a shopping center has frontage on two or more streets, the shopping center shall be permitted two free-standing signs, provided that the two signs are not located on the same street; are at least 100 feet apart and the second sign does not exceed 100 square feet in surface area and 20 feet in height.

a. If two free-standing signs are proposed on a single parcel of land for a shopping center, only one of them may include a digital display.

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2. For free-standing signs within 660 feet of a freeway, a free-standing sign with a digital display shall not be located within 1,000 feet of another digital display that is located on the same side of the street.

3. Mobile Displays are prohibited. No person shall place, use, maintain, or otherwise allow a mobile vehicle, trailer, or other advertising display not permanently affixed to the ground to be used as an on-site advertisement.

D. DIGITAL DISPLAY REQUIREMENTS

Digital displays shall comply with the following standards:

1. All digital displays shall be controllable by the combination of a photocell that measures available daylight and remote adjustment capabilities that control the luminance levels of the display, and utilize automatic dimming technology, include a default mechanism that causes the display to revert immediately to a black screen if the display malfunctions in a way that causes the display to wholly or partly flash.

2. Hours of operation for digital displays shall be allowed 24-Hours a day, except when the display is located within 300 feet of areas that are zoned for residential, conservation, and Specific Plan (S-P) or as limited by an approved Signage Program.

a. Where the display is located within 300 feet of property that is zoned for a residential or conservation use, the hours of operation shall be limited to between 6 am to 10 pm.

b. Where the display is located within 300 feet of an S-P Zone, the hours of operation shall be defined in the Specific Plan Development standards or Sign Program.

3. Displays will have non-reflective, black, consistent, linear louvers, from end to end, above and below each individual row of light emitting diodes or similar light producing element.

4. Digital displays to have a black, ribbed background to prevent light refraction, reflection, and diffusion.

5. Digital displays will have a consistently maintained photocell with brightness keyed to an astronomical calendar and capabilities to slowly brighten throughout morning twilight to dawn for a period of 20-30 minutes and to slowly dim throughout evening twilight after dusk to sunset for a period of 20-30 minutes.

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6. Brightening and dimming will be at a rate of 1% dimming increments performed approximately every 12 seconds at the fastest speed.

7. Digital Display dimming capabilities will be able to be enacted automatically, in a pre-scheduled fashion or manually (minimum of 64 levels).

8. Dimming capabilities will be able to be controlled physically on-site as well as with software which can be accessed remotely from operator's location and updated instantly.

9. Digital Displays will be able to reach 1% of dimming while maintaining the full range of the color spectrum.

10. The luminance of any digital display shall transition smoothly at a consistent rate of speed from the Daytime Luminance Level to the Nighttime Luminance Level, beginning at sunset and concluding the transition to nighttime intensity level no less than 15 minutes after sunset. The brightness of the digital display shall not exceed the following:

a. During Standard Time (1st Sunday in November to 2nd Sunday in March)

1) 7:00 a.m. to sunset: 7,500 Candelas/meter sq.

2) Sunset to 7:30 p.m.: 600 Candelas/meter sq.

3) 7:30 p.m. to 7:00 a.m.: 450 Candelas/meter sq.

b. During Daylight Savings Time (2nd Sunday in March to 1st Sunday in November)

1) 7:00 a.m. to sunset: 7,500 Candelas/meter sq.

2) Sunset to 10:00 p.m.: 600 Candelas/meter sq.

3) 10:00 p.m. to 7:00 a.m.: 450 Candelas/meter sq.

c. Beginning 45 minutes prior to sunset and concluding 45 minutes after sunset, the digital display shall transition smoothly at a consistent rate from the permitted daytime brightness level to the permitted brightness level during the Sunset to 7:30 p.m. or Sunset to 10:00 p.m. period as applicable. Beginning 15 minutes prior to the required time, the digital display shall also transition smoothly at a consistent rate from the permitted brightness

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for the Sunset to 7:30 p.m. or Sunset to 10:00 p.m. period to the 7:30 p.m. to 2:00 a.m. or 10:00 p.m. to 2:00 a.m. period as applicable.

d. Measurement of Brightness. The brightness of the digital display shall be measured from ground level at the nearest residential property outside of the combined boundaries of the project area. The measured maximum brightness shall be based on the luminance levels of the white display portion of the Sign. For digital display, the red, green and blue outputs shall be turned to full ON at the time of testing. A calibrated luminance meter shall be used to measure the luminance intensity of the Sign in Candela per meter squared (nits) in accordance with the luminance meter manufacturer's operational instructions. The luminance measurements should not be taken at oblique angles that exceed 60 degrees off-axis from the face of the Sign.

11. Digital display transitions shall follow these requirements:

a. Instantaneous image changes shall not be allowed;

b. The image refresh shall occur through a seamless transition from one image to the next with no strobing effect;

c. Refresh rate of a digital display shall not be more frequent than one refresh event every six seconds;

d. Sign image must remain static between refreshes;

e. Display messages are not allowed to scroll;

12. Riverside County Lighting Ordinances. Within the Palomar Observatory Special Lighting Area, all displays shall comply with the requirements of County Ordinance No. 655. All displays and lighting shall comply with Ordinance No. 915 Regulating Outdoor Lighting.

13. Airport Influence Areas. Within an Airport Influence Area, the proposed digital display shall be submitted to the Airport Land Use Commission for review and compliance with the applicable Airport Land Use Compatibility Plan.

14. Material. All new signs and support sign support structures shall be made of noncombustible materials or plastics approved by both the Riverside County Fire Department and Building and Safety Department. In the case of new untested materials, the applicant shall submit a sample of material to both the Riverside County Fire Department and Building and Safety Department for approval.

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15. Movement. No on-site advertising display shall move or rotate, to display any moving and/or rotating parts. No propellers, flags, or other noise creating devices, and no architectural embellishments which utilize mechanical or natural forces for motion, shall be permitted. Use of daylight reflective materials, such as mirrored glass, are prohibited.

~~B~~E. SIGNS AFFIXED TO BUILDINGS - ALL AREAS.

1. No on-site advertising sign shall be affixed on, above or over the roof of any building, and no on-site advertising sign shall be affixed to the wall of a building so that it projects above the parapet of the building. For the purposes of this Section, a mansard style roof shall be considered a parapet.

2. The maximum surface area of signs affixed to a building shall be as follows:

a. Front wall of building - The surface area of the sign shall not exceed ten percent of the surface area of the front face of the building.

b. Side walls of a building - The surface area of the sign shall not exceed ten percent of the surface area of the side face of the building.

c. Rear wall of a building - The surface area of the sign shall not exceed five percent of the surface area of the rear face of the building.

~~C~~F. ON-SITE SUBDIVISION SIGNS

Shall be subject to the following minimum standards:

1. No sign shall exceed 100 feet in surface area.

2. No sign shall be within 100 feet of any existing residence that is outside of the subdivision boundaries.

3. No more than two such signs shall be permitted for each subdivision.

4. No sign shall be artificially lighted.

~~D~~G. ON-SITE IDENTIFICATION SIGNS.

On-site identification signs affixed to the surface of walls, windows, and doors of permanent structures, which do not exceed four inches in letter height and do not exceed four square feet in area are permitted in addition to any other sign permitted in this ordinance.

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ORDINANCE NO. 348.4978
ORDINANCE OF THE COUNTY OF RIVERSIDE PROVIDING FOR LAND USE PLANNING AND ZONING REGULATIONS AND RELATED FUNCTIONS.
ARTICLE XIX ADVERTISING REGULATIONS

~~E~~H. ON-SITE SIGNAGE ALONG SCENIC CORRIDORS DESIGNATED WITHIN THE EASTERN COACHELLA VALLEY AND WESTERN COACHELLA VALLEY COMMUNITY PLANS.

1. The provisions of Subsections A., B., C., and D. of Section 19.4. of this ordinance shall apply to areas within the boundaries of the adopted Eastern Coachella Valley Plan (ECVP) and Western Coachella Valley Plan (WCVP), with the following exceptions:

a. In areas adjacent to scenic corridors as designated by the ECVP or WCVP, if a business chooses to advertise with a sign affixed to its primary building in lieu of a free-standing sign, then the maximum surface area of the sign affixed to the building shall not exceed the following:

1) Front wall of building - ten percent of the surface area of the front face of the building.

2) Side walls of building - ten percent of the surface area of the side face of the building.

3) Rear wall of building - ten percent of the surface area of the rear face of the building.

b. MONUMENT SIGNS - For monument signs as defined within the policies of the ECVP or WCVP, along highway or freeway scenic corridors:

1) For a single business or tenant advertised, maximum surface area shall not exceed 150 square feet, and overall height shall not exceed 10 feet.

2) For multiple businesses or tenants advertised, maximum surface area shall not exceed 200 square feet, and overall height shall not exceed 12 feet.

c. SHEATHED-SUPPORT SIGNS - For sheathed-support signs as defined within the policies of the ECVP or WCVP, along freeway scenic corridors:

1) For locations within 330 feet of the nearest edge of a freeway right-of-way line:

a) For a single business or tenant advertised, maximum surface area shall not exceed 150 square feet, and overall height shall be equal to that of the use advertised, up to a maximum of 25 feet.

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b) For multiple businesses or tenants advertised, maximum surface area shall not exceed 200 square feet, and overall height shall be equal to that of the use advertised, up to a maximum of 25 feet.

2) For locations within 660 feet of the terminus of a freeway exit or the origination of a freeway entrance:

a) For a single business or tenant advertised, maximum surface area shall not exceed 150 square feet, and overall height shall not exceed 35 feet.

b) For multiple businesses or tenants advertised, maximum surface area shall not exceed 200 square feet, and overall height shall not exceed 35 feet.

c) Neither a single-business sheathed-support sign nor a multiple-business sheathed-support sign shall be erected along a highway scenic corridor.

d) The minimum spacing between free-standing signs located within 330 feet of the nearest edge of a freeway right-of-way line shall be that distance necessary so as not to adversely obscure the visibility of adjacent free-standing on-site advertising signs.

e) For the purposes of Article XIX, any sign which would otherwise meet the definition of "ON SITE ADVERTISING STRUCTURE AND SIGNS" in Section 19.2.E. of this ordinance shall also be deemed to meet this definition if the sign advertises the business conducted, services available or rendered, or the goods produced, sold or available for sale on an adjacent parcel cooperatively on a joint sign, provided that the business on that adjacent parcel utilizes no other freestanding on-site advertising sign located on its parcel, and that a plot plan is submitted and approved for the parcel containing the sign.

Added Effective:
05-06-99 (Ord. 348.3868)

SECTION 19.5. (Repealed.)

Amended Effective:
07-23-99 (Ord. 348.3881)

SECTION 19.6 (Repealed.)

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Amended Effective:
10-15-98 (Ord. 348.3842) 07-23-99 (Ord. 348.3881)

SECTION 19.7. NON-COMMERCIAL STRUCTURES OR SIGNS.

Anywhere a display, structure or sign is permitted by this ordinance, a non-commercial message may be placed on such display, structure or sign.

Amended Effective:
07-23-99 (Ord. 348.3881)

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RIVERSIDE COUNTY
AIRPORT LAND USE COMMISSION

June 2, 2023

Carl Stiehl, Project Planner
City of Murrieta Planning Department
1 Town Square
Murrieta CA 92562

RE: AIRPORT LAND USE COMMISSION (ALUC) DEVELOPMENT REVIEW – DIRECTOR'S DETERMINATION

File No.:	ZAP1127FV23
Related File Nos.:	DCA2021-2396 (Development Code Amendment), MCA2023-00001 (Municipal Code Amendment), MCA2023-00002 (Municipal Code Amendment)
APN:	Citywide

Dear Mr. Stiehl:

As authorized by the Riverside County Airport Land Use Commission (ALUC) pursuant to its Resolution No. 2011-02, as ALUC Director, I have reviewed City of Murrieta Case Nos. DCA2021-2396 (Development Code Amendment), MCA2023-00001 (Municipal Code Amendment), MCA2023-00002 (Municipal Code Amendment), a proposal to amend the City's Development and Municipal Codes regarding updates to the: 1) Hillside Ordinance, 2) Electric Vehicle Charging and Housing Element Implementation Ordinance, and 3) Multi-Family Design Guidelines.

There are no development standard changes or changes to zoning and land use that would increase residential density or non-residential intensity within the proposed amendments. Therefore, these amendments have no possibility for having an impact on the safety of air navigation within the portions of the French Valley Airport Influence Area located within the City of Murrieta.

As ALUC Director, I hereby find the above-referenced project **CONSISTENT** with the 2007 French Valley Airport Land Use Compatibility Plan, as amended in 2011.

If you have any questions, please contact me at (951) 955-6893.

Sincerely,
RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

Paul Rull, ALUC Director

cc: ALUC Case File

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Jackie Vega
Barbara Santos

County Administrative Center
4080 Lemon St.,14th Floor.
Riverside, CA 92501
(951) 955-5132

www.rcaluc.org

Meeting Date: 05-24-2023

ORDINANCE NO. XX:

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MURRIETA, CALIFORNIA, AMENDING TITLE 16 OF THE MURRIETA MUNICIPAL CODE TO AMEND THE CITY'S DEVELOPMENT CODE (MCA-2023-00001), TO REVISE SECTIONS, 16.08, 16.31, 16.44, 16.52, AND 16.73.

WHEREAS, as the City of Murrieta proposes an amendment to the City's Development Code for the purpose of revising and updating sections 16.08, 16.31, 16.44, 16.52, and 16.73.

WHEREAS**,** as the California statewide Green Buildings Standards Code was Approved by the California Building Commission, the 2022 California Green Building Standards Code, Title 24, Part 11, is effective as of January 1, 2023; and

WHEREAS, the January 2020 City of Murrieta Climate Action Plan Update is intended to implement policies of the Murrieta General Plan Update; and

WHEREAS, the Murrieta 6th Cycle Housing Element Policy Action 1-9 outlines amendments to the City's municipal code to implement; and

WHEREAS, the California Environmental Quality Act (CEQA) Guidelines Section 151833-Projects Consistent with a Community Plan, General Plan, or Zoning, allows a streamlined environmental review process for projects that are consistent with the development densities established by existing zoning, community plan or general plan policies for which an Environmental Impact Report (EIR) was certified; and

WHEREAS, on XX XX, 2023 the City Council of the City of Murrieta held a duly noticed public hearing on the proposed Development Code Amendment, at which was presented the staff report and evidence in the record to support the findings required by the Murrieta Development Code Section 16.13; and

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Murrieta, does ordain as follows:

SECTION 1. FINDINGS

Based upon the substantial evidence presented at the public hearing on XX XX, 2023, including written and oral staff reports and public and applicant written and oral testimony, and on the record from the Planning Commission public hearing, in accordance with Murrieta Development Code, the City Council of the City of Murrieta approves the Development Code Amendments in accordance with the following findings:

Findings and Recommended Approval for Development Code Amendments:

1. The proposed amendments ensures and maintains internal consistency with all of the objectives, policies, general plan land uses, programs and actions of all elements of the general plan;

   FACTS: The Development Code is the primary tool for implementing the General Plan, providing regulating standards, identification of permitted uses, and other regulations that support the proper implementation of the General Plan Update. This

Development Code Amendment revises and updates sections 16.08, 16.31, 16.44, 16.52, and 16.73.

2. The proposed amendments would not be detrimental to the public convenience, health, safety or general welfare of the city;

   FACTS: The General Plan will promote the health, safety and welfare of the City through the listed goals and policies included within each element, the proposed Code Amendments are consistent with Murrieta's 6th Cycle Housing Element and would not be detrimental to the public convenience, health, safety or general welfare of the city.

3. The proposed amendments are internally consistent with other applicable provisions of the development code;

   FACTS: The January 2020 City of Murrieta Climate Action Plan Update includes a policy to adopt an EV charging station ordinance that requires new development standards and this ordinance complies with that requirement. The amendment has been drafted to integrate and implement the Electric Vehicle Parking Requirements in the Development Code and thereby, is internally consistent.

4. The proposed amendment is in compliance with the provision of the California Environmental Quality Act (CEQA) Guidelines Section 15183 - Projects Consistent with a Community Plan, General Plan, or Zoning.

   FACTS: The project has been evaluated pursuant to CEQA and was determined exempt under CEQA Guidelines Section 15183 - Projects Consistent with a Community Plan, General Plan, or Zoning. Section 15183, provides that projects which are consistent with the development density established by a Community Plan, General Plan, or Zoning for which an environmental impact report (EIR) has been certified "shall not require additional environmental review, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site." Considering that the amendments implement policies identified within the General Plan, and consistent within, no additional environmental review is required. Therefore, the amendments are exempt under the CEQA Guidelines. Staff and the Planning Commission have recommended that the City Council find that the project is exempt from CEQA, and direct staff to record and file the document under CEQA and the CEQA Guidelines (14 California Code of Regulations [CCR] Section 1500 et seq.).

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SECTION 2. Title 16 Development Code (Table of Contents) of the Murrieta Municipal Code is hereby amended to revise the Electric Vehicle Parking Requirements as follows:

16.44.115 Electric Vehicle Parking Requirements.

A. Definitions.

~~1. *Electric Vehicle Supply Equipment.* Refer to Vehicle Code Section 22511.2.~~

~~2. *Electric Vehicle Charging Space.* Refer to Vehicle Code Section 22511.2.~~

1. *EV:* An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, electric motorcycles and the like, primarily powered by an electric motor that draws from a rechargeable storage battery, fuel cell, photovoltaic array or other source of electric current.
2. *EV Capable Space:* A vehicle space with electrical panel space and load capacity to support a branch circuit and necessary raceways, both underground and/or surface mounted, to support EV charging.
3. *EV Ready Space:* A vehicle space which is provided with a branch circuit; any necessary raceways, both underground and/or surface mounted; to accommodate EV charging, terminating in a receptacle or a charger.
4. *Level 2 EV Supply Equipment (EVSE):* The 208/240 Volt 40-ampere branch circuit, and the electric vehicle charging connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises and the electric vehicle.

B. Standards.

1. A parking space served by *EVSE* ~~or a parking space designated as a future electric vehicle charging space~~ shall count as at least one standard automobile parking space for the purpose of complying with any applicable minimum parking space requirements as established by the City.

2. An accessible parking space with an access aisle served by *EVSE* ~~or an accessible parking space with an aisle designated as a future electric vehicle charging space~~ shall count as at least two standard automobile parking spaces for the purpose of complying with any applicable minimum parking space requirements as established by the City. (Ord. 566 § 15, 2020)

3. *EV Ready* and *EVSE* spaces must be identified by signage or pavement markings that comply with Caltrans requirements.

4. The number of *EV Capable* spaces and *EV Ready* spaces will comply with California Green Building Standards Code.

C. Requirements per Development Type

TABLE 16.44.115-1
ELECTRIC VEHICLE PARKING REQUIREMENTS AT A LOCATION

Occupancy Type	**EVSE Parking Requirement (round up to nearest parking space)**
One- and Two-Family Homes, Multi-Family Dwellings with Private Garages	Installation of one Level 2 or greater *EVSE* per enclosed garage
Multi -Family Dwellings without Private Garages, Hotels and Motels	Install Level 2 *EVSE* for 6% of total parking spaces required
Non-Residential Development	Install Level 2 *EVSE* for 4% of total parking spaces less than 200 parking spaces. Install Level 2 *EVSE* for 5% of total parking spaces for 201 or greater parking spaces.

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SECTION 3. Title 16 Development Code (Table of Contents) of the Murrieta Municipal Code is hereby amended to revise the muti-family minimum lot size requirements as follows:

16.08.020 Residential Districts General Development Standards.

TABLE 16.08-4 RESIDENTIAL (MULTI-FAMILY) ZONES GENERAL DEVELOPMENT STANDARDS			
Development Feature	**MF-1**(5)	**MF-2**(2)	**MF-3**
Minimum Parcel Size	1 acre ~~5 acres~~	1 acre ~~5 acres~~	1 acre ~~5 acres~~
Minimum Parcel Width	100 feet	100 feet	100 feet
Density Range	10.1 - 15 du/acre	15.1 - 18.0 du/acre	Min. 30 du/acre
Minimum Livable Area	500 sq. ft.	500 sq. ft.	500 sq. ft.
Setbacks			
Street	10 feet	10 feet	Varying 10 - 20 feet
Interior	10 feet	10 feet	Minimum 10 feet(1)
Maximum Parcel Coverage	35%	35%	None
Maximum Height Limit	50 feet	50 feet	100 feet
Open Space (per dwelling unit)			
Private Open Space	60 sq. ft./upper floor 100 sq. ft./ground floor	60 sq. ft./upper floor 100 sq. ft./ground floor	All units 50 sq. ft.(2)
Common Open Space	200 sq. ft.	200 sq. ft.	150 sq. ft.(3)
Recreational Amenities			For projects containing 25 or more dwelling units, provide one recreational amenity for each 30 dwelling units or fraction thereof(4)
Minimum On-site Landscaping	10% of the site area		
Notes: (1) When adjacent to existing single-family residential use or zone, the building setback from the nearest property line shall be 10 feet for the first 25 feet in height, above 25 feet in height the setback shall be 20 feet, and above 50 feet, the setback shall be 30 feet.			

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(2) For stand-alone multi-family residential projects or as part of a mixed-use development, each residential unit shall be provided with at least one area of private open space accessible directly from the living area of the unit, in the form of fenced yard or patio, a deck or balcony at a minimum area of 50 square feet. The minimum dimension, width or depth of a balcony shall be 5 feet.

(3) All common open space shall be conveniently located and accessible to all dwelling units on the site. Common open space may include landscaping, pedestrian paths and recreational amenities. In projects containing fewer that 10 units, the common open space shall have a minimum width and depth of 10 feet. In projects containing 10 or more or units, the minimum width and depth shall be 20 feet.

(4) One common recreational amenity shall be provided for each 30 units or fraction thereof. The following listed amenities satisfy the above recreational facilities requirements. Recognizing that certain facilities serve more people than others, have a wider interest or appeal, and/or occupy more area, specified items may be counted as two amenities, as noted. In all cases, each square foot of land area devoted to a recreational amenity shall be credited as common open space on a 1:1 basis.

a. Clubhouse (two)
b. Swimming Pool (two)
c. Tennis, Basketball or Racquetball court
d. Weightlifting facility
e. Children's playground equipment
f. Sauna or Jacuzzi
g. Day Care Facility (two)
h. Other recreational amenities deemed adequate by the director.

(5) For projects proposing a clustering configuration with detached single-family homes or within small attached unit configurations, please see 16.16.020 “Planned Residential Development General Standards” and 16.16.030 “Planned Residential Development Design Standards and Parameters” for requirements.

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SECTION 3. Title 16 Development Code (Table of Contents) of the Murrieta Municipal Code is hereby amended to revise the Reasonable Accommodation Findings as follows:

16.73.050 Findings and Decision.

A. Any decision on an application under this chapter shall be supported by written findings addressing the criteria set forth in this subsection. An application under this chapter for a reasonable accommodation shall be granted if all of the following findings are made:

1. The housing, which is the subject of the request, will be used by an individual disabled as defined under the Acts.

2. The requested reasonable accommodation is necessary to make specific housing available to an individual with a disability under the Acts.

3. The requested reasonable accommodation would not impose an undue financial or administrative burden on the city.

4. The requested reasonable accommodation would not require a fundamental alteration in the nature of a city program or law, including, but not limited to, land use and zoning.

~~5. The requested reasonable accommodation would not adversely impact surrounding properties or uses~~.

6. There are no reasonable alternatives that would provide an equivalent level of benefit without requiring a modification or exception to the city's applicable rules, standards and practices.

B. In determining whether the requested reasonable accommodation is necessary to make specific housing available to individual(s) with a disability, pursuant to Subsection (A)(2) above, the city may consider, but is not limited to, the following factors:

1. Whether the requested accommodation will affirmatively enhance the quality of life of a person(s) with disability.

2. Whether the person(s) with disability will be denied opportunity to enjoy the housing type of their choice absent the accommodation.

C. In determining whether the requested reasonable accommodation would require a fundamental alteration in the nature of a city program or law, pursuant to Subsection (A)(4) above, the city may consider, but is not limited to, the following factors:

1. Whether the requested accommodation would fundamentally alter the character of the neighborhood.

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2. Whether the accommodation would result in a substantial increase in traffic or insufficient parking.

3. Whether granting the requested accommodation would substantially undermine any express purpose of either the city's general plan or applicable specific plan.

D. In granting a request for reasonable accommodation, the reviewing authority may impose any conditions of approval deemed reasonable and necessary to ensure that the reasonable accommodation would comply with the findings required by Subsection (A) above.

(Ord. 482-13 § 2, 2013)

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SECTION 4. Title 16 Development Code (Table of Contents) of the Murrieta Municipal Code is hereby amended to revise the Manufactured Homes By-right as follows:

TABLE 16.08-1 USE TABLE FOR RESIDENTIAL (SINGLE-FAMILY) ZONING DISTRICTS Permit Requirement by District							
Symbol	**Applicable Process**						**See Chapter**
P	**Permitted Land Use - Compliance with development standards and zoning clearance required**						**16.74**
C	**Conditional Use - Conditional use permit required**						**16.52**
"Blank"	**Land use not permitted**						
Land Use (1) (2)	**RR**	**ER-1**	**ER-2**	**ER-3**	**SF-1**	**SF-2**	**See Standards in Section**
Manufactured ~~Housing~~ Home **(including mobile homes)**(6)	**P**	**P**	**P**	**P**	**P**	**P**	**16.44.050**

TABLE 16.08-2 USE TABLE FOR RESIDENTIAL (MULTI-FAMILY) ZONING DISTRICTS Permit Requirement by District				
Symbol	**Applicable Process**			**See Chapter**
P	**Permitted Land Use - Compliance with development standards and zoning compliance required**			**16.74**
C	**Conditional Use - Conditional use permit required**			**16.52**
"Blank"	**Land use not allowed**			
Land Use (1) (2)	**MF-1**	**MF-2**	**MF-3**	**See Standards in Section**
Manufactured Home	**P**	**P**	**P**	
Mobile Home Parks	**C**	**C**	**C**	

SECTION 5. Title 16 Development Code (Table of Contents) of the Murrieta Municipal Code is hereby amended to revise the Parking Requirements in Multi-family Housing Projects as follows:

16.34.040 Number of Parking Spaces Required.

TABLE 3-7 PARKING REQUIREMENTS BY LAND USE

Residential Uses	Vehicle Spaces Required
Single family housing	Two spaces in a fully enclosed garage.
Duplex housing units	Two spaces for each unit, with at least one space in a fully enclosed garage.
Multi-family dwellings and other attached dwellings	Studio and one bedroom units: 1.5 spaces for each unit, ~~with one space for each unit in a fully enclosed garage,~~ plus guest parking. Two bedrooms or more: 2 spaces for each unit, plus 0.5 additional spaces for each bedroom over 2, ~~with one space for each unit in a fully enclosed garage,~~ plus guest parking equal to 25% of the total number of units.
Mobile homes (in mobile home parks)	Two spaces for each mobile home (tandem parking allowed in an attached carport), plus one guest parking space for each four units.
Condominiums	Studio, one bedroom and two bedroom units: Two covered spaces for each unit, ~~with one space for each unit in a fully enclosed garage,~~ plus guest parking. Three bedrooms or more: Two spaces for each ~~unit with one space for each unit in a fully enclosed garage~~; plus 0.5 additional spaces for each bedroom over two; plus guest parking equal to 33% of the total number of units evenly spread throughout the entire project.
Mixed-use developments (residential portion)	Determined by conditional use permit.
Accessory dwelling units	See Section 16.44.160
Senior housing projects	One space for each unit with half the spaces covered, plus one guest parking space for each ten units.
Senior congregate care	0.5 space for each residential unit, plus one space for each four units for guests and employees.
Short-term vacation rentals	Parking for the short-term vacation rental shall comply with the requirements as specified under Table 3-7, Table 5.27-01 for required on-site quantities, and Section 16.44.260 of this municipal code. Required parking shall be allocated on-site of the single-family residential dwelling, or within designated parking spaces

	for condominiums, as prescribed by Table 5.27-01. All garage, driveway, carport and tandem parking spaces associated with the single-family residential dwelling or condominium unit shall, at all times, be available for parking of transient occupant and guest vehicles, as those terms are defined in Title 5.27. Temporary parking passes issued by the city shall be provided to all transient occupants and for their guest(s). The observable parking passes shall be displayed in the vehicle's front-windshield for the duration of the stay.
Density Bonus	On-site parking for a density bonus project shall be consistent with the requirements as described under Government Code Section 65915(p). See Section 16.20.040.B.4 for additional details.

(Ord. 574-22, Exhibit B-3 (part), 2022; Ord. 565-21, Exhibit B (part), 2021; Ord. 561-20, Exhibit B (part), 2020; Ord. 556 §§ 10, 11, 2020; Ord. 544 §§ 6, 7, 2019; Ord. 538, Exhibit A (part), 2018; Ord. 537, Exhibit A (part), 2018; Ord. 388 § 3, 2007; Ord. 372 §§ 2, 3, 2006; Ord. 367 § 4 (part), 2006; Ord. 269 § 2 (part), 2002; Ord. 182 § 2(part), 1997)

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SECTION 6. Title 16 Development Code (Table of Contents) of the Murrieta Municipal Code is hereby amended to revise the Conditional Use Permit Findings as follows:

16.52.040 Findings and Decision.

Following a review of the application and public hearing in compliance with Chapter 16.76, the applicable re-view authority shall act to approve, approve with conditions, or disapprove the conditional use permit. The re-view authority may approve a conditional use permit only if all of the following findings of fact can be made in a positive manner:

A. The proposed use is conditionally allowed within~~, and would not impair the integrity and character of,~~ the subject zoning district and complies with all applicable provisions of this development code;

B. The proposed use is consistent with the objectives, policies, general land uses, and programs of the general plan, and any applicable specific plan;

C. The approval of the conditional use permit for the proposed use is in compliance with the requirements of the California Environmental Quality Act (CEQA) and there will be no potentially significant negative impacts upon environmental quality and natural resources that could not be properly mitigated and monitored;

D. The site is suitable for the type and intensity of use or development that is proposed;

E. There are adequate provisions for sanitation, water, and public utilities and services to ensure public convenience, health, safety, and general welfare; and

F. The proposed use would not create significant noise, traffic, or other conditions or situations that may be objectionable or detrimental to other allowed uses in the vicinity or adverse to the public convenience, health, safety, or general welfare, or materially injurious to properties and improvements in the vicinity of the subject property.

(Ord. 182 § 2 (part), 1997)

SECTION 7. Title 16 Development Code (Table of Contents) of the Murrieta Municipal Code is hereby amended to revise the Emergency Shelter Parking Requirements as follows:

16.44.200 Emergency Residential Shelters and Transitional Housing.

A. Purpose. This division sets forth a uniform set of standards for emergency shelters to provide temporary housing for the homeless.

B. Emergency Shelter Standards for Regulations. Emergency shelters for homeless persons shall be subject to and comply with the following standards and regulations.

1. A single emergency shelter for thirty (30) occupants, or a combination of multiple shelters with a combined capacity not to exceed thirty (30) occupants, shall be allowed as a permitted use, consistent with section 65583(4)(A) of the Government Code. All emergency shelters, regardless of the number of occupants, shall meet the minimum standards contained herein below. Any emergency shelter with a capacity greater than thirty (30) occupants shall also be subject to the approval of a conditional use permit, as set forth in section 16.52.

2. The facility shall operate on a first-come, first serve basis with clients only permitted on-site and admitted to the facility between 6:00 p.m. and 7:00 a.m. during Pacific Daylight Time, and 5:00 p.m. and 7:00 a.m. during Pacific Standard Time. Clients must vacate the facility by 8:00 a.m. and have no guaranteed bed for the next night, A curfew of 10:00 p.m. (or earlier) shall be established and strictly enforced and clients shall not be admitted after the curfew.

3. To avoid over-concentration of emergency shelter facilities, a minimum distance of three hundred (300) feet shall be maintained from any other emergency shelter, as measured from the property line.

4. Emergency shelters shall not be located within one thousand (1,000) feet of a public or private school (pre-school through twelfth grade), universities, colleges, student housing, senior housing, child care facilities, public parks, businesses licensed for on- or off-site sales of alcoholic beverages or parolee/probationer home as defined in Article VI, Section 16.110 (Definitions) and as measured from the property line.

5. Service providers shall provide sufficient numbers of male and female toilets - restrooms for clients and prospective clients to have access to use on a twenty-four (24) hour basis. For group housing and other similar shelter programs, adequate private male and female showers shall be provided along with lockers for clients to temporarily store their belongings.

6. Any outdoor storage, including, but not limited to, items brought on-site by clients for overnight stays, shall be screened from public view by a minimum six (6)-foot tall decorative wall or fence.

7. Adequate waiting areas must be provided within the premises for clients and prospective clients including ten (10) square feet per bed, minimum one hundred (100) square feet to ensure that public sidewalks or private walkways are not used as queuing or waiting areas.

8. Facility improvements shall comply with the Murrieta municipal code and the most current adopted building and safety code, specific to the establishment of dormitories and shall additionally provide:

   a. A minimum of one (1) toilet for every eight (8) beds per gender.

b. A minimum of one (1) shower for every eight (8) beds per gender.

c. Private shower and toilet facility for each area designated for use by individual families.

9. An emergency shelter facility shall provide off-street parking at the ratio of one (1) space per four (4) beds, and/or 0.5 per bedroom designated as a family unit with children, plus one (1) space per staff member. Service providers are responsible to provide and maintain adequate parking and freight loading facilities for employees, clients and other visitors who drive to the premises. Provided that the parking standards do not require more parking for emergency shelters than other residential or commercial uses within the same zone.

10. Bike rack parking shall be provided at the facility.

11. Exterior lighting shall be provided for the entire outdoor and parking area of the property per the lighting standards of the Section 16.18.100 of the code.

12. The facility may provide the following services in a designated area separate from sleeping areas:

a. A recreation area inside the shelter or in an outdoor area visually separated from public view by a minimum six (6)-foot tall visually screening decorative wall or fence.

b. A counseling center for job placement, educational, health care, legal services, or mental health services.

c. Laundry facilities to serve the number of clients at the shelter.

d. Kitchen and dining area.

e. Client storage area.

f. Similar types of facilities to address the needs of homeless clients, as determined by the planning director.

13. A shelter management plan shall be submitted as a part of the conditional use permit application, which addresses all of the following:

a. Service providers shall maintain sufficient monetary resources to enable them to operate the facility per the shelter management plan, and shall demonstrate to the city prior to approval of the permit application that such funds shall be available for use upon first occupancy of the proposed project and shall reasonably be expected to be available for the life of the project;

b. A minimum of one (1) staff member per fifteen (15) beds shall be awake and on duty when the facility is open. Facility staff shall be trained in operating procedures, safety plans, and assisting clients. The facility shall not employ staff who have been convicted of a felony or who are required to register as a sex registrant under Penal Code 290;

c. Service providers shall maintain up-to-date information and referral sheets to give clients and other persons who, for any reason, cannot be served by the establishment;

d. Service providers shall provide criteria to screen clients for admittance eligibility, with the objective to provide first service to individuals with connections to Murrieta;

e. Service providers will maintain information on individuals utilizing the facility and will ensure that the maximum stay at the facility shall not exceed one-hundred and twenty (120) days in a three-hundred and sixty-five (365) day period;

f. Service providers shall continuously monitor waiting areas to inform prospective clients whether they can be served within a reasonable time. If they cannot be served by the provider because of time or resource constraints, the monitor shall inform the client of alternative programs and locations where he or she may seek similar services;

g. Service providers will educate on-site staff to provide adequate knowledge and skills to assist clients in obtaining permanent shelter and income, including referrals to outside assistance agencies. An annual report on this activity will be provided to the city;

h. Service providers shall provide for the timely removal of litter attributable to clients within the vicinity of the facility every twenty-four (24)-hour period;

i. Service providers will maintain good communication and have procedures in place to respond to operational issues which may arise from the neighborhood, city staff, or the general public;

j. The shelter management plan shall include how staff will address and regulate alcohol and illegal drug use by clients on the premises;

k. Service providers shall establish standards for responding to emergencies and incidents expelling clients from the facility, re-admittance policies for clients who have previously been expelled from the facility shall also be established.

14. The establishment shall implement other conditions and/or measures as determined by the city, in consultation with other city/county agencies necessary to ensure that management and/or clients of the establishment maintain the quiet, safety and cleanliness of the premises and the vicinity of the use; and

15. Other requirements as deemed necessary by the city to ensure that the facility does not create an adverse impact to surrounding properties.

SECTION 8. EFFECTIVE DATE.

This ordinance shall take effect thirty (30) days after its adoption.

SECTION 9. SEVERABILITY.

If any provision of this ordinance or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications, and to this end the provisions of this ordinance are declared to be severable.

SECTION 10. NOTICE OF ADOPTION.

The City Clerk shall certify to the adoption of this ordinance and shall publish a summary of this ordinance and post a certified copy of the full ordinance in the office of the City Clerk at least five (5) days prior to the adoption of the proposed ordinance; and within fifteen (15) days after adoption of the ordinance, the City Clerk shall publish a summary of the ordinance with the names of the council members voting for and against the ordinance.

ADOPTED by the City Council, signed by the Mayor, and attested by the City Clerk this ____ day of _____, 2023.

_____

Lisa DeForest, Mayor

ATTEST:

_____

Cristal McDonald, City Clerk

APPROVED AS TO FORM:

_____

TIffany J. Israel, City Attorney

I, Cristal McDonald, City Clerk of the City of Murrieta, California, hereby certify under penalty of perjury that the foregoing Ordinance was duly and regularly introduced at a meeting of the City Council on the xxth day of xxxx, 2023, and that thereafter the said ordinance was duly and regularly adopted at a regular meeting of the City Council on the ____ day of _____, 2023, by the following vote, to-wit:

AYES:

NOES:

ABSENT:

ABSTAIN:

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of Murrieta, California, this _____ day of _____, 2023.

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Attachment X

Ordinance Redline

Section 8.20.030 (Declaration of nuisance) of the Murrieta Municipal Code is hereby amended to read as follows:

8.20.030 Declaration of nuisance.

...

P. To maintain any property or structure in such a manner as to cause or allow the property or structure to become defective, unsightly or in such other condition of deterioration or disrepair as the same may cause substantial depreciation of the property values of, or similar detriment to surrounding properties, as well as an adverse effect on the health, safety, and welfare of the citizens of the city. This includes but is not limited to any of the following:

...

5. Property which is not in compliance with the following minimum standard requirements:

...

b. In all zones, trees, shrubs, lawns, landscaping, and other plantings shall be maintained, including regular irrigation, pruning of trees, trimming of shrubs and cutting of lawns, in conformity with the surrounding vicinity. Property –shall also comply with the weed abatement standards in Chapter 8.32 of this code; and, in any case, ~~abate~~ dead, decayed, diseased, overgrown or hazardous trees, weeds and vegetation, cultivated or uncultivated, which is likely to harbor rats or vermin, or constitute an unsightly appearance, or is detrimental to neighboring properties or property values shall be abated. Following a catastrophic event causing a loss of vegetation (i.e. wildfire, landslide, etc.), all impacted sloped areas of a subject parcel shall be revegetated to prevent further erosion pursuant to Section 16.28.080 (Landscaping Standards).

…

Section 15.52.020 (Definitions) of the Murrieta Municipal Code is hereby amended to read as follows:

15.52.020 Definitions.

…

"Hillside Area," Refer to the definition for this term under Section 16.24.030.

~~"Hillside site," means a site where the existing grade is twenty percent (20%) or greater and which may be adversely affected by drainage and/or stability conditions within or from outside the site, or which may cause an adverse affect on adjacent property.~~

…

Section 16.08.020 (Residential Districts General Development Standards), Table 16.08-03 (Residential (Single-Family) Zones General Development Standards) of the Murrieta Municipal Code is hereby amended to read as follows:

TABLE 16.08-3
RESIDENTIAL (SINGLE-FAMILY) ZONES
GENERAL DEVELOPMENT STANDARDS

Development Feature	**RR**	**ER-1**	**ER-2**	**ER-3**	**SF-1**	**SF-2**[3]
Minimum Parcel Size	2.5 acres[2]	1.0 acres	0.5 acres[1]	10,000 sq. ft.	7,200 sq. ft.	4,350 sq. ft.
Density Range	0.1 - 0.4 dus/acre	0.4 - 1.0 dus/acre	1.0 - 2.0 dus/acre	2.0 - 3.0 dus/acre	2.1 - 5.0 dus/acre	5.1 - 10.0 dus/acre
Minimum Parcel Width	100 feet	100 feet	100 feet	70 feet	70 feet	55 feet, 45 feet for parcels less than 5,000 square feet. This parcel width shall be increased to a 50 foot width for every fifth lot on a non-cul-d e-sac parcel street frontage.
Minimum Livable Area	1,000 sq. ft.	1,000 sq. ft.	1,000 sq. ft.	1,000 sq. ft.	1,000 sq. ft.	1,000 sq. ft.
Setbacks						
Front	20 feet	20 feet	20 feet	20 feet	20 feet	20 feet
Interior	20 feet	20 feet	20 feet	10 feet	10 feet	7.5 feet per side. For parcels less than 5,000 sq. ft. = A minimum of an average of 12 feet overall for the combination on of both interior sides with no side setback of less than 5 feet.
Street Side	20 feet	20 feet	20 feet	20 feet	20 feet	10 feet
Rear	20 feet	20 feet	20 feet	20 feet	20 feet	20 feet
Accessory Structures	Consistent with Section 16.44.150					
Maximum Parcel Coverage	25%	25%	35%	35%	35% for two-story;	50%

					45% for single story	
Maximum Building Height[(4)]	40 feet[(4)]	40 feet[(4)]	40 feet[(4)]	35 feet[(4)]	35 feet[(4)]	35 feet[(4)]
Minimum On-site Landscaping	25% of front yard area					
Small Attached Unit Configuration	Refer to Section 16.16.020 "Planned Residential Development General Standards" for development standards and project review and 16.16.030 "Planned Residential Development Design Standards and Parameters."					

Notes:

(1) A forty (40) foot wide buffer shall be provided along Washington Avenue (from Guava to Elm Street) in the public right-of-way. Landscaping to include six-foot high block wall, pedestrian trails and/or sidewalk, and landscaping berms to act as natural buffers. New residential projects will be allowed to access from Washington Avenue with residential lots abutting Washington Avenue are prohibited from taking direct access from Washington Avenue.

(2) The minimum parcel area for properties zoned RR can include adjacent area to the centerline of the public street right-of-way.

(3) For projects proposing a clustering configuration with detached single-family homes or within small attached unit configurations, please see 16.16.020 "Planned Residential Development General Standards" and 16.16.030 "Planned Residential Development Design Standards and Parameters" for requirements.

(4) For structures located within a Hillside Area, see maximum height criteria as provided within Section 16.24 (Hillside Development) and applicability.

Section 16.08.020 (Residential Districts General Development Standards), Table 16.08-04 (Residential (Multi-Family) Zones General Development Standards) of the Murrieta Municipal Code is hereby amended to read as follows:

TABLE 16.08-4
RESIDENTIAL (MULTI-FAMILY) ZONES
GENERAL DEVELOPMENT STANDARDS

Development Feature	MF-1[5]	MF-2[2]	MF-3
Minimum Parcel Size	1 acre	1 acre	1 acre
Minimum Parcel Width	100 feet	100 feet	100 feet
Density Range	10.1 - 15 du/acre	15.1 - 18.0 du/acre	Min. 30 du/acre
Minimum Livable Area	500 sq. ft.	500 sq. ft.	500 sq. ft.
Setbacks			
Street	10 feet	10 feet	Varying 10 - 20 feet
Interior	10 feet	10 feet	Minimum 10 feet[1]
Maximum Parcel Coverage	35%	35%	None
Maximum Height Limit[6]	50 feet[6]	50 feet[6]	100 feet[6]
Open Space (per dwelling unit)			
Private Open Space	60 sq. ft./upper floor 100 sq. ft./ground floor	60 sq. ft./upper floor 100 sq. ft./ground floor	All units 50 sq. ft.[2]
Common Open Space	200 sq. ft.	200 sq. ft.	150 sq. ft.[3]
Recreational Amenities			For projects containing 25 or more dwelling units, provide one recreational amenity for each 30 dwelling units or fraction thereof[4]
Minimum On-site Landscaping	10% of the site area		

Notes:
(1) When adjacent to existing single-family residential use or zone, the building setback from the nearest property line shall be 10 feet for the first 25 feet in height, above 25 feet in height the setback shall be 20 feet, and above 50 feet, the setback shall be 30 feet.
(2) For stand-alone multi-family residential projects or as part of a mixed-use development, each residential unit shall be provided with at least one area of private open space accessible

directly from the living area of the unit, in the form of fenced yard or patio, a deck or balcony at a minimum area of 50 square feet. The minimum dimension, width or depth of a balcony shall be 5 feet.

(3) All common open space shall be conveniently located and accessible to all dwelling units on the site. Common open space may include landscaping, pedestrian paths and recreational amenities. In projects containing fewer that 10 units, the common open space shall have a minimum width and depth of 10 feet. In projects containing 10 or more or units, the minimum width and depth shall be 20 feet.

(4) One common recreational amenity shall be provided for each 30 units or fraction thereof. The following listed amenities satisfy the above recreational facilities requirements. Recognizing that certain facilities serve more people than others, have a wider interest or appeal, and/or occupy more area, specified items may be counted as two amenities, as noted. In all cases, each square foot of land area devoted to a recreational amenity shall be credited as common open space on a 1:1 basis.

a. Clubhouse (two)
b. Swimming Pool (two)
c. Tennis, Basketball or Racquetball court
d. Weightlifting facility
e. Children's playground equipment
f. Sauna or Jacuzzi
g. Day Care Facility (two)
h. Other recreational amenities deemed adequate by the director.

(5) For projects proposing a clustering configuration with detached single-family homes or within small attached unit configurations, please see 16.16.020 “Planned Residential Development General Standards” and 16.16.030 “Planned Residential Development Design Standards and Parameters” for requirements.

(6) For structures located within a Hillside Area, see maximum height criteria as provided within Section 16.24 (Hillside Development) and applicability.

Section 16.08.030 (Single-family Residential Design Standards and Design Features) of the Murrieta Municipal Code is hereby amended to read as follows:

16.08.030 Single-family Residential Design Standards and Design Features.

…

5. Walls.

a. Standard: Walls shall be designed using masonry materials such as split face and slumpstone, with colors that complement the architectural design of adjacent buildings.

b. Standard: Walls adjacent to streets shall run in a continuous plane for more than forty-eight (48) feet without incorporating at least two of the following design features:

1) A minimum two-foot change in plane for at least ten feet;
2) A minimum eighteen- (18-) inch raised planter for at least ten feet;
3) A minimum eighteen- (18-) inch change in height for at least ten feet;
4) Use of pilasters at forty-eight (48) foot intervals and at changes in wall planes and height; or
5) A section of open grillwork a minimum four feet in height for at least ten feet.

c. Standard: Refer to Section 16.22.070(F) (Retaining Walls) for retaining wall criteria.

…

Section 16.08.040 (Multi-family Residential Design Standards) of the Murrieta Municipal Code is hereby amended to read as follows:

16.08.040 Multi-family Residential Design Standards.

…

7. Walls.

a. Standard. Walls shall be designed using masonry materials such as split face and slump stone, with colors that complement the architectural design of adjacent buildings.

b. Standard: Walls adjacent to streets shall not run in a continuous plane for more than forty-eight (48) feet without incorporating at least two of the following design features:

1) A minimum two-foot change in plane for at least ten feet;
2) A minimum eighteen (18) inch raised planter for at least ten feet;
3) Use of pilasters at forty-eight (48) foot intervals and at changes in wall planes and height; or
4) A section of open grillwork a minimum four feet in height for at least ten feet.

c. Standard: Refer to Section 16.22.070(F) (Retaining Walls) for retaining wall criteria.

…

Section 16.10.020 (Commercial District General Development Standards), Table 16.10-2 (Commercial Zones General Development Standards Requirements) of the Murrieta Municipal Code is hereby amended to read as follows:

16.10.020 Commercial District General Development Standards.

TABLE 16.10-2
COMMERCIAL ZONES
GENERAL DEVELOPMENT STANDARDS REQUIREMENTS

Development Feature	**NC**	**CC**	**RC**
Minimum Site Area(1)	None	None	30 acres(2)
Setbacks			
Street	15 feet	25 feet	25 feet
Interior (adjacent to commercially zoned properties)	0 or 10 feet	0 or 10 feet	0 or 10 feet
Interior (adjacent to residential zoned properties)	20 feet minimum or equal to the building height, whichever is greater	20 feet minimum or equal to the building height, whichever is greater	20 feet minimum or equal to the building height, whichever is greater
Interior (adjacent to a freeway)	25 feet minimum	25 feet minimum	25 feet minimum
Accessory Structure	Consistent with Section16.44.150		
Maximum Building Height(4)	35 feet(4)	50 feet(4)	50 feet(4)
Minimum On-site Landscaping(3)	15 percent	20 percent	20 percent

(1) Site area means a parcel or group of parcels, which are considered a unit for purposes of development.
(2) Portions of a site may be developed prior to development of the entire site, if it can be demonstrated that the portion does not compromise the overall comprehensive development of the site.
(3) See Chapter 16.28 , Landscaping Standards for Water Efficient Landscaping.
(4) For structures located within a Hillside Area, see maximum height criteria as provided within Section 16.24 (Hillside Development) and applicability.

Section 16.11.020 (Office Districts General Development Standards), Table 16.11-2 (Office Districts General Development Standards) of the Murrieta Municipal Code is hereby amended to read as follows:

16.11.020 Office Districts General Development Standards.

TABLE 16.11-2
OFFICE DISTRICTS GENERAL DEVELOPMENT STANDARDS(1) (2)

Development Feature	Office	ORP
Required Building Setbacks		
Street Side	25 feet	25 feet
Interior	25 feet	25 feet
Interior (adjacent to residential zoned properties)	Twice Building Height	Twice Building Height
Interior (adjacent to a freeway)	25 feet minimum	25 feet minimum
Building Height		
Maximum Building Height(3)(6)	90 feet(6)	150 feet(6)
Accessory Structures	Consistent with Section 16.44.150	
Landscaping		
Minimum On-site Landscaping(4)	20 percent	20 percent
Minimum Parking Area Landscaping Based on Parking Lot Size(5)		
5 - 24 spaces	5 percent	5 percent
25 - 49 spaces	7.5 percent	7.5 percent
50 spaces plus	10 percent	10 percent
Parking Requirements		
See Chapter 16.34, Off-Street Parking and Loading Standards		

(1) Portions of a site may be developed prior to development of the entire site, if it can be demonstrated that the portion does not compromise the overall comprehensive development of the site.
(2) Development standards may vary for mixed use projects and projects over ten acres in size when comprehensively planned in compliance with Chapter 16.64, Master Development Plans, or Chapter 16.66, Specific Plans.
(3) For structures greater than fifty (50) feet in building height and within 500 feet of existing residential homes, a public hearing shall be required, and the review shall include an evaluation of view sheds to maintain views for residential homes and a shadow survey to avoid buildings casting shadows on residential homes.
(4) See Chapter 16.28, Landscaping Standards and Water Efficient Landscaping.
(5) Minimum required parking lot landscaping area is included in required minimum on-site landscaping area.
(6) For structures located within a Hillside Area, see maximum height criteria as provided within Section 16.24 (Hillside Development) and applicability.

Section 16.12.020 (Business Park and Industrial Districts General Development Standards), Table 16.12-2 (Business Park and Industrial Zones General Development Standards) of the Murrieta Municipal Code is hereby amended to read as follows:

16.12.020 Business Park and Industrial Districts General Development Standards.

TABLE 16.12-2
BUSINESS PARK AND INDUSTRIAL ZONES
GENERAL DEVELOPMENT STANDARDS

Development Feature	BP	GI	GI-A
Minimum Parcel Size	10,000 square feet	20,000 square feet	10,000 square feet
Minimum Parcel Width	75 feet (minimum average)	75 feet (minimum average)	75 feet (minimum average)
Setbacks Required			
Street	25 feet	25 feet	25 feet
Interior	None	None	10 feet
Interior (adjacent to residential zoned properties)	20 feet minimum or equal to the building height		
Interior (adjacent to a freeway)	25 feet minimum		
Accessory Structures	Same as main structure		
From Residential Areas	50 feet	25 feet	25 feet
Maximum Height Limit(2)	50 feet(2)	40 feet(2)	40 feet(2)
Minimum On-site Landscaping(1)	15 percent	5 percent	5 percent

(1) See Chapter 16.28 , Landscaping Standards and Water Efficient Landscaping
(2) For structures located within a Hillside Area, see maximum height criteria as provided within Section 16.24 (Hillside Development) and applicability.

Section 16.12.030 (Business Park and Industrial Zoning Districts Design Standards) of the Murrieta Municipal Code is hereby amended to read as follows:

16.12.030 Business Park and Industrial Zoning Districts Design Standards.

…

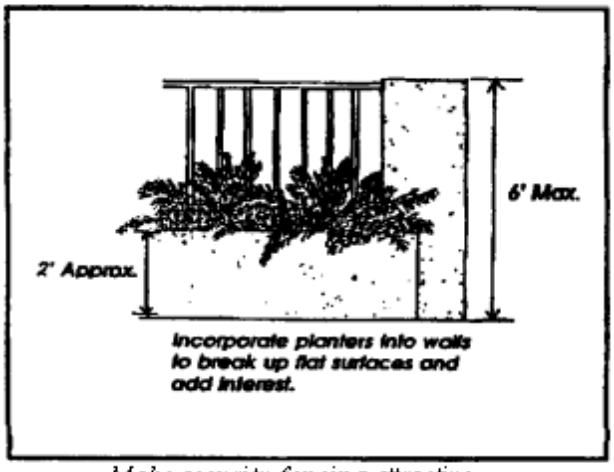
4. Screen Walls/Fencing.

a. Standard: If walls are not required for a specific screening or security purpose they shall not be provided. Walls provide hiding places for intruders and surfaces for graffiti. The intent is to keep walls as low as possible while performing their screening and security functions.

b. Standard: When security fencing is required, it shall not include barbed wire or razor wire. Chain link fencing is not allowed along street frontages. Security fencing shall be:

1) Masonry pillars with open metal grillwork;
2) Short (two-three feet) masonry walls with grillwork on top; and
3) Open grillwork or chainlink fence along side and rear property boundaries or used internally on the site if not visible from the public street.

c. Standard: Long expanses offences and walls shall be offset and architecturally designed to create interest and avoid monotony. Landscape pockets, a minimum of twelve (12) feet wide and four feet deep, shall be provided at forty (40)-foot minimum intervals along the wall. These dimensions may vary somewhat, as long as the overall effect is the same, subject to approval by the director.



Make security fencing attractive

d. Standard: Refer to Section 16.22.070(F) (Retaining Walls) for retaining wall criteria.

…

Section 16.13.020 (Innovation District General Development Standards), Table 16.13-2 (Innovation District General Development Standards) of the Murrieta Municipal Code is hereby amended to read as follows:

16.13.020 Innovation District General Development Standards.

TABLE 16.13-2 INNOVATION DISTRICT GENERAL DEVELOPMENT STANDARDS (1) (2)	
Development Feature	**Standard**
Required Building Setbacks	
Front	10 feet minimum
Rear	10 feet minimum
Street Side(3)	10 feet minimum
Interior Side(3)	10 feet minimum
From Freeway	100 feet minimum
From Residential Districts	75 feet minimum when adjacent to a residential district
Maximum Building Height(4)(7)	150 feet(4)(7)
Minimum Ceiling Heights	14 feet - ground floor 10 feet - above ground floor
Minimum Lot Size	10,000 square feet for 1 and 2 stories, 20,000 square feet for 3 and 4 stories, and 40,000 square feet for 5 or more stories
Required Building Massing Stepbacks	
Floors 3 and Higher	Minimum 10 additional feet from face of second floor below
Accessory Structures	Same as main structure
Public Art Standards	
Minimum Public Art	One percent (1%) of construction costs (capped at $400,000) to public art for projects where a building permit value exceeds $5,000,000
Eligible Artworks	Public art located at or near the site; no commercial messages, including designs and logos
Landscaping/Open Space Standards	
Minimum On-site Landscaping/Open Space(5)	20 percent of the project's lot area. Amenities such as court yards, roof top gardens, outdoor dining, food trucks/vendors spaces, shade structures, plazas, and artwork on-site may count towards landscaping/open space requirements.
Minimum Surface Parking Area Landscaping Standards(6)	
5 - 24 spaces	5 percent of the parking area
25 - 49 spaces	7.5 percent of the parking area
50 spaces plus	10 percent of the parking area
Parking Requirements	

See Chapter 16.34, Off-Street Parking and Loading Standards
(1) Portions of a site may be developed prior to development of the entire site, if it can be demonstrated that the portion does not compromise the overall comprehensive development of the site. (2) Development standards may vary for projects over ten acres in size when comprehensively planned in compliance with Chapter 16.64, Master Development Plans, or Chapter 16.66, Specific Plans. (3) Measured from right of way line or property line. (4) For structures greater than fifty (50) feet in building height and within 500 feet of existing residential districts, a public hearing shall be required, and the review shall include an evaluation of view sheds to maintain views for residential homes in the residential district and a shadow survey to avoid nonresidential buildings casting shadows on residential homes. No building shall exceed any Federal Aviation Administration (FAA) requirements. (5) See Chapter 16.28, Landscaping Standards and Water Efficient Landscaping. (6) Minimum required parking lot landscaping area is included in required minimum on-site landscaping/open space area. (7) For structures located within a Hillside Area, see maximum height criteria as provided within Section 16.24 (Hillside Development) and applicability.

Section 16.14.010 (Purpose), Table 16.14-2 (Special Purpose Districts General Development Standards) of the Murrieta Municipal Code is hereby amended to read as follows:

16.14.010 Purpose.

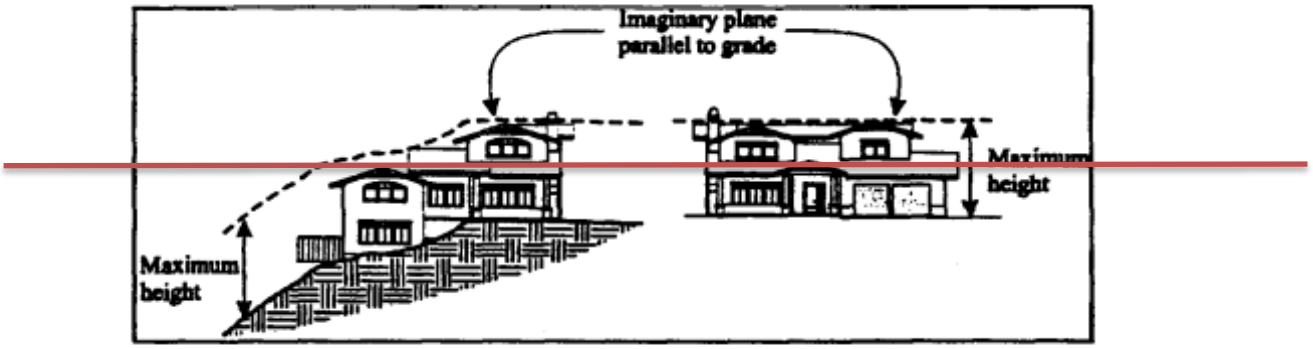
TABLE 16.14-2 SPECIAL PURPOSE DISTRICTS GENERAL DEVELOPMENT STANDARDS			
Development Feature	**P&R**	**C&I**	**OS**
Setbacks			
Street	25 feet	25 feet	25 feet
Interior	20 feet	20 feet	20 feet
From Abutting Residential District	15 feet		
Accessory Structures	Same as Primary Structure		
Maximum Height Limit(1)	35 feet(1)	50 feet(1)	35 feet(1)
(1) For structures located within a Hillside Area, see maximum height criteria as provided within Section 16.24 (Hillside Development) and applicability.			

Section 16.18.080 (Height Measurement and Height Limit Exceptions) of the Murrieta Municipal Code is hereby amended to read as follows:

All structures shall meet the following standards relating to height, except for fences and walls, which shall comply with Chapter 16.22 (Fences, Hedges, and Walls).

A. Maximum Height. The height of structures shall not exceed the standard established by the applicable zoning district in Article II (Zoning Districts and Allowable Land Uses) or for structures within a Hillside Area under Section 16.24.020.A. In addition, the ~~M~~maximum height for structures on a specific parcel shall be measured as follows:~~the vertical distance from finish grade to an imaginary plane located the allowed number of feet above and parallel to the finish grade.~~

~~**FIGURE 3-1**~~
~~**HEIGHT MEASUREMENT**~~



1. Establishing the high point and low point on the property as reference grade points as follows:

a. A measurement is taken from the lower of existing or proposed grade, 5 feet away from the lowest grade point around the structure in accordance with Figure 16.18-1. This point shall be the low reference grade point. The highest point anywhere on the structure may not exceed the elevation of that low grade point by more than the allowable height plus the grade differential between the low point of structure and high point of structure (excluding items as detailed under Section 16.18.080(B) (Exceptions to Height Limits)), but in such case where the actual grade differential exceeds 10 feet, only a maximum of 10 feet may be added to the maximum allowable height per the zone. The measurement is the difference in elevation between the highest and the lowest adjacent ground elevation surrounding the building.

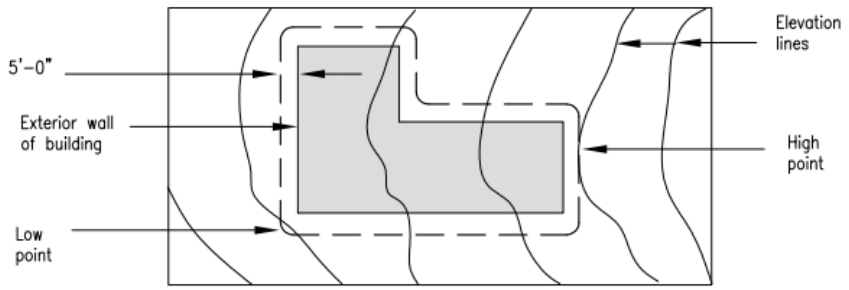


FIGURE 16.18-1
MEASUREMENT LOCATIONS

b. If the difference in elevation is 10 feet or less, the reference grade point is established at the highest adjacent ground elevation. See Figure 16.18-2. If the difference in elevation is greater than 10 feet, the reference grade point is established at 10 feet above the lowest adjacent ground elevation. See Figure 16.18-3. For stepped or terraced buildings, the building height is the overall height as illustrated in Figures 16.18-4 and Figure 16.18-5.

Height Measurement on a Slope

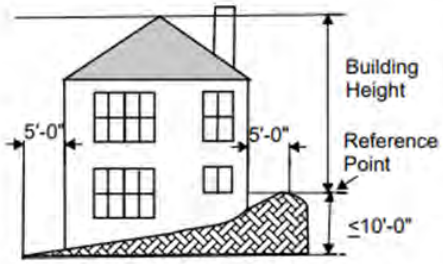


Figure 16.18-2 = ≤10'-0"

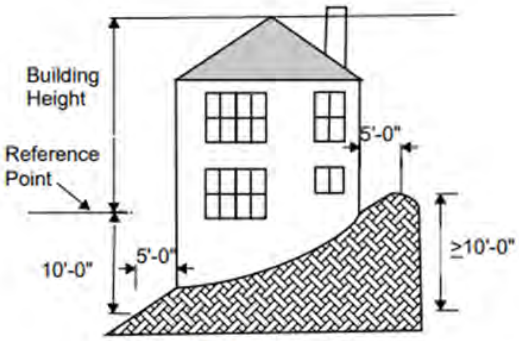


Figure 16.18-3 = ≥10'-0"

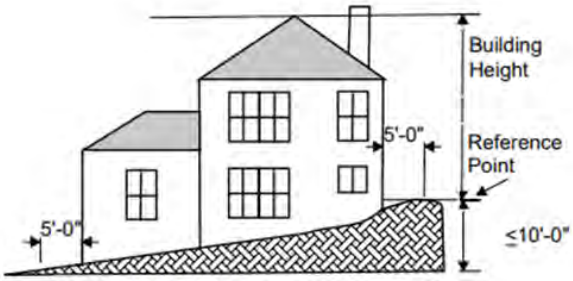


Figure 16.18-4 - Stepped Building = ≤10'-0"

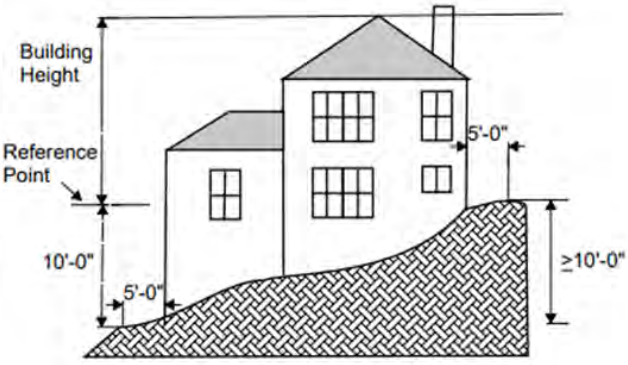


Figure 16.18-5 - Stepped Building = ≥10'-0"

FIGURES 16.18-2, -3, -4. -5
MEASUREMENT CRITERA

c. For a project with a proposed pad configuration, the height of the structure measured by the vertical distance from the finished grade to the height of the roof line. See Figure 16.18-6.

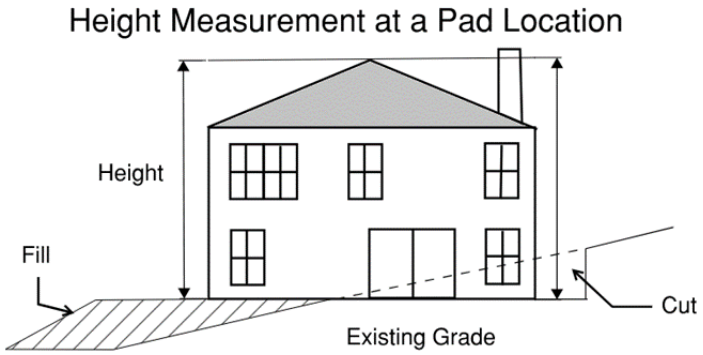


FIGURE 16.18-6
MEASUREMENT WITH PAD CONFIGURATION

~~**B. Structures on Sloping Parcels.** Where the average slope of a parcel is greater than one foot rise or fall in 7 feet of distance from the street elevation at the property line, structure height shall be measured in compliance with Chapter 16.24 (Hillside Development).~~

~~C~~**B. Exceptions to Height Limits.** Exceptions to the height limits identified in this development code shall apply in the following manner:

1. Roof-mounted Features. Roof-mounted features including chimneys, cupolas, clock towers, elevator equipment rooms, equipment enclosures, and similar architectural features shall be allowed, up to a maximum of fifteen (15) feet above the allowed structure height. The total square footage of all structures above the heights allowed in the zoning districts shall not occupy more than twenty-five (25) percent of the total roof area of the structure.
Greater height or area coverage may be allowed subject to the approval of a minor conditional use permit in compliance with Chapter 16.52.

2. Parapet Walls. Fire or parapet walls may extend up to four feet above the allowable height limit of the structure.

3. Public Assembly, Hotels, Class "A" Office and Public Structures. Places of public assembly including churches, schools, assembly halls, Class "A" office buildings greater than three (3) stories, hotels and other similar structures may exceed the established height limit by one (1) foot for every two (2) feet that the minimum required front, rear and side yard setbacks are increased. The increase in the front, rear and side yard setbacks is determined by averaging the total of the increased building setbacks at the closest point on all sides. The maximum additional height allowed is thirty (30) feet above the height limit established for the applicable zoning district. This exception shall not apply when the site is adjacent to single-family zoned property. This exception may be used in conjunction with the height exception for rooftop equipment.

4. Telecommunications Facilities. Telecommunication facilities, including antennae, poles, towers, and necessary mechanical appurtenances, may be authorized to exceed the height limit established for the applicable zoning district, subject to the approval of a conditional use permit in compliance with Chapter 16.52.

5. Basement. A basement is defined as a story that has its floor surface below the adjoining finished grade as both conditioned and unconditioned space per the California Building and Residential Codes.

…

Section 16.18.140.D.4.b (Setback Regulations and Exceptions) of the Murrieta Municipal Code is hereby amended to read as follows:

16.18.140 – Setback Regulations and Exceptions

..

4. Setback Requirements for Specific Structures:

..

b. Retaining Walls. ~~(Retaining walls up to four feet in height are exempt.)~~Refer to Table 16.18-2 (Retaining Walls – Non-Hillside Areas) below:

~~**1) Up to Six Feet.** Retaining walls up to six feet in height may be located within a required set-back provided the exposed side of the wall faces into the subject parcel; and~~

~~**2) Over Six Feet.** Retaining walls greater than six feet in height, or where the exposed side of the wall faces out from the subject parcel without regard to height, shall be subject to the same requirements as the main structure in the applicable zoning district.~~

TABLE 16.18-2
RETAINING WALLS - NON-HILLSIDE AREAS

Criteria	
Facing Outward Within Front or Street-Side Setback	For residential, mixed-use locations, commercial and industrial, retaining walls within a front yard or street-side setback shall not exceed four feet in height.
Facing Inward	Retaining walls up to six feet in height may be located within a required setback provided the exposed side of the wall faces into the subject parcel and shall incorporate landscaping to screen the wall(s).
Line-of-Sight Locations/Visibility Triangles	For any required line–of–sight locations or visibility triangles, a maximum of thirty inches in height shall be permitted.
Six Feet or Greater - Retaining Wall Facing Outward	Retaining walls six feet or greater in height, shall be subject to the same setback requirements as the main structure in the applicable zoning district and shall incorporate landscaping to screen the wall(s).
Required Offset	At twelve feet in height, a retaining wall shall be separated by a minimum of six feet

	horizontally to accommodate landscaping.
Design Criteria	Refer to Section 16.22.070(F) (Retaining Walls).
Retaining Wall(s) within Hillside Areas	Refer to Table 16.24-2 (Retaining Walls – Designated Hillside Areas)

Section 16.22.030 (General Height Limitations), Table 3-3 (Maximum Height of Fences, Hedges, and Walls) of the Murrieta Municipal Code is hereby amended to read as follows:

16.22.030 General Height Limitations.

Fences, hedges and walls may be erected/maintained to the heights shown in Table ~~3-3~~16.22-1.

~~**TABLE 3-3**~~
~~**MAXIMUM HEIGHT OF FENCES, HEDGES, AND WALLS**~~

TABLE 16.22-1
MAXIMUM HEIGHT OF FENCES, HEDGES, AND WALLS

Location	**Maximum Height (within Setback Areas)**
Rear and side yards (interior and street side)	Six feet*
Front yards	Three feet*
At intersections of streets, alleys and driveways within traffic safety sight areas.	Twenty-four (24) inches

*** The director may approve additional height to enclose or screen areas.**

Section 16.22.040 (Exceptions to Height Limitations) of the Murrieta Municipal Code is hereby amended to read as follows:

16.22.040 Exceptions to Height Limitations – Non-Retaining Walls.

A. Fences and walls otherwise limited to three feet in height, may be allowed up to five feet in height with see-through (e.g., wrought iron or grille work) fencing material;

B. Fences and walls otherwise limited to six feet in height, may be approved up to eight feet in height with see-through (e.g., wrought iron or grille work) fencing material; and

C. Fences and walls may be allowed up to ten feet when the required setbacks are maintained. Heights greater than ten feet may be allowed subject to approval of the director.

Section 16.22.050 (Measurement of Fence or Wall Height) of the Murrieta Municipal Code is hereby amended to read as follows:

16.22.050 Measurement of Fence or Wall Height.

Where there is a difference in the ground level between two adjacent parcels ~~of less than two feet~~, the height of a fence or wall constructed along the property line shall be determined by using the finish grade of the highest contiguous parcel. ~~When there is a difference in the ground level between two adjacent parcels of two feet or more, the height of a fence or wall shall be determined by the director.~~

Section 16.22.060 (Walls Required Between Different Zoning Districts) of the Murrieta Municipal Code is hereby amended to read as follows:

16.22.060 Walls Required Between Different Zoning Districts.

Walls shall be provided and maintained between different zoning districts as follows:

A. Where a nonresidential or multi-family zoning district abuts a residential zoning district, a solid masonry wall ~~C~~ of six feet in height shall be constructed on the zone boundary line. Walls may be constructed higher than six feet if the viewshed is not impeded~~. This is~~ and subject to the approval of the D~~d~~irector. If retaining areas are proposed at these locations, please refer to the design standards as described under Section 16.22.070(F) (Retaining Walls);

B. Where a Business Park (BP), General Industrial (GI), or General Industrial-A (GIA) ~~IG~~ zoning district abuts another zoning district, a solid masonry wall six feet in height shall be constructed on the zone boundary line. This standard may be applicable at a project location within Innovation District (INN) depending on the proposed site layout and pedestrian and vehicle access. Please see Section 16.13.030 (Innovation District Design Standards) for additional details and criteria;

C. Walls shall be of solid masonry construction and shall be of a decorative design when in view of public rights-of-way subject to approval of the director; and

D. The director may waive or modify requirements for walls between different zoning districts where a solid masonry wall already exists on the contiguous property if the following findings can be made:

1. The existing wall meets or can be modified to conform to the intent of this chapter;

2. Suitable landscaping can be installed adjacent to the existing wall to supplement and enhance the ~~de-sired~~desired physical separation;

3. The existing wall can be protected to prevent vehicle damage~~, if necessary~~; and

4. Concurrence of the adjacent property owner can be obtained, to modify the existing wall to meet the requirements of this chapter.

Section 16.22.070 (Special Wall and Fencing Requirements) of the Murrieta Municipal Code is hereby amended to read as follows:

16.22.070 Special Wall and Fencing Requirements.

A. Swimming Pools, Spas and Similar Features. Swimming pools, spas and other similar features shall be fenced in compliance with Chapter 15.48 (Swimming Pool Enclosures) of the municipal code.

B. Outdoor Equipment, Storage and Work Areas. Screening of outdoor uses and equipment and activities shall be provided in compliance with Section 16.18.120 (Screening and Buffering).

C. Temporary Fencing. Temporary fencing may be necessary to protect archaeological or historic resources and/or trees during site preparation and construction. Temporary fencing for these purposes shall be subject to the approval of the director.

D. Fence and Wall Design. Perimeter fences/walls adjoining public rights-of-way shall be articulated in compliance with subsection 16.08.030(A)(5)(b) (Walls). The design shall include an appropriate mix of materials and landscaping subject to the approval of the director.

E. Construction Fencing. Active construction sites shall be enclosed with a locked temporary construction fence or similar barrier to prevent ease of access into the site.

F. Retaining Walls.

1. Retaining walls may be allowed to reduce grading, preserve natural, features, or increase soil stabilization.

2. Crib walls, keystone, loffelstein walls, and other similar living wall systems are a design option as long as it can be demonstrated on the project plans that the walls are structurally acceptable and provisions are provided for acceptable landscaping. Such wall shall be subject to the following standards:

a. Utilization of a curvilinear slope pattern consistent with the appearance of the natural hillside terrain.

b. Planted with landscape material suitable for the climate and wall exposure relative to the sun.

c. The landscape aesthetic effect to be achieved by the overall development shall be emphasized and considered.

d. The color palette and materials selected for the retaining wall shall blend in with the adjacent hillsides and landscape plant palette.

3. Retaining Walls shall incorporate materials and colors used in an adjacent structures. All materials used to construct the retaining wall(s) shall consist of native stone, poured-in-place concrete, precast concrete block, color treated, textured or veneered to blend in with the surrounding natural colors and textures of the existing landscape and native plant materials.

4. Retaining Walls visible from the public right-of-way shall be designed to provide variation in placement, use of planters, differing materials, and modulation of the wall plane.

5. Retaining Walls shall follow landform grading shapes and contours.

6. Tubular steel or wrought-iron safety fencing may be necessary in conjunction with retaining wall locations. If necessary, these wall locations are to provide for landscape safety maintenance personnel. Construction shall be consistent with the California Building Code and related codes.

7. Refer to Table 16.18-1 (Retaining Walls) and 16.24-2 (Retaining Walls – Designated Hillside Areas) for additional criteria.

Chapter 16.24 (Hillside Development) is hereby amended to read as follows:

16.24.010 Purpose.

The purpose of this chapter is to provide regulations for the development of areas in the ~~city~~*City* that, because of their topography, require special consideration to ensure that they are developed in a way that substantially maintains their natural character and environmental and aesthetic values to implement the *City's* G~~g~~eneral P~~p~~lan, and to provide for the safety, health, and welfare of the public by:

A. Providing guidelines and standards for development in visually sensitive ~~hillside areas~~*Hillside Areas* to minimize the ad~~-~~verse impacts of ~~grading~~*grading* and to promote the goals and objectives of the *City's* G~~g~~eneral P~~p~~lan;

B. Maintaining an environmental equilibrium consistent with existing vegetation, wildlife, soils, geology, ~~slopes~~*slopes*, and drainage patterns, and to preserve natural topography and scenic character, including canyons, creeks, knolls, rock outcrops, and ridgelines whenever feasible;

C. Encouraging development proposals that feature water conservation and aquifer recharge techniques;

D. Encouraging development proposals that are sensitive to fire, flood, slide, *erosion*~~erosion~~, pollution, or other safety hazards;

E. Encouraging sensitive development through flexible design and innovative arrangement of building sites by utilizing variable lot sizes, clustering, and setback variations;

F. Utilizing nontraditional design standards for streets and hillside ~~grading~~*grading* where development quality and public safety are not affected;

G. Encouraging developments that incorporate desirable existing features of land (e.g., natural vegetation, viewsheds, topographic features);

H. Protecting significant natural areas for ecologic purposes, educational, and other scientific study purposes; 1. Encouraging the use of drought-tolerant plant material to protect ~~slopes~~*slopes* from soil *erosion*~~erosion~~ and slippage, preserve natural watershed, minimize fire hazard, and minimize the scarring and deformation of the natural landscape;

I~~J~~. Limiting the impact of ~~cut~~*cut* ~~slopes~~*slopes* on adjacent developed and undeveloped properties; and

J~~K~~. Providing for appropriate intensity of development (e.g., density, massing, etc.) ~~in hillside areas~~ through a variety of design techniques to ensure that development intensity decreases as ~~slopes~~*slopes* become steeper (e.g., lot sizes appropriate for steeper topography and separation of structures sufficient to preserve ~~the~~a viewshed).

16.24.020 Applicability.

~~A. **Hillside Area.** The standards contained in this chapter apply to uses and structures within areas that have a slope of twenty (20) percent or greater and/or are designated on the significant features map on file with the department.~~

A. Location Consideration for Analysis. Notwithstanding any other provisions of this Code, the standards contained in this chapter apply to uses and structures within HIllside Areas that have a slope twenty-five (25) percent or greater and as designated within the boundaries of a Hillside Overlay Map. Additionally, please refer to 16.02.020 (Exemptions from Land Use Permit Requirements), 16.24.080 (Exceptions) for activities and features exempt from review.

B. Basis for Slope Determinations. ~~For the purpose of this chapter, slope shall be computed on the natural slope of the land before grading is commenced, as determined from a topographic map having a scale of not less than one inch equals one hundred (100) feet and a contour tour interval of not more than five feet.~~Slope determinations shall be based upon citywide contour data as provided on the City's website under the Geographic Information System webpage under Interactive Mapping.

C. Development Plan Permit Required. Hillside developments shall be subject to the approval of a development plan permit in compliance with Chapter 16.56, unless exempt per adopted *City* policy or State Law (Example: Accessory Dwelling Unit).

~~D. The development standards, guidelines and provisions of this chapter shall be applied to those portions of land with a predominance of significant natural slopes exceeding twenty-five (25) percent and areas that are integrally contiguous or slopes determined as significant by the director. The provisions of this chapter shall apply to projects relating to subdivisions, permits, uses, structures, specific plans, master development plans, and associated site plans for development review except as specifically exempted by Section 16.02.020.~~

D. The development standards, guidelines and provisions of this chapter shall be applied to those portions of land with a predominance of *natural slopes* exceeding twenty-five (25) percent or greater and areas that are integrally contiguous. The provisions of this chapter shall apply to projects relating to subdivisions, permits, uses, structures, specific plans, master development plans, and associated site plans for development review except as specifically exempted by Section 16.02.020 (Exemptions from Land Use Permit Requirements), and 16.24.080 (Exceptions).

16.24.030 Definitions.

For the purposes of this chapter the following definitions shall apply:

City. The City of Murrieta, state of California, referred to in this development code as the "City."

City Engineer. The director of Public Works/City Engineer of the city or their duly delegated representative.

City Manager. The official employed by an elected council to direct the administration of the City. See Chapter 2.08 "City Manager"

Clearing. The removal of vegetation (grass, brush, trees, and similar plant types) by hand or mechanical means (e.g. ~~also known as~~ brushing, ~~and/or~~ grubbing).

Cluster Development. A concept where structures are grouped on certain portions of a site, frequently of different shapes and sizes, surrounded by large expanses of open space.

Contour. A line drawn on a plan that connects points of equal elevation.

Cut. ~~The mechanical removal of earth material.~~An act by which soil, sand, gravel, or rock is cut into, dug, quarried, uncovered, removed, or relocated, and shall include the conditions resulting therefrom.

Daylight Line. The line between the finished grade and natural terrain drawn by connecting points where pro-posed contours meet existing contours.

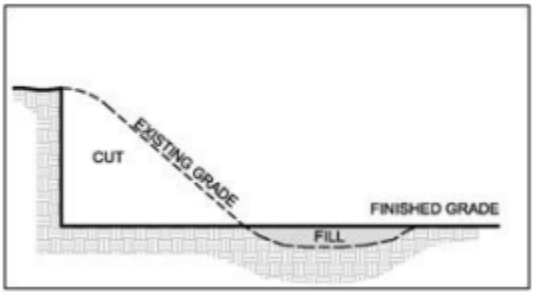
Director. See Section 16.46.050 “Director.”

Elevation. Height or distance above mean sea level.

Erosion. The process by which the soil and rock components ~~of the earth's crust~~ are worn away and removed from one place to another by natural forces (e.g., ~~as~~ wind, ~~and~~ water)

Fill. A ~~deposit of earth material placed by artificial means.~~deposit of soil, sand, gravel, rock, or other material placed by artificial means.

Finished Grade. The final elevation of the ground surface after development, that is in conformance with ~~the~~ approved plans.



Grading. To bring an existing surface to a designed form by excavating, filling, or landforming operations ~~in excess of fifty (50) cubic yards~~.

Contour Grading. A grading concept designed to result in earth shaping ~~forms~~ that resembles natural terrain characteristics. ~~Horizontal and vertical curve variations are often used for slope banks.~~

Conventional Grading. A grading concept that results in simple, straight forward, cut and fill lines and even ~~planed slopes~~*slopes*. ~~This is the most basic type of grading often resulting in an "engineered or man-made" appearance attributable to a lack of curvilinear or natural-appearing shapes.~~

Landform Grading. A grading method that replicates the irregular shapes of the natural ground surface~~slopes~~. Landform graded land surfaces~~slopes~~ are characterized by continuous series of concave and convex forms interspersed with mounds that blend into profiles, nonlinearity in plan

view, varying slope gradients, and significant transition zones, between man-made and natural land surfaces~~slopes~~.

Hillside Area. ~~Land with an average rise or fall of twenty-five (25) percent or greater or a vertical rise of thirty (30) feet or more~~ Means those areas specifically designated on a Hillside Overlay Map as adopted by the City Council under Section 16.24.100.

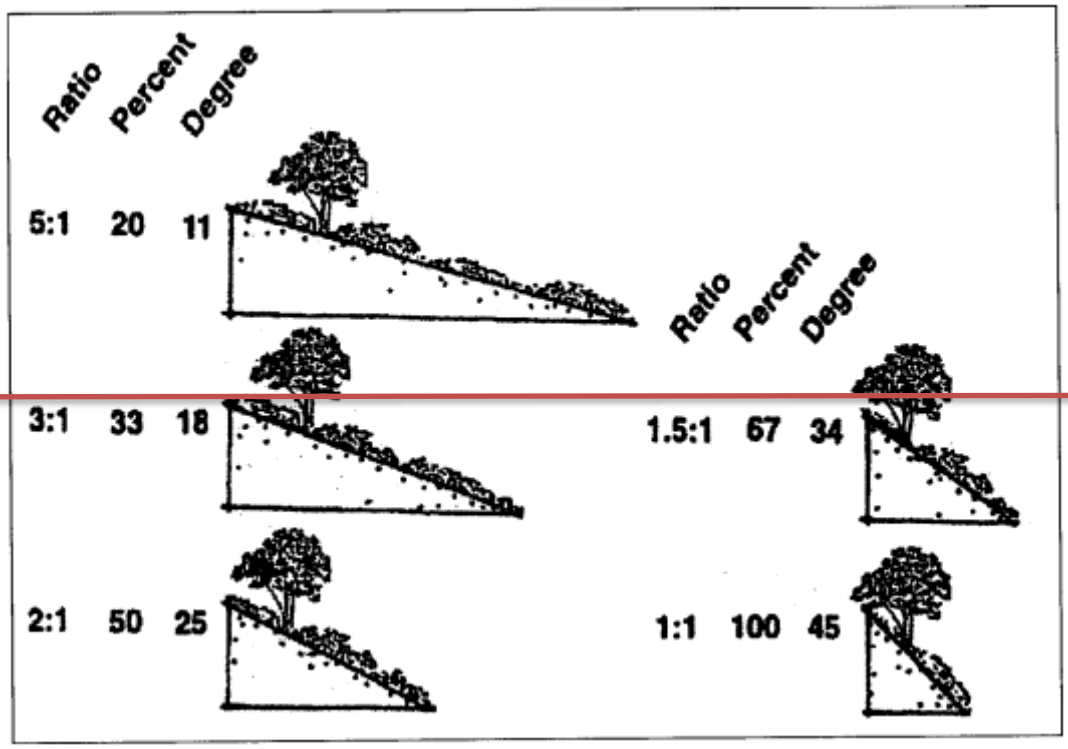
Mass Grading. The movement of large quantities of earth over large areas. Disruption of the majority of the on-site surface terrain resulting in a successive pad/terrace configuration. ~~Modification or elimination of natural landforms may result.~~

Minimal Grading. A grading concept designed to minimize excavation and filling. Allows the movement of earth for projects (e.g., as individual building foundations, driveways, local roads, and utility excavation). The concept is associated with roads conforming closely to natural contours and with structures being built on natural terrain.

Pad. A level area created by grading to accommodate development.

Prominent Ridge. A ridge or hill location that is visible from Interstate 15, Interstate 215, or from an arterial or secondary street, that forms part of the skyline or is seen as a distinct edge against a backdrop of land and has been identified on a "Prominent Ridgelines" Map adopted by the City Council. Refer to Section 16.24.110.
~~Ridge. An extended, narrow, conspicuous elevation of land generally between valleys.~~

Slope. An inclined ground surface, the inclination of which is expressed as a ratio of the vertical distance (rise), or change in elevation, to the horizontal distance (run). The percent of a given slope is determined by dividing the rise by the run, multiplied by one hundred (100).



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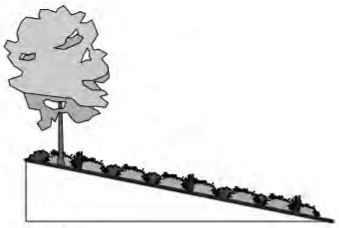
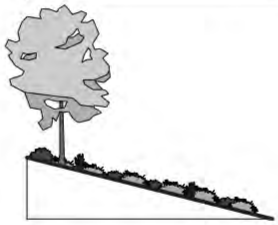
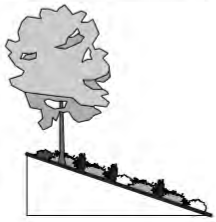
5:1	20	11		2:1	50	25	
4:1	25	14		1.5:1	67	34	
3:1	33	18		1:1	100	45	

~~**Slope, Average.** The method of determining average natural slope of land using the following equation:~~

~~I x L x .0023 where~~

~~A~~

~~I = Contour interval in feet.~~

~~L = Combined length in feet of contour lines measured on the project site.~~

~~.0023 = A constant that converts square feet into acres and expresses slope in percent.~~

~~A = Project site area in acres.~~

Slope, Man-made. A manufactured slope consisting wholly or partially of either cut or filled material. Slope, Natural. A slope that is not man-made.

Slope, ~~Significant~~ Natural. A slope that is not man-made that exceeds twenty-five (25) percent ~~and a vertical rise of thirty (30) feet or more~~.

Slope Ratio. The relationship of a slope's horizontal length to vertical height, with the height specified as one (e.g. 2:1).

Slope Transition. The area where a slope plane changes to meet the natural terrain or a level graded area either vertically or horizontally.

16.24.040 Application Submittal Requirements.

Applications for development ~~within the hillside overlay zoning district~~ shall comply with the submittal requirements of this chapter. When a development project is a specific plan or master development plan, the submittal requirements shall be incorporated in the appropriate sections

of the corresponding documents. If adequate detailed studies are provided with the specific plan and/or master development plan, subsequent implementing development applications shall be reviewed for substantial conformance with these plans.

Application filing requirements are as follows:

A. ~~A~~ Natural Features Map. This map shall identify slope banks, ridgelines, canyons, natural drainage courses, United States Geological Survey (U.S.G.S.) blueline streams, rock outcroppings, sensitive ~~biotic~~biological habitats, cultural resources, and other natural features for the purposes of project review and California Environmental Quality Act (CEQA) analysis~~determined to be worthy of consideration for preservation~~.

~~**B. A Conceptual Grading Plan.** A conceptual grading plan shall be submitted at a minimum scale of one inch to two hundred (200) feet (this scale may be adjusted with the approval of the department). The plan shall include the following items:~~

~~1. A legend with appropriate symbols indicating high point, low point, spot elevations, pad and finished floor elevations, top of wall, top of curb, change in direction of drainage, and planned drainage improvements;~~

~~2. A separate map with proposed fill areas and cut areas, depths of these areas clearly shown in five-foot topographic lines. Quantities of each cut and fill area shall be clearly marked and calculated as a percentage of the total site area. The fill and cut areas shall be either colored green and red, respectively, cross-hatched, or screened to delineate the separate areas;~~

~~3. Contours for existing and proposed land conditions. Existing contours shall be depicted with a dashed line with every fifth contour darker, and proposed contours shall be depicted as above except with a solid line. Contours shall be shown at minimum intervals of five feet of change in elevation, with two-foot contours in the flatter areas (if using Riverside County flood control district topographic maps, a four-foot interval may be used); and~~

~~4. Additional information as required to assist department review of the project.~~

B. Overall Conceptual Grading Plan. An overall conceptual *grading* plan shall be submitted at a minimum scale of one (1) inch equals twenty (20) feet). The plan shall include the following items:

1. A legend with symbols identifying the following, but not limited to: high point, low point, spot *elevations*, *pad*, top of wall, top of footing, top of curb, top of ground surface on both sides of a retaining wall, and planned drainage improvements;

2. A separate map shall be provided with proposed *cut* and *fill* areas, depths of these identified areas shown in five-foot topographic lines. Quantities of each *cut* and *fill* area shall be identified and calculated as a percentage of the total site area. The *cut* and *fill* areas shall be either colored green and red, cross-hatched, or screened to delineate each respective area;

3. *Contours* for existing and proposed topographic conditions shall be provided within submitted plan exhibits. Existing *contours* shall be depicted with continuous screened lines and proposed *contours* shall be depicted as above except with a solid line. *Contours* shall be shown at minimum intervals of two feet of change in elevation. Elevations of less than two feet shall be depicted with spot elevations; and

4. Additional information as required to assist with review of the project.

C. Drainage Map. A conceptual drainage and flood control facilities map describing planned drainage improvements. The map shall utilize ~~city~~*City* standards or an acceptable alternate as determined by the *City Engineer* or their designee~~city engineer~~.

~~**D. Slope Analysis Map.** A slope analysis map for the purpose of determining the quantity amount and location of land as it exists in its natural state and for calculating average slope categories. A base topographical map for~~of the site shall be prepared and shall have a scale of not less than one inch to one~~two hundred (100~~200) feet. The base topographical map shall include adjoining properties within one hundred (100) feet of the site boundaries to portray the site's context. Slope bands in contrasting colors shall be delineated in the range of zero to twenty-five (0—25) percent, twenty-six to fifty (26—50) percent, and fifty (50) percent or greater. A tabulation of the land area by slope percentage shall also be provided. A heavy solid line indicating the twenty-five (25) percent grade differential shall be clearly marked on the plan.~~

~~The exact method for computing the percent slope and area of each slope category shall be sufficiently de-scribed and presented so that a review can be readily made. A heavy solid line indicating the twenty-five (25) percent grade differential shall be clearly marked on the plan. An eight and one-half by eleven (8-1/2 x 11) inch legible acetate reduction of the slope analysis with appropriate legend shall also be provided.~~

D.~~E.~~ Slope Profile Drawings. ~~A sufficient number of slope profiles shall be provided to clearly illustrate the ex-tent of the proposed grading. A minimum of four c~~Cross-section slope profiles shall be included with the slope analysis. Additional profiles may be required as determined by the ~~city engineer~~*City Engineer* or their designee. The slope profiles shall:

1. Be drawn at the same scale and indexed, or keyed, to the slope analysis map, ~~grading~~*grading* plan, and project site map. Both vertical and horizontal scales shall be indicated;

2. Show existing and proposed topography, structures, and infrastructure. Proposed topography, structures, and infrastructures shall be drawn with a thin, solid line. Existing topography and features shall be drawn with a dashed line;

3. Extend at a minimum of ~~least~~ one hundred (100) feet outside the project site boundary to clearly show the impact on adjacent property. Additional distance may be necessary to determine off-site terrain and features;

4. Be drawn along those portions of the subject site where:

a. The greatest portion of the site where alteration of existing topography is proposed;

b. The most intensive ~~or massive~~portion of the site where development is proposed (e.g. where structures are proposed);

~~c. The is most visible from surrounding land uses; and~~

~~d~~c. Where proposed ~~grading~~*grading* ~~will~~would potentially impact existing natural drainage conditions.

5. At least two of the slope profiles shall be roughly parallel to each other and roughly perpendicular to existing *contour*~~contour~~ lines. At least one other slope profile shall be roughly at a ninety (90) degree angle to the other slope profiles and existing contour lines.

F. Indicate Source of Data. ~~Both the slope analysis and slope profiles shall~~ Indicate the datum, source, date, and scale ~~of topographic data used in the slope analysis and slope profiles~~.

G. Geotechnical Report. A geotechnical and soils report~~,~~ shall be prepared by a registered geotechnical engineer to *City*~~city~~ standards and provided in sufficient detail to substantiate and support the design concepts presented in the application ~~as submitted~~. Additional environmental technical studies and investigations, including, but not limited to, hydrologic, seismic, access/circulation, cultural, tribal cultural, and biological resources~~biota research~~ may ~~also~~ be required to help in the determination of the buildable area of a subject site for consistency with project review and for California Environmental Quality Act (CEQA) analysis.

H. Objective Design Guidelines. Objective ~~D~~design guidelines shall be provided for projects that are to be reviewed by the Planning C~~c~~ommission. Otherwise, illustrative building *elevations*~~elevations~~ showing all sides of the structure shall be provided.

~~**I. No Grading Proposed.** In the event that no grading is proposed, (e.g., custom lot subdivision) a statement to that effect shall be filed with a plan that shows possible future house plotting, pad grading, driveway de-sign, and septic system location for each parcel proposed. The plan shall be prepared on a topographic map drawn at a scale of one inch to two hundred (200) feet.~~

I. No Grading Permit Required. See 16.24.080 (Exceptions) for applicability.

J. Additional Information. The following items may be required if determined necessary by the ~~director~~*City Engineer* or their designee to aid in the analysis of the proposed project:

1. A line of sight or view analysis;

2. Photographic and/or computer generated graphic renderings;

3. A topographic model and/or large scale detailed partial model; or

4. Other illustrative techniques determined necessary to aid in review of the project.

~~K. Exceptions to the filing requirements shall be determined by the director~~

16.24.050 Project Review Procedures.

~~Projects within designated hillside areas shall be subject to review and approval by the director or the commission in compliance with the provisions of this chapter.~~

A. Director Approval. The *Director* shall approve, approve with conditions, or deny development proposal applications pursuant to the authority as referenced under Table 4-1 "Approval Authority and Public Hearing Requirements." ~~when the following conditions apply:~~

~~1. Development plan permits;~~

~~2. Extensions of time; or~~

~~3. Building permit reviews.~~

B. Planning Commission Approval. The Planning C~~c~~ommission shall approve, approve with conditions, or deny development proposal applications pursuant to the authority as referenced under Table 4-1 "Approval Authority and Public Hearing Requirements." ~~when one or more of the following conditions apply:~~

~~1. When padded building sites are proposed; or~~

~~2. Proposals referred to the commission by the director.~~

C. Modification of Requirements. The Planning C~~c~~ommission may modify or waive a development standard:

1. W~~w~~hen an improved or more environmentally sensitive design ~~will~~would result. Further, where it can be demonstrated that imposing the objective hillside development standards would either render a parcel unbuildable and create a loss of its reasonable economic use, or place an undue restriction on the improvement of the property, development consistent with the *City's* G~~g~~eneral P~~p~~lan shall be allowed subject to approval by the Planning C~~c~~ommission, if the following findings can be made:

a. The site is physically suitable for the design and siting of the proposed development. The proposed development will result in minimum disturbance of environmentally sensitive areas;

b. The ~~grading~~*grading* proposed in connection with the development would ~~will~~ not result in soil *erosion*~~erosion~~, silting of lower ~~slopes~~*slopes*, flooding, severe scarring, ~~or~~ create other geological instability conditions, or a fire hazard condition that would affect the public's health, safety and general welfare for the *City*, as determined by the ~~city engineer~~*City Engineer* or their designee;

~~c. The proposed development retains the visual quality of the site, the aesthetic qualities of the area, and the neighborhood characteristics by utilizing proper structural scale and character, varied architectural treatments, and appropriate plant materials; and~~

16.24.060 Hillside Development Standards.

The following are minimum standards and shall apply to a use, development, or alteration of land in compliance with Section 16.24.020 (Applicability). These standards are supplemented by the provisions of the development guidelines contained in Section 16.24.070 (Hillside Development Guidelines) of this chapter.

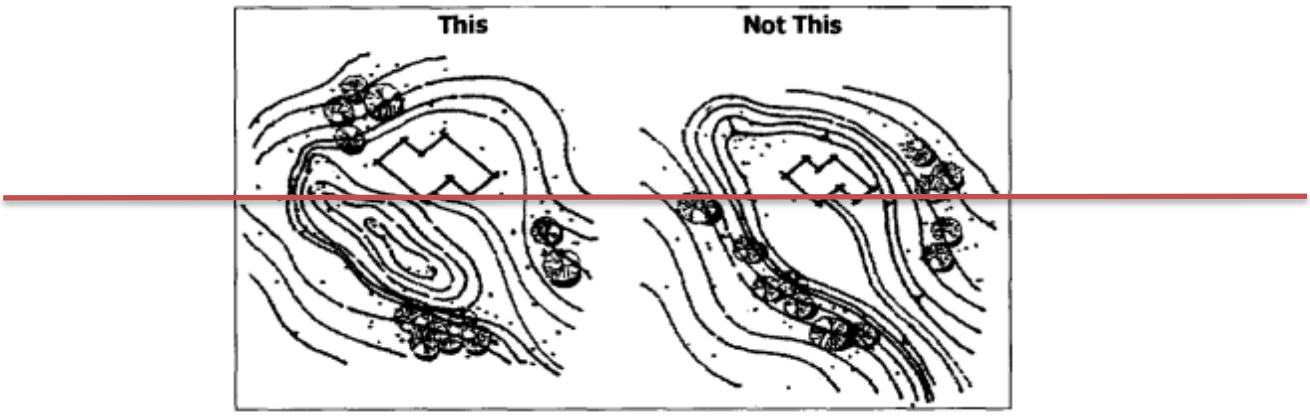
A. Hillside Slope Categories. The following ~~descriptions~~categories serve as guidelines ~~general standards~~ for determining the applicability of hillside ~~slope~~conditions at a subject site ~~categories to ensure that development will compliment the overall character of the landform~~.

TABLE 16.24-1
HILLSIDE DEVELOPMENT STANDARDS

% Natural Slope Category	Standards
Under~~Up to~~ 25%	This is not considered a hillside condition and the provisions of the Chapter shall not apply.
Over 25% but less than ~~up~~ to 50%	This is a hillside condition. Development within this slope category is limited to the less visually prominent ~~slopes~~*slopes* of a subject site, ~~and then only~~ where it can be ~~shown~~demonstrated that ~~grading~~*grading*, vegetation removal, safety, ~~and environmental and~~ aesthetic, and other environmental impacts are ~~can be~~ minimized. Potential i~~I~~mpacts ~~of~~ from site access and roadways shall be minimized by following natural ~~contours~~*contours* or using grade separations. Proposed s~~S~~tructure(s) shall blend with the natural landform through their shape, material, and utilization of naturally occurring color(s). ~~Special hillside architectural and design techniques are required, which may include the use of larger lots, variable setbacks, and variable building structural techniques and clustering. Padded building sites may be considered in some instances. Where this occurs, the commission may consider padded building sites adjacent to special features when it is found that grading of padded building sites will create a better relationship between the special feature(s) and the building sites.~~
50% and over(1)	This is an excessive slope condition and development is prohibited. (1)This applies to the property as a whole.

B. Site Design.

1. Projects ~~located in hillside areas~~ shall incorporate clustering, variable setbacks, multiple orientations, and other site planning techniques to preserve open spaces, protect natural features, and offer views to residents.



2. When clustering techniques are utilized~~used~~, the minimum lot sizes may be decreased to five thousand (5,000) square feet when it is necessary to preserve sensitive lands (e.g., hillsides, creeks, habitat areas, etc.). Lots may be allowed smaller than five thousand (5,000) square feet, but not smaller than four thousand (4,000) square feet, for up to twenty (20) percent of the total approved lots and only under an approved specific plan when ~~absolutely~~ necessary

to preserve sensitive and ~~hillside areas~~*Hillside Areas*. Lots under five thousand~~thou-sand~~ (5,000) square feet are prohibited in slope areas of twenty-five (25) percent or greater.

C. Driveways and Roadways.

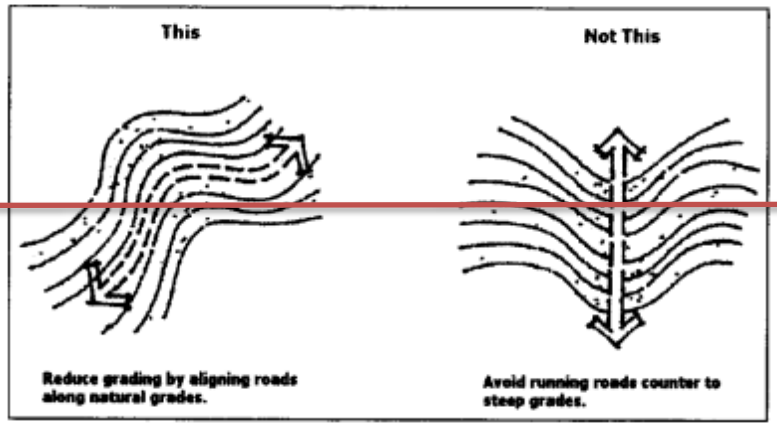
1. ~~-~~Driveways shall be designed in a manner as to when a vehicle is entering a public~~/~~ and/or private streets~~,~~ ~~maintaining~~ adequate sight distance shall be maintained as determined by the ~~city engineer~~*City Engineer* or their designee.

2. Driveways shall not be located within three feet of a side property line. Exceptions to this standard may be considered based on lot size, percentage of slope, ~~appropriate~~ drainage facilities and use as a common ~~(joint)~~ driveway by the *City Engineer* or their designee.

3. Only ~~slopes~~*slopes* less than fifty (50) percent (2:1) shall be ~~allowed~~permitted adjacent to driveways.

4. Driveway grades above fifteen (15) percent may only be considered by the *City Engineer* or their designee when driveways are aligned with the natural *contours*~~contours~~ of the land, and are necessary to achieve ~~effective~~ site design, and safety considerations ~~are met~~ to the satisfaction of the building and safety official, *City Engineer* or designee, and fire code official. ~~building and safety official, city engineer, and the fire department. Proper d~~Design considerations shall be employed, including the use of vertical curves. On proposed driveways ~~that may be approved~~with a slope greater than fifteen (15) percent, a coarse, all-weather paving material (e.g. asphalt or concrete), or grooves for traction, shall be incorporated into the design~~construction~~.

5. Roadways shall conform to the natural landform. Significant alterations to the physical and visual character of a hillside shall be avoided by eliminating large notches in ridgelines and wide straight alignments. Modified or reduced ~~width road~~road width sections and split sections shall be considered in the layout of hillside streets to reduce ~~grading~~*grading* and ~~cuts~~*cuts* in topography while allowing access for fire trucks and other emergency vehicles.



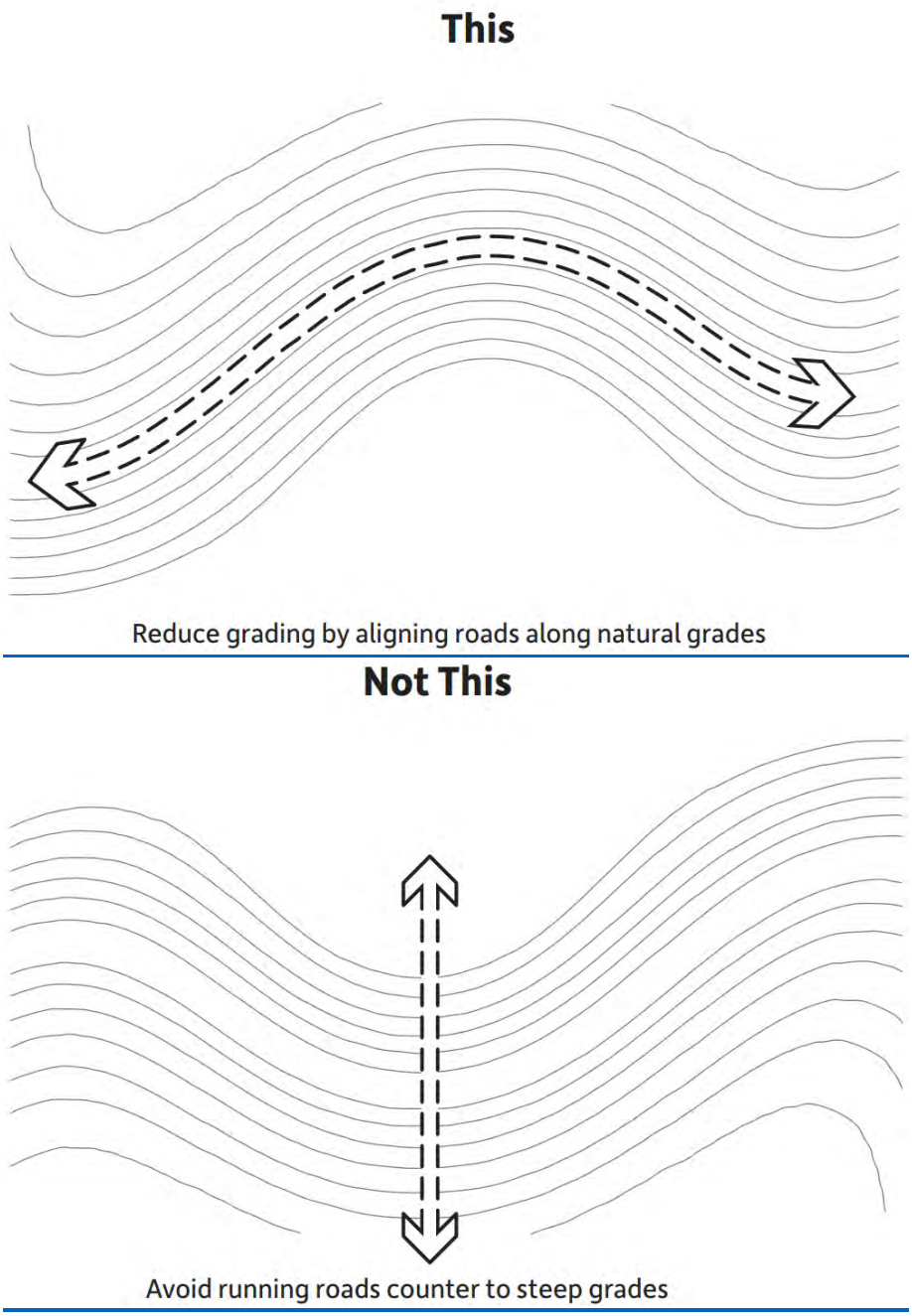


FIGURE 16.24-1
ROADWAY PLACEMENT

6. Where road construction is proposed ~~in hillside areas~~, the standards shall be consistent with those identified for high fire hazard areas, the California Fire Code, and with *City* design standards.

7. The extent of vegetation and visual disruption shall be minimized by the combined use of retaining structures and regrading to approximate natural ~~slopes~~*slopes*. The view along a street frontage shall be buffered with~~provide a pleasant appearance with a sense of open space~~

~~and~~ landscaping and the maintenance of views shall be preserved as demonstrated on the project plans. The use of terraced walls and landscaping ~~to reduce grading impact associated with retaining walls~~ is a recommended design technique to address this visual impact~~encouraged~~.

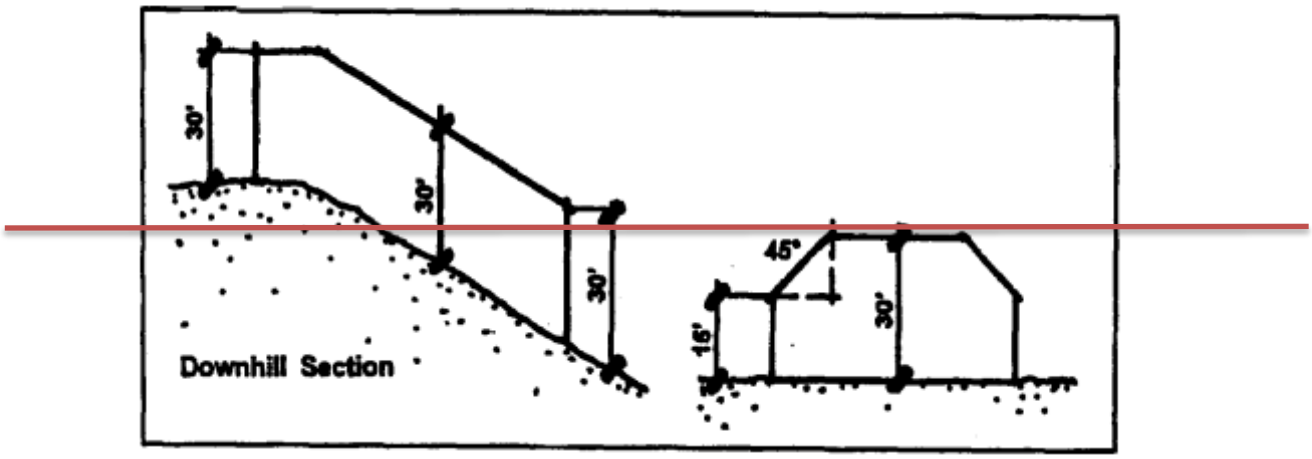
8. Wet utilities shall be placed in the road right-of-way, where feasible and approved by the reviewing agency.

9. Scaled roadway drainage facilities and grades shall be provided consistent with *City* design standards.

D. Architecture.

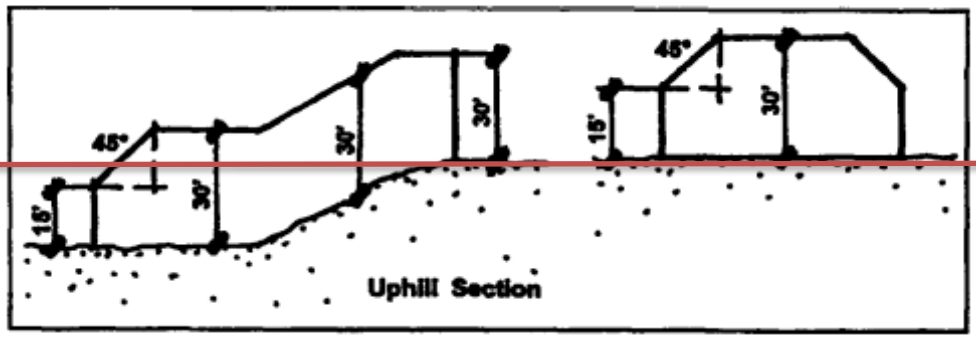
1. ~~The building envelope for primary structures, except for padded building sites,~~ The maximum structure height shall be thirty (30) feet. Refer to Section 16.18.080.A (Maximum Height) for additional criteria on how to calculate the maximum height for a sloped parcel. ~~as follows:~~

~~**a. Downhill Lot.** The maximum structure height shall be thirty (30) feet, measured from finished grade at the front setback line extending towards the rear of the lot. The maximum height at the side setbacks shall be fifteen (15) feet extending up toward the center of the lot at a forty-five (45) degree angle to a maximum height of thirty (30) feet as measured from finished grade.~~



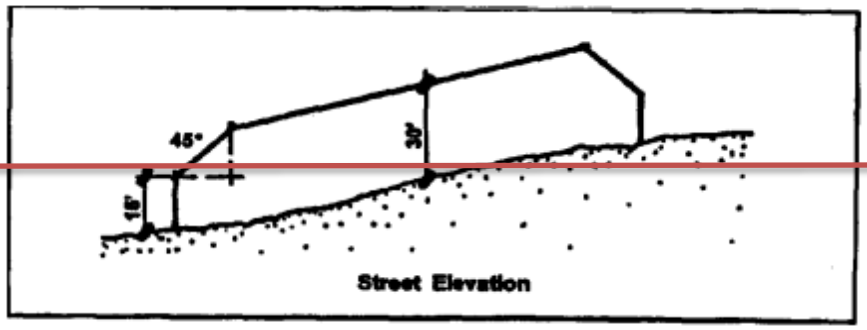
~~**FIGURE 3-4**~~
~~**BUILDING ENVELOPE FOR DOWNHILL LOT**~~

~~**b. Uphill Lot.** The maximum structure height shall be fifteen (15) feet, measured from finished grade at the front setback line extending up towards the rear of the lot at a forty-five (45-) degree angle to a maxi-mum height of thirty (30) feet. The maximum height at the side setbacks shall be fifteen (15) feet extending up towards the center of the lot at a forty-five- (45-) degree angle to a maximum height of thirty (30) feet as measured from finished grade.~~



~~FIGURE 3-5~~
~~BUILDING ENVELOPE FOR UPHILL LOT~~

~~**c. Cross Slope Lot.** The maximum structure height shall be thirty (30) feet, measured from finished grade at the maximum front setback line extending towards the rear of the lot. The maximum height at the side setbacks shall be fifteen (15) feet extending up towards the center of the lot at a forty-five (45-) degree angle to a maximum of thirty (30) feet as measured from finished grade.~~



~~FIGURE 3-6~~
~~BUILDING ENVELOPE FOR CROSS LOT SLOPE~~

a~~d~~. **Architectural Projections Allowed.** Architectural projections and variations in roof design are encouraged. Projections above the maximum height limits for architectural features may be allowed subject to approval by the ~~director~~*Director*.

2. ~~In steeper terrain, R~~reduction of front yard setbacks may be considered in order to minimize rear yard grading.

~~3. Architectural treatments shall be provided on all sides of a structure. Elements of the architectural treatment used on the front facade shall be repeated on all sides of a structure with additional emphasis on those elevations visible from public rights-of-way.~~

3~~4~~. Building materials and color schemes ~~shall blend with the natural landscape. Colors~~ shall be of earth tones and the value (lightness or darkness) of the specific hue shall be as close to that of the immediately surrounding landscape as possible as demonstrated on the project plans. ~~Where exterior stucco is used, it shall have a final coat of integrated color in a muted earth tone. Contrasting color accents shall be kept to a minimum.~~

45. Treated wood or materials of a wood-like appearance, having the necessary fire retardant characteristics. are encouraged for a design option for exterior surfaces. Use of other natural materials (e.g., river rock) is a design option as wellalso strongly encouraged. The reflectivity of exposed surfaces (walls, roofs, windows, frames, and paved surfaces) shall be mitigated with the incorporation of by overhangs, trellises, planting, and similar features.

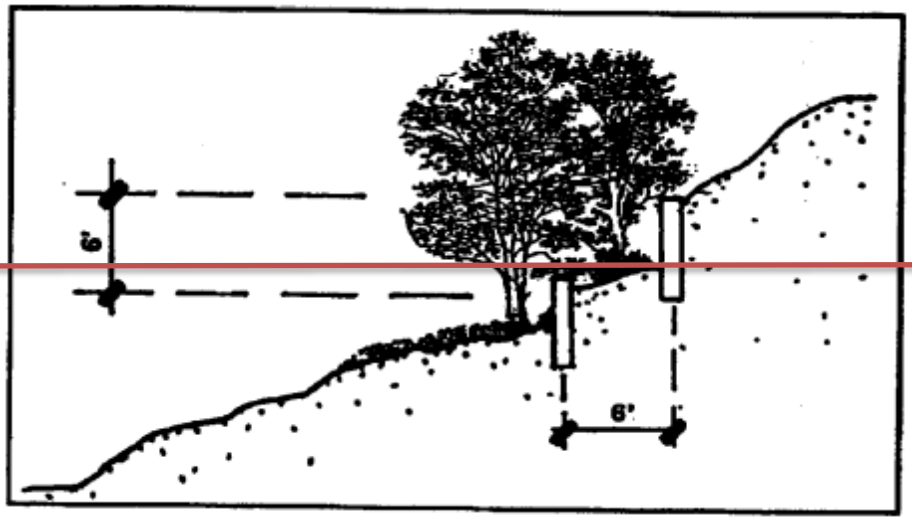
56. Exterior lighting shall be located and shielded so as to not impact adjacent property owners in terms of glare and privacy in compliance with Section 16.18.100 (Lighting).

E. Walls and Fences.

TABLE 16.24-2 RETAINING WALLS – DESIGNATED HILLSIDE OVERLAY AREAS	
Criteria	
Up to Three Feet Within Front or Street-Side Setback	Walls within the required front yard or street-side setback shall not exceed three feet in height, shall be separated by a minimum of three feet, and shall incorporate landscaping to screen the wall(s).
Line-of-Sight Locations/Visibility Triangles	For any required line–of–sight locations, or visibility triangles, a maximum of thirty inches in height shall be permitted.
Up to Six Feet.	Where multiple terraced retaining walls are designed to retain larger slopes, they shall not exceed six feet in height. Refer to Figure 16.24-2.
Over Six Feet	Prohibited
Over Six Feet and as Part of Structure.	Walls that are an integral part of the primary structure may exceed six feet in height; however, their visual impact shall be mitigated through *contour grading* and landscape treatment. Refer to Figure 16.24-3.
Required Offset	At six feet in height, a retaining wall shall be separated by a minimum of six feet horizontally. Refer to Figure 16.24-2.
Design Criteria	Refer to Section 16.22.070.F (Retaining Walls).

~~1. Retaining walls, not exceeding six feet in height, may be allowed to reduce grading, preserve natural features, or increase soil stabilization. Within the required front yard setback, individual retaining walls shall not exceed three feet in height.~~

~~2. Where multiple (terraced) walls are designed to retain larger slopes they shall not exceed six feet in height and shall be separated by a minimum of six feet horizontally. A maximum of two walls shall be placed together. Walls within the required front yard setback shall not exceed three feet in height and shall be separated by a minimum of three feet and shall incorporate landscaping to screen the wall(s).~~



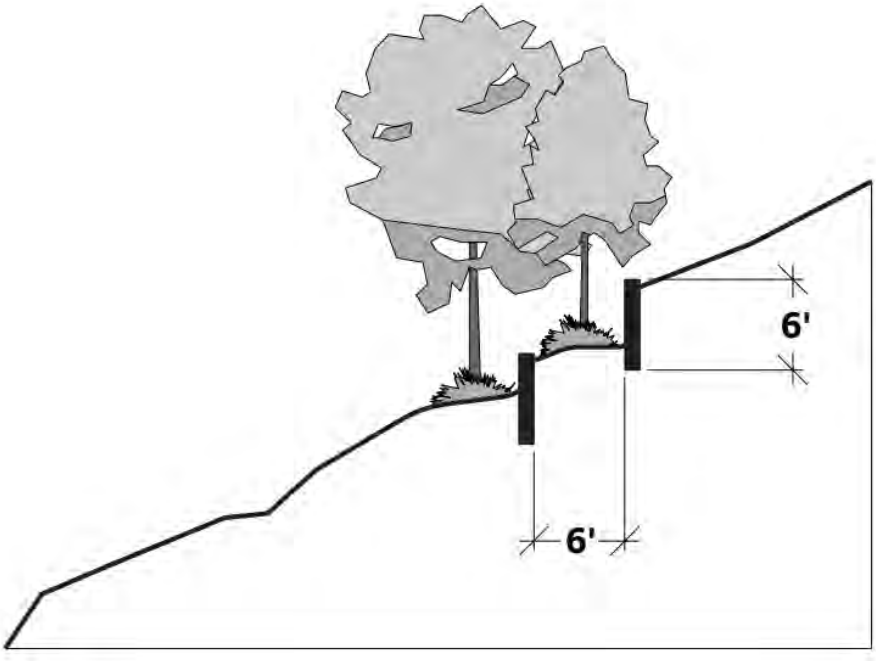


FIGURE ~~3-7~~16.24-2
HEIGHT OF RETAINING WALLS

~~3. Walls that are an integral part of the primary structure may exceed six feet in height; however, their visual impact shall be mitigated through contour grading and landscape treatment.~~

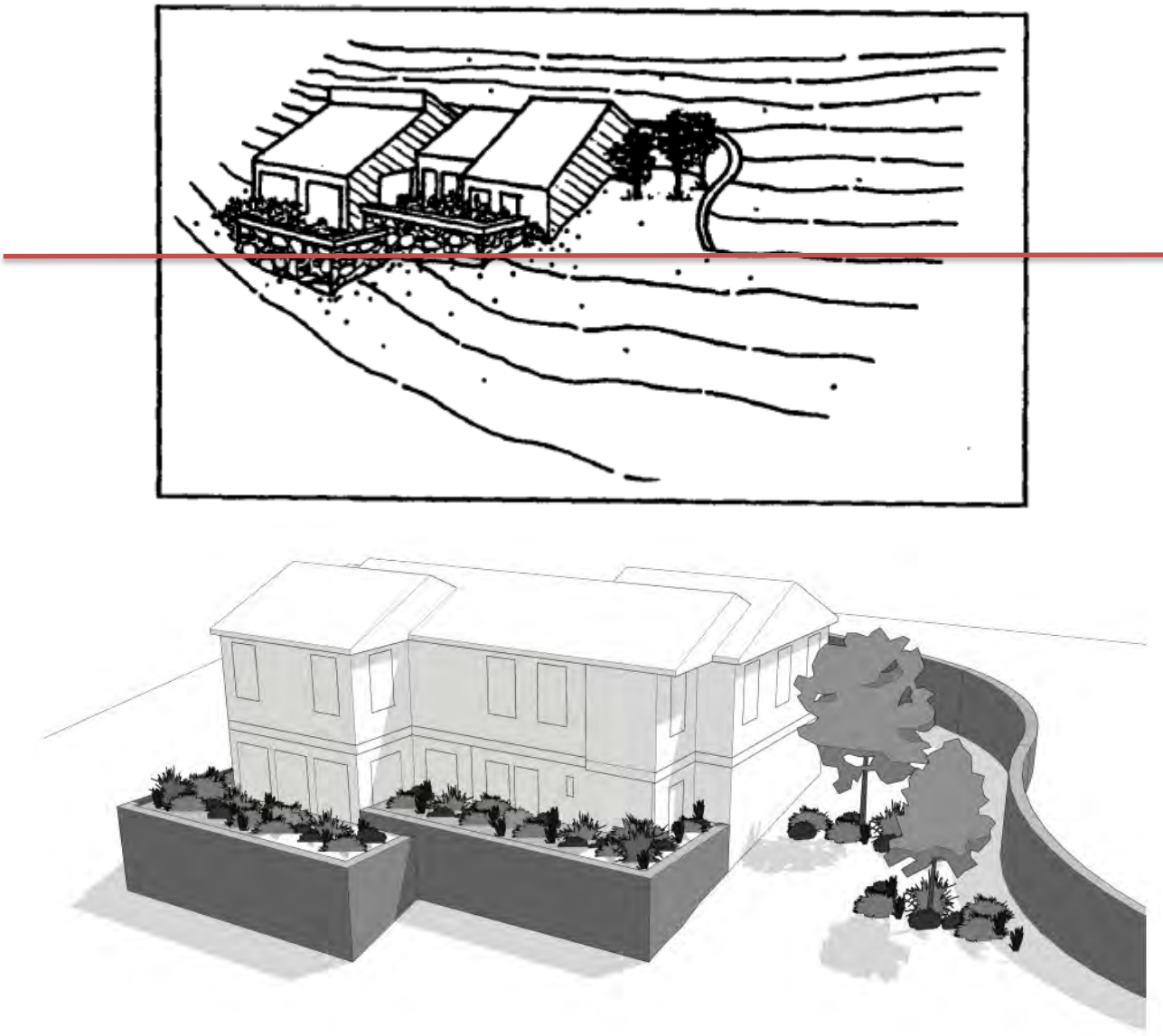


FIGURE ~~3-8~~16.24-3
RETAINING WALL AS PART OF PRIMARY STRUCTURE

1~~4~~. Refer to Section 16.22.070.F (Retaining Walls) for additional criteria.~~Crib walls may be approved on a case by case basis if it can be demonstrated that excessive height is not being created and provisions for extensive landscaping are incorporated.~~

~~5. Walls and fences shall incorporate materials and colors used in an adjacent structures. Naturally occur-ring materials (e.g., river rock, flagstone, etc.) shall be used whenever possible.~~

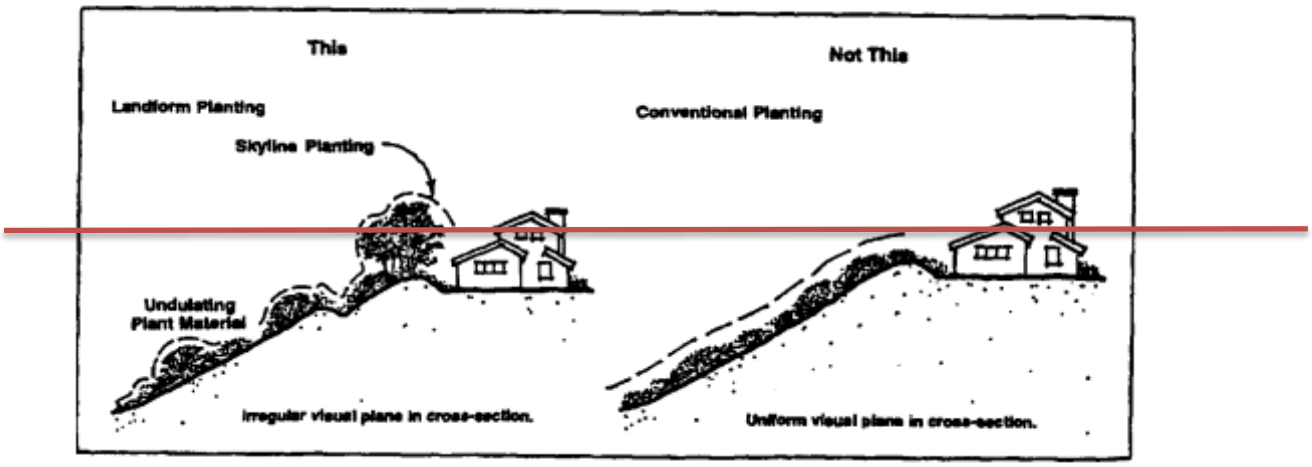
~~6. Walls and fencing visible from the public right-of-way shall be designed to incorporate visual interest through variation in placement, use of planters, differing materials, and modulation of the wall plane.~~

~~7. Walls and fences shall follow landform grading shapes and contours.~~

F. ~~E.~~ **Landscaping.** Revegetation in hillside areas shall reflect the visual patterns found naturally in local canyons and valleys. The landscaping as viewed from urban areas and arterial roadway system shall mask and screen man-made structures.

1 . Indigenous, or naturalized plants that blend naturally with the landscape shall be utilized in areas where planting is required. Plant selections shall be deep-rooting, drought tolerant, and fire resistive.

2. Natural landform planting shall be used to soften manufactured slopes, reduce the impact of development on steep slopes or ridgelines~~.~~ and provide erosion control. These landscape techniques shall serve to reintroduce landscape patterns that occur naturally ~~in the hillsides~~.



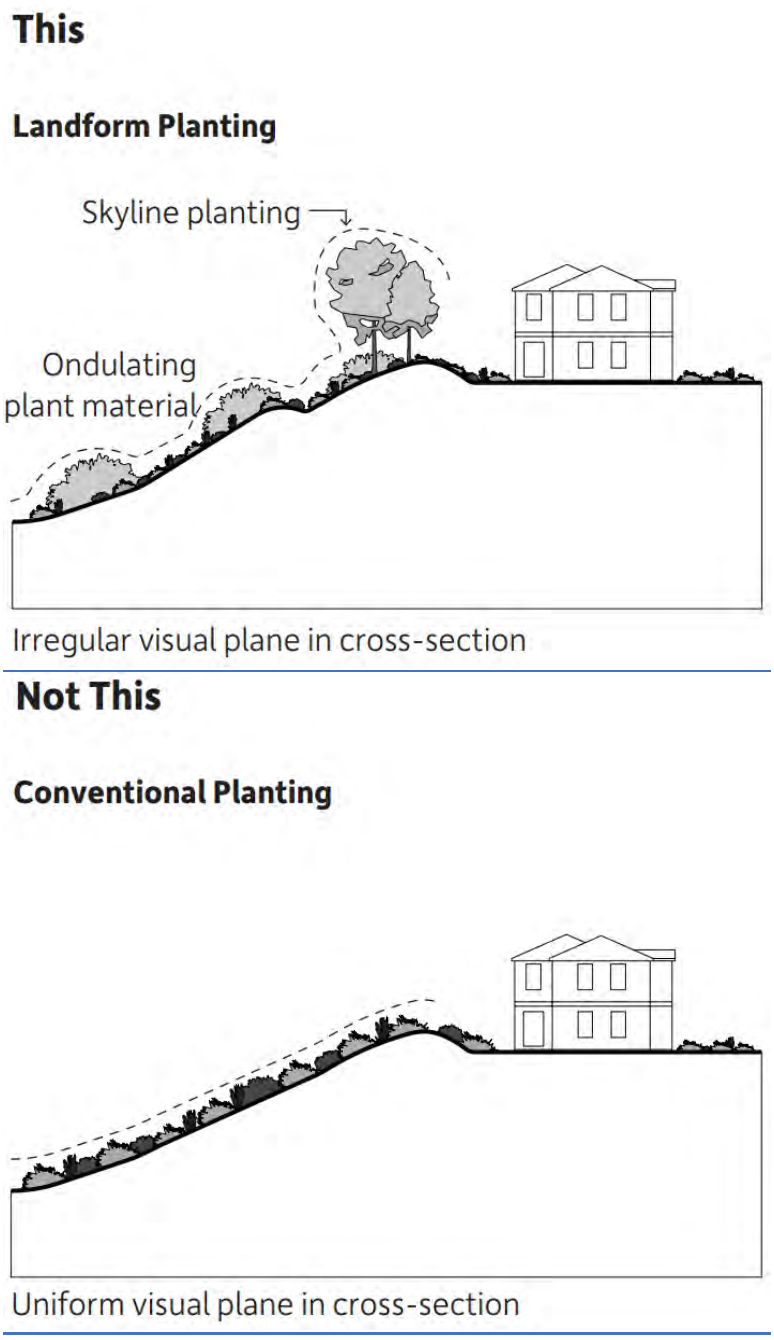


FIGURE 16.24-4
NATURAL LANDFORM PLANTING

~~3. A "vegetative backdrop" shall be maintained by replanting with native trees or the same vegetation that was removed. The vegetation should screen structures to the extent possible at maturity and preserve the appearance of the natural skyline.~~

3. A "vegetative backdrop" shall be maintained by replanting the site with native trees and/or providing the same vegetation that was removed consistent with City landscaping standards. As demonstrated on the project plans, the proposed vegetation shall be sized and

spaced appropriately to screen structures for growth of the species at maturity and to preserve the appearance of the natural skyline.

4. The surface of graded or disturbed slopes with three feet or greater vertical height shall be protected against damage by erosion through the planting *of* deep rooted ground cover as demonstrated on the project plans. Slopes exceeding eight feet in vertical height shall be planted with ground cover and a combination of~~*of*~~ shrubs and trees that have a high "root-to-shoot" ratio. The size of shrubs and trees shall be determined based on the individual project area as deemed appropriate by the department and/or ~~commission~~Planning Commission.

5. Jute mesh or an equivalent shall be required when planting occurs between August fifteenth and April fifteenth, and when determined, as necessary, by a soils engineer and/or licensed landscape architect. Jute mesh shall be used in combination with required plantings, as outlined in the Slope Landscaping guidelines available on the City of Murrieta website for optimal long-term slope stabilization.

6. Indigenous, native vegetation shall be retained and supplemented within canyons and along natural drainage courses where grading does not occur, provided that it conforms with fuel modification and tire prevention plans.

~~7. Common open areas and front and side yards adjacent to a street shall be adequately landscaped and irrigated. The areas shall be provided with native plant materials that blend with the natural character *of* the surrounding landscape.~~

7. Common open areas and front and side yards adjacent to a street shall be landscaped and irrigated consistent with City landscaping and fire protection standards. These areas shall be provided with native plant materials that blend with the natural character of the surrounding landscape.

~~8. In order to protect slopes from soil erosion and slippage and to facilitate revegetation, an automatic irrigation system shall be installed on slopes with planting. Design and operation *of* the irrigation system shall respect the special conditions that exist in hillside situations specific to maintaining slope stabilization and integrity. In all cases, the emphasis shall be toward using plant materials that may eventually not need to be irrigated: therefore, temporary irrigation systems may be used as approved by the city's landscape architect and city engineer. Water and energy conservation techniques shall be utilized (e.g., drip irrigation, alluvial rockscape, etc.) Where irrigation systems are installed above ground, ultraviolet light resistant. brown line or other approved color, shall be used.~~

8. In order to protect *slopes* from soil erosion and failure, and to facilitate revegetation, an automatic irrigation system shall be installed on slopes with planting. Design and operation of the irrigation system shall respect the special conditions that exist in hillside situations specific to maintaining slope stabilization and integrity. In all cases, the emphasis shall be toward using plant materials that may eventually not need to be irrigated: therefore, temporary irrigation systems may be used as approved by the city's landscape architect and city engineer. Water and energy conservation techniques shall be utilized (e.g., drip irrigation, alluvial rockscape, etc.) Where irrigation systems are installed above ground, ultraviolet light resistant, brown line or other approved color, shall be used.

~~9. A permanent fuel modification area shall be required around development projects that are adjacent or exposed to hazardous fire areas for the purpose of fire protection. The fuel modification area shall be maintained by its owners, a homeowners' association, or other public nonprofit agency or conveyed in a public easement. Adequate provisions shall be made for the continual maintenance of these areas and the fire chief may require brush, vegetation, or debris to be removed and cleared consistent with the provisions of Chapter 8.32 of the municipal code. Where feasible, fuel modification areas shall be designated as common open space rather than private open space. The recommended width of the fuel modification area shall be based on applicable building and fire codes and the recommendations *of* the fire chief with consideration given to:~~

~~a. A worst-case Santa Ana wind condition;~~
~~b. The natural ungraded slope *of* the land within the project and in the areas adjacent to the project;~~
~~c. Fuel loading:~~
~~d. Access to the project by fire suppression equipment. and access directly to the fuel modified area, and egress out of the project in case of evacuation;~~
~~e. The on-site availability *of* water that can be used for fire fighting purposes with regard to fire flows, water pressure, and duration:~~
~~f. "Built-in" fire protection within structures (i.e., sprinklers etc.);~~
~~g. Soil erosion and sediment control measures; and~~
~~h. The fire department fuel modification policy document.~~

~~10. Fuel modification areas shall also incorporate soil erosion and sediment control measures to alleviate permanent scarring and accelerated erosion.~~

9. A permanent fuel modification area shall be required around projects that are located within high or very-high fire severity zone, adjacent to a high or very-high fire severity zone, or exposed to hazardous fire areas for the purpose of fire protection. The fuel modification area shall be maintained by its owners, a homeowners' association, or other public nonprofit agency, or conveyed within a public easement. Adequate provisions shall be made for the continual maintenance of these areas and the fire code official may require brush, vegetation, combustible item(s), or debris to be removed, cleared, and maintained, consistent with the provisions of Chapter 8.32 of the Municipal Code. Where feasible, fuel modification areas shall be designated as common open space rather than private open space. The recommended width of the fuel modification area shall be based on applicable building and fire codes and the recommendations of the fire code official with consideration given to:

a. A worst-case Santa Ana wind condition;

b. The natural ungraded slope of the land within the project and in the areas adjacent to the project;

c. Fuel load;

d. All weather access to the project by fire suppression equipment and personnel, access directly to the fuel modified area, and egress out of the project area in case of evacuation;

e. The on-site availability of water that can be used for firefighting purposes with regard to fire flows, water pressure, and duration;

f. "Built-in" fire protection within structures (i.e., sprinklers etc.);

g. Soil erosion and sediment control measures;

h. The fire department fuel modification policy and the Wild Urban Interface Undesirable Plants & Trees list;

i. Fuel modification zones for landscaping as outlined by the California Department of Forestry and Fire Protection.

10. Fuel modification areas shall also incorporate soil erosion and sediment control measures to alleviate permanent scarring and accelerated erosion.

G. Grading.

1. ~~Grading~~*Grading* shall not take place on natural ~~slopes~~*slopes* that exceed fifty (50) percent.

2. ~~Slopes~~*Slopes* created by *grading*~~grading~~ of the site shall not exceed fifty (50) percent or 2:1., ~~without~~Slopes exceeding 2:1, but less than, or equal to 1.5:1, may be considered upon additional analysis by a licensed geotechnical engineer. ~~a soils report and stabilization study indicating a greater permissible slope.~~ ~~Slopes~~*Slopes* shall not exceed thirty (30) feet in height between terraces or benches, except that the Planning C~~c~~ommission may permit ~~slopes~~*slopes* exceeding these dimensions where the ~~slopes~~*slopes* will result in a natural appearance and will not create geological or *erosion*~~erosion~~ hazards. The soils report and stabilization study shall ~~will~~ be subject to third party review prior to approval by the ~~city~~*City*. ~~Refer to the hillside development guidelines (16.24.070) for methods to accomplish this standard.~~

~~3. Structures shall not visually impair ridgeline silhouettes. Structures are not permitted closer to a prominent ridge than fifty (50) feet measured vertically on a cross-section or one hundred fifty (150) feet *horizontally* on a topographic map, whichever is more restrictive. Exceptions to this requirement for public facilities, utilities, and infrastructure necessary to serve the public health, safety, and welfare may be considered by the commission~~

3. In order to help address visual impacts at *Prominent Ridgelines*, use of the combination of natural occurring vegetation (trees/shrubs) and proposed landscaping shall be implemented to screen proposed structures at these locations. Additionally, any required Fuel Modification Zone and California Fire Code standards shall be considered in the design of this screening method blending with the terrain and existing vegetation.

4. ~~Clearing~~*Clearing* and/ or grubbing, excavation, ~~or~~and other earth disturbances shall not be ~~permitted~~initated on ~~hillside areas~~*hillside areas* prior to the issuance of a ~~grading~~*grading* permit., ~~with~~ with the exception of county/state authorized soils remediation operations, drill holes, and exploratory trenches for the collection of geologic and soil data or for weed abatement activities. Trenches are to be ~~properly~~ backfilled and ~~in addition, *erosion*~~erosion~~ treatment provided where ~~slopes~~*slopes* exceed twenty-five (25) percent.

5. Manufactured ~~cut~~*cut* and ~~fill~~*fill* ~~slopes~~*slopes* exceeding ten feet in height which ~~will~~would be either exposed to public view, or are adjacent to environmentally sensitive areas, shall be ~~landform~~*landform* or ~~contour~~*contour* graded, where physically feasible, so that their ultimate appearance will resemble a natural slope. This will include ~~slopes~~*slopes* ~~along~~adjacent to streets and highways, ~~slopes~~*slopes*, adjacent to parks, schools, open spaces, and other public facilities and other prominent ~~slopes~~*slopes*. ~~Refer to the hillside development guidelines (16.24.070) for methods to accomplish this standard.~~

6. ~~Landform~~*Landform* ~~grading~~*grading* shall be used where zero to twenty-five (0-25) percent (~~nonhillside~~non-hillside) ~~slopes~~*slopes* intersect with twenty-five to fifty (25-50) percent (hillside) ~~slopes~~*slopes*. Proper transitioning from manufactured ~~slopes~~*slopes* created by ~~conventional~~*conventional* ~~grading~~*grading* methods to natural ~~slopes~~*slopes* shall be achieved gradually and naturally through the use of radii or irregular curvilinear shapes that will blend into the adjoining topography tangentially and not create abrupt changes.

7. ~~Fill~~*Fill* ~~slopes~~*slopes* shall not be placed perpendicular across a canyon. Straight line ~~cut~~*cut* of~~F~~ ~~fill~~*fill* ~~slopes~~*slopes* shall not be made to appear like a dam. The terminus of the ~~fill~~*fill* shall, instead, be concave in shape to restore the ~~can-yon~~canyon appearance. This concave configuration shall be in combination with the use of substantially flatter ~~slope ratios~~*slope ratios* (4:1, 3.5:1, 3:1~~l~~) at or near the center of this indentation. Symmetrical or unsymmetrical concave configurations shall be used depending upon the adjoining or underlying topographic characteristics.

8. Minimal radius rounding at the edges of ~~cut~~*cut* and ~~fill~~*fill* ~~slopes~~*slopes* is not an acceptable method. ~~Proper~~T~~t~~ransitioning from manufactured ~~slopes~~*slopes* to natural ~~slopes~~*slopes* shall be achieved gradually and naturally through the use of radii or irregular curvilinear shapes that will blend into the adjoining topography tangentially and not create abrupt changes.

9. In the planning, design, and development of public utilities and infrastructure, every reasonable effort as demonstrated shall be made to minimize ~~grading~~*grading* impacts and incorporates a design that follows~~harmonize with~~ the natural ~~contours~~*contours* and character of the land.

10. Side yard ~~slopes~~*slopes* and ~~low (less than twenty (20) feet in height)~~ rear yard ~~slopes~~*slopes* (less than twenty (20) feet in height) whose view is blocked by future structures need not have landform design applied.

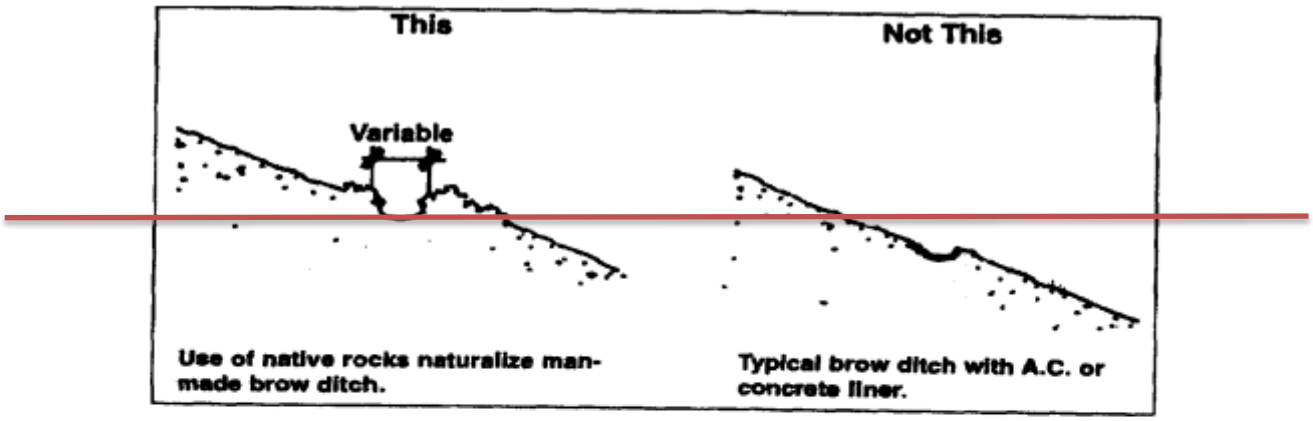
11. ~~Grading~~*Grading* shall be phased so that prompt revegetation or construction will control *erosion*~~erosion~~. Where possible~~,~~ only those areas that will be built on, resurfaced, or landscaped shall be disturbed. Top soil shall be stockpiled during the rough ~~grading~~*grading* phase and ~~used~~utilized on ~~pads~~*pads* or revegetated habitat areas, upon the recommendation of the soils engineer. ~~Refer to the hillside development guidelines for methods to accomplish this standard.~~

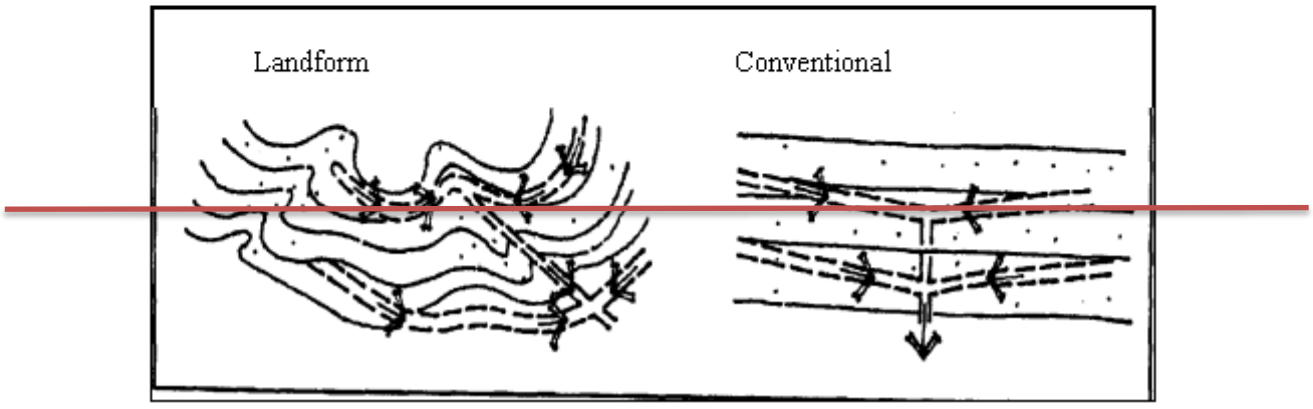
12. Applicable requirements of the ~~city~~*City* and state shall be complied with in conjunction with the latest ~~a~~ National Pollution Discharge Elimination System (NPDES) permit prior to the issuance of a ~~grading~~*grading* permit. This ~~, which~~ may include, but is not limited to, a Grading Plan, an *Erosion*~~Erosion~~ Control Plan, Best Management Plan (During Construction and Post-Construction Phases), ~~(including Notice of Intent to be filed with the state Water Resources Control Board)~~ and Construction Monitoring Program.

H. Drainage.

1. Debris basins, energy dissipating devices, and down drains shall be provided, where necessary, to reduce *erosion*~~erosion~~ when ~~grading~~*grading* is undertaken in the ~~hillside areas~~*hillside areas*. Natural drainage courses ~~should~~shall be retained where health and safety can be maintained~~are not jeopardized~~. Drainage courses retained in a natural state shall be protected from ~~grading~~*grading* activity. In instances where a crossing is required, ~~.~~ a natural crossing and bank protection shall be a ~~preferred~~design option over steel and concrete systems. Where drainage structures are required, they shall be naturalized with coloration, plant materials, native rocks and/or concealment with ~~grading~~*grading* techniques.

2. Drainage channels, slope drainage devices, interceptor drains, and terrace drains ~~should~~shall be placed in less visible locations as demonstrated on the project plans and evaluated for erosion. Down drains shall be hidden in swales diagonally or curvilinear across a slope face. In this manner they will be built into the overall landform of the slope. They ~~should~~shall also receive a naturalizing treatment, which may include native rock, colored concrete, and/or landscaping so that the structure appears as an integral part of the environment. In all cases, a concrete liner shall be used in addition to a naturalizing treatment as demonstrated on the project plans and evaluated for erosion.





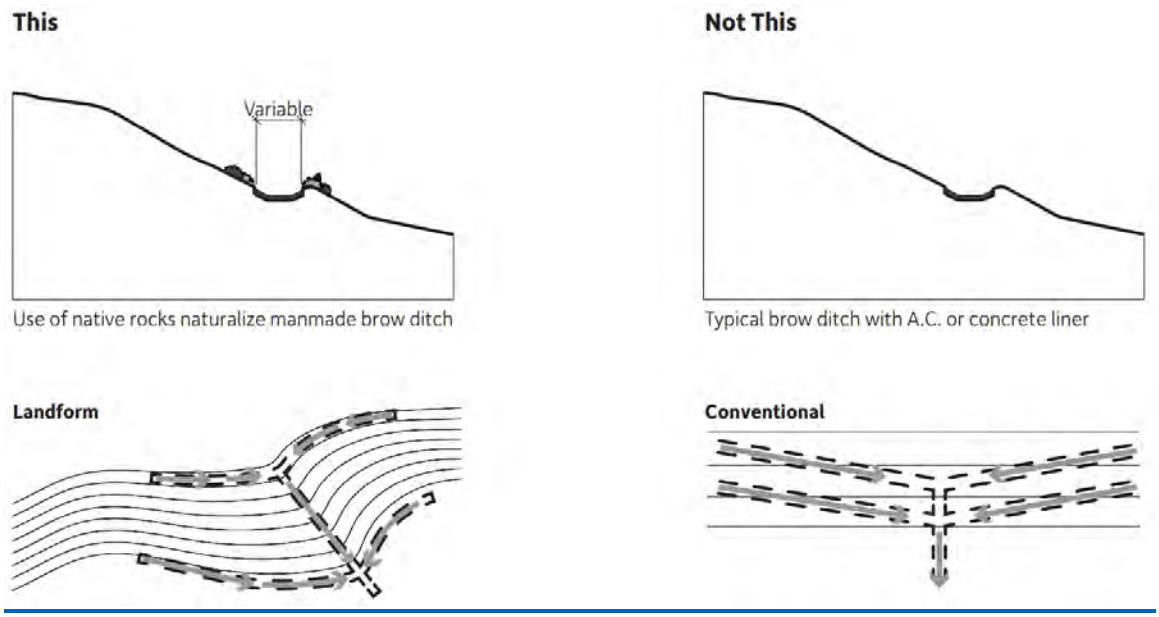


FIGURE 16.24-5
NATURALIZED VERSUS CONVENTIONAL LANDFORMING

3. Cross lot drainage usage shall be minimized. In situations where this is not possible using conventional design, optional techniques (e.g., single loaded streets, reduced densities, etc.) shall be considered. Use of cross lot drainage may be considered only after demonstrationdemonstrating that this method will not adversely affect the proposed lots or adjacent properties, and that it is absolutely required in order to minimize the amount of gradinggrading which would result with conventional drainage practices.

4. Where cross lot drainage is utilized, the following shall apply:

a. Project Interiors. One lot may drain across one other lot if a maintenance easement is provided within either an improved, open "V"-swale gutter which has a naturalized appearance, or within a closed drainage pipe that shall be a minimum twelve (12) inches in diameter. This drainage shall be conveyed to either to a public street or to a drainage easement. If drainage is conveyed to a private easement, it shall be maintained by its owners or a Homeowners' Association; otherwise, the drain agedrainage shall be conveyed to a public easement. The easement width shall be determined on an individual basis and shall be dependent on appropriate hydrologic studies and access requirements. Irrigation lines shall be placed above swales to minimize the impacts in the event of a system failure. When irrigation lines cross an open "V"-swale they shall be placed into a galvanized pipe, which is to be clamped to the soil on both sides of the swale subject to the review of the *City Engineer*directoror designee.

b. Project Boundaries. On-site drainage shall be conveyed in an improved open "V"-swale gutter, which has a naturalized appearance, or within an underground pipe in either a private drainage easement, that is to be maintained by its owners or a homeowners' association, or it shall be conveyed in a public easement. The easement width shall be a minimum oftenof ten feet. A greater width may be determined necessary on an individual basis and shall be dependent on appropriate hydrologic studies and access requirements.

I. Public Safety.

1. Residential developments shall be constructed in a manner so as to reduce the potential for spread of ~~brushfires~~wildfires as follows:

a. In the case of a conflict where more restrictive provisions are contained in the adopted and/or locally adopted versions of the California Building Code,~~uniform building code~~ or in the California Fire Code~~uniform fire code~~, the more restrictive provisions shall apply.

b. Roofs shall be covered with noncombustible materials (e.g., clay tile, concrete shake, tile, or similar materials). Open ends shall be stopped in order to prevent bird nests, or other combustible material, lodging within the roof and to prevent entry of flames.

c. Exterior walls and fences shall be surfaced with noncombustible or flame resistive materials. Alternate surface materials may be approved subject to the approval of the fire code official~~chief~~ and b~~B~~uilding o~~O~~fficial. Except as otherwise provided herein, exterior walls shall extend to the ground.

d. Balconies,~~.~~ patio roofs, eaves and other similar overhangs shall be of noncombustible or flame resistive materials.

e. Plastic webbing, split or whole bamboo, reed or straw-like materials, corrugated plastic or fiberglass materials, and similar flammable materials are not permitted for use on patio covers.

f. Vents for attics and underfloor areas shall be designed and located to minimize the likelihood of spreading of fire.

g. Chimneys shall be provided with approved spark arresters.

2. Adequate water supply and pressure for proposed development shall be required in compliance with the adopted California Fire Code~~department Standards~~.

3. The fire code official~~chief~~ shall require brush, vegetation, or combustible debris to be removed and cleared within ten feet on each side of every roadway and access drive, and may enter upon private property to do so. This requirement shall not apply to single specimens of trees, ornamental shrubbery, or cultivated groundcover provided they do not form a means of readily transmitting fire.

4. If the fire code official~~chief~~ determines in a specific case that difficult terrain, danger of *erosion*~~erosion~~, or other unusual circumstances make strict compliance with the clearance of vegetation undesirable or impractical, he or she may suspend enforcement thereof and require reasonable alternative measures designed to advance the purposes of this chapter.

5. Site design shall provide for all-weather equipment access to publicly maintained slope areas for maintenance and emergency purposes. Secondary access shall be provided, or a reasonable alternative method may be considered by the fire code official to ensure public safety.

6. Structures and facilities shall be restricted in geologically hazardous areas.

7. Special construction features shall be required in the design of structures where site investigations ~~con-firm~~confirm potential geologic hazards.

8. Development not on public sewers shall be permitted only after site specific investigations have been conducted that demonstrate the soils are suitable for on-site wastewater disposal and the disposal of wastewater will not degrade the subsurface water quality.

9. Due to the hazard associated with saturated soils in areas of steep ~~slopes~~*slopes*, irrigation systems in critical areas that have the potential for failure in the judgement of the ~~city engineer~~*City Engineer* or designee shall be required to be equipped with potentiometers to make sure that the systems will not operate when there is sufficient moisture in the soil.

16.24.070 Hillside Development Guidelines.

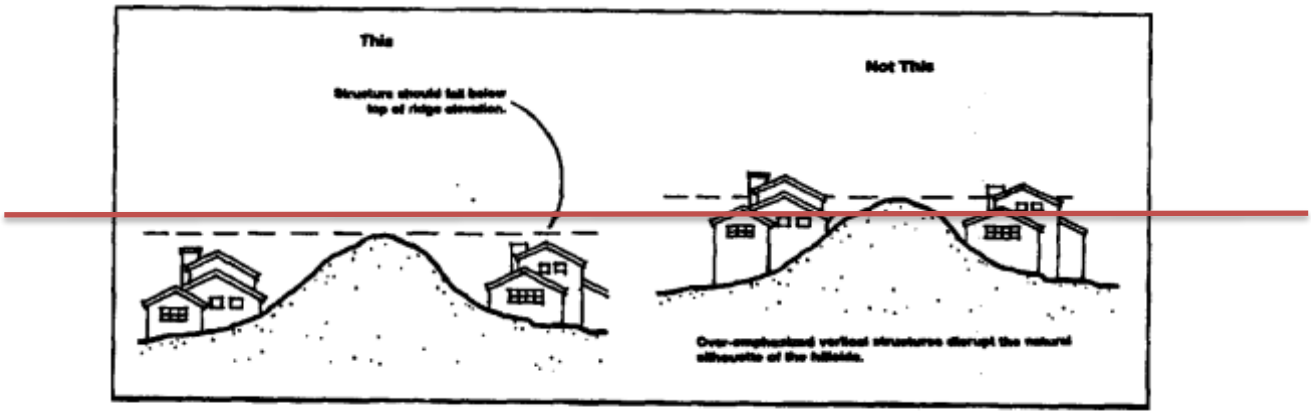
The hillside development guidelines are intended to illustrate and amplify the appropriate development concepts for designated ~~hillside areas~~*Hillside Areas*. The guidelines are not intended to be an exhaustive list of standards, but rather policy statements, to encourage development that is sensitive to the unique characteristics common to hillside properties. The guidelines allow for flexibility and they encourage creativity, especially where a specific plan is prepared. However~~How-ever~~, the objective development standards provided in Section 16.24.060 shall be considered as a "benchmark" against which hillside development proposals will be reviewed for compliance with the purposes of this chapter.

The guideline's purpose is to allow for innovative or alternate methods of design in ~~hillside area~~*Hillside Areas*. Innovation is encouraged as long as the end result is one that respects the natural character of the hillside and is consistent with the purposes of this chapter and the goals, objectives and policies of the *City's* G~~g~~eneral P~~p~~lan.

Conformance with the guidelines ~~will~~shall be incorporated in the preparation and approval of subdivisions and individual site developments. During the application review process, the ~~city~~*City* will evaluate the consistency of the proposal with the purposes of this chapter. Prior to the start of the design effort, it is recommended that the project design team members read the *City's* G~~g~~eneral P~~p~~lan and become familiar with its policies.

A. Site Design.

1. Design of building sites ~~should~~shall be sensitive to the natural terrain. Structures ~~should~~shall be located in a way that minimizes ~~grading~~*grading* and preserves natural features (e.g., prominent knolls, ridgelines, etc.)

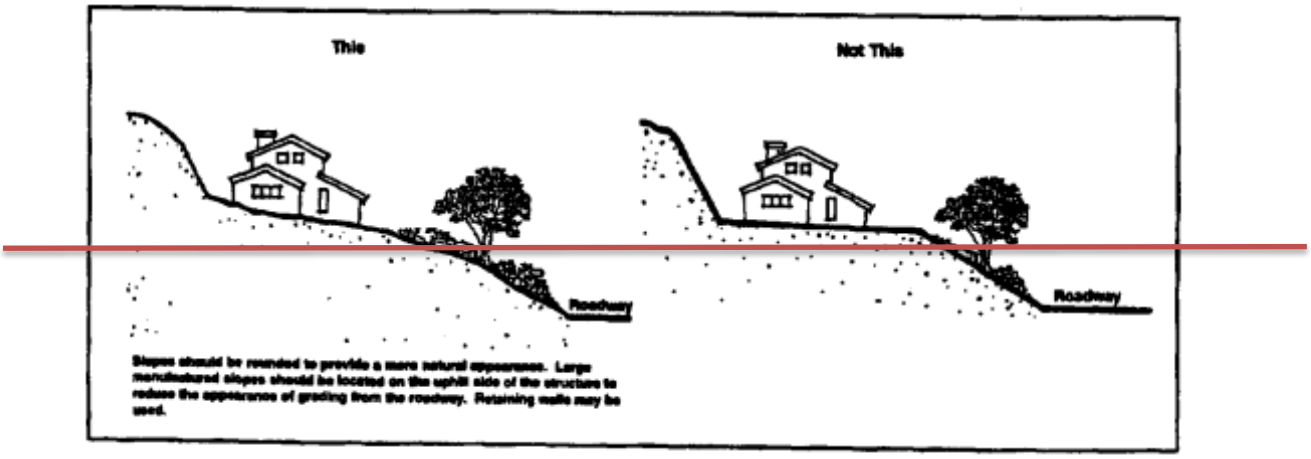


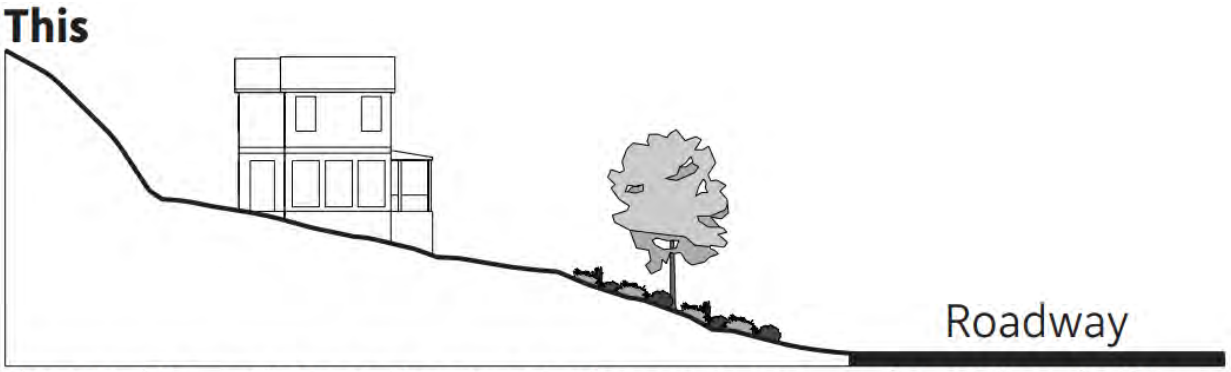
2. Preserve views of significant visual features. See Section 16.24.110 "Prominent Ridgelines Map.", ~~the hillside overlay zone map as seen from both within and outside a hillside development. When designing lots and plotting homes, the following provisions should be considered:~~

~~a. Dwellings should be oriented to allow view opportunities, even though views may be limited. Residential privacy should not be unreasonably sacrificed; and~~

~~b. A significant public vista, skyline, open space corridor, or vertical open space corridor as seen from an interstate, an arterial, or a secondary street should be a major design element in the site planning process.~~

3. Where possible, graded areas should be designed with manufactured slopes located on the uphill side of structures.





Slopes should be rounded to provide a more natural appearance. Large manufactured slopes should be located on the uphill side of the structure to reduce the appearance of grading from the roadway. Retaining walls may be used.

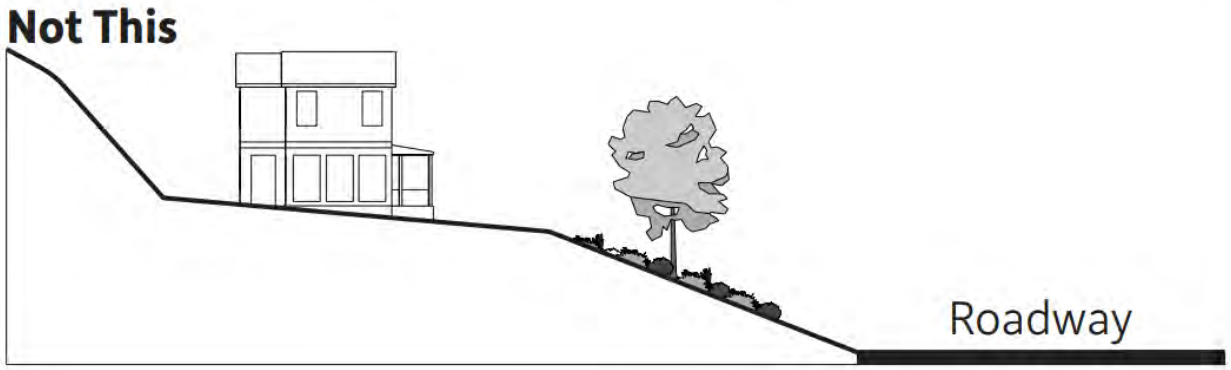
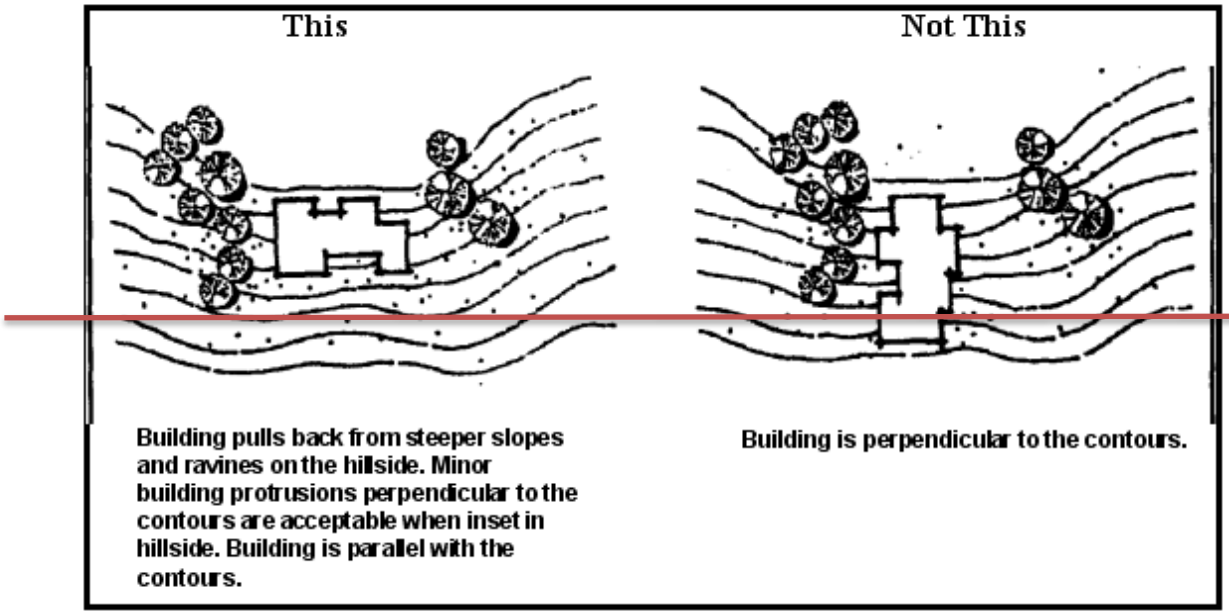


FIGURE 16.24-6
EXHIBIT 2 - BUILDING PLACEMENT AT A SITE

4. To the extent possible, ~~,~~ the width of a building, measured in the direction of the slope, ~~should~~shall be minimized ~~in order to limit the amount of cutting and tilling and to better "fit" the house to the natural terrain~~. The degree of slope will dictate how this is accomplished and shall be demonstrated on the project plans (See Figure 16.24-6 “Exhibit 3 - Building Placement at a Site.”



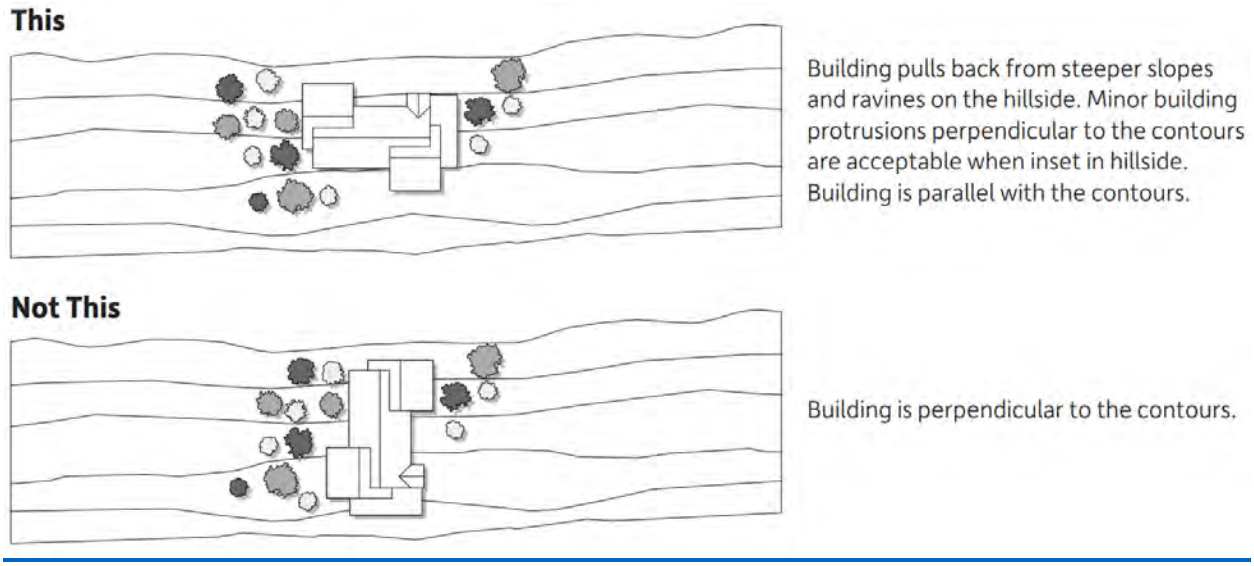
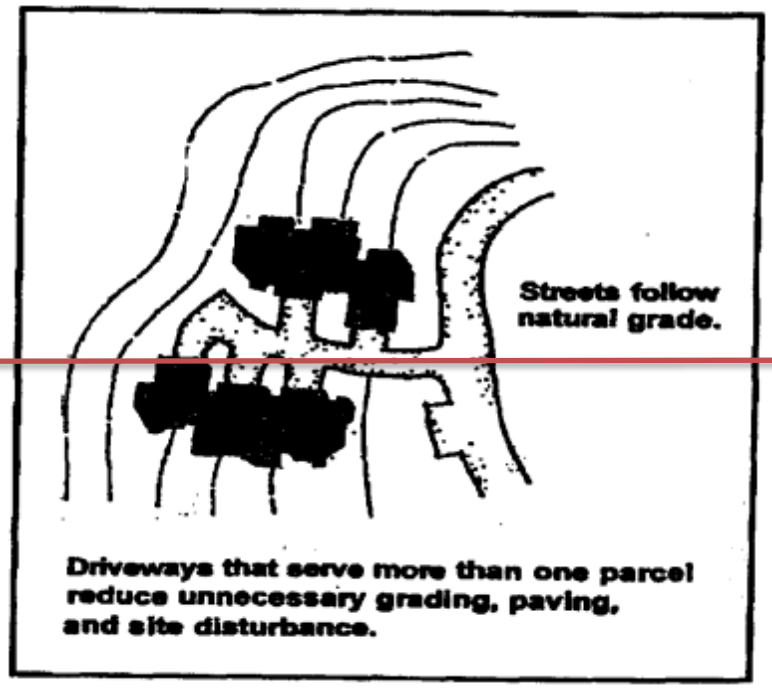


FIGURE 16.24-6
EXHIBIT 3 - BUILDING PLACEMENT AT A SITE

5. Clustering of development is encouraged. ~~in hillside areas regardless of size. This is particularly important in environmentally sensitive areas in order to reduce the potential for tire hazard, erosion and excess runoff, and to preserve existing natural features and open space.~~

B. Driveways and Roadways.

1. Driveways that serve more than one parcel are encouraged as a method of reducing ~~unnecessary grading~~*grading*, paving, and site disturbance.



Driveways that serve more than one parcel reduce unnecessary grading, paving, and site disturbance.

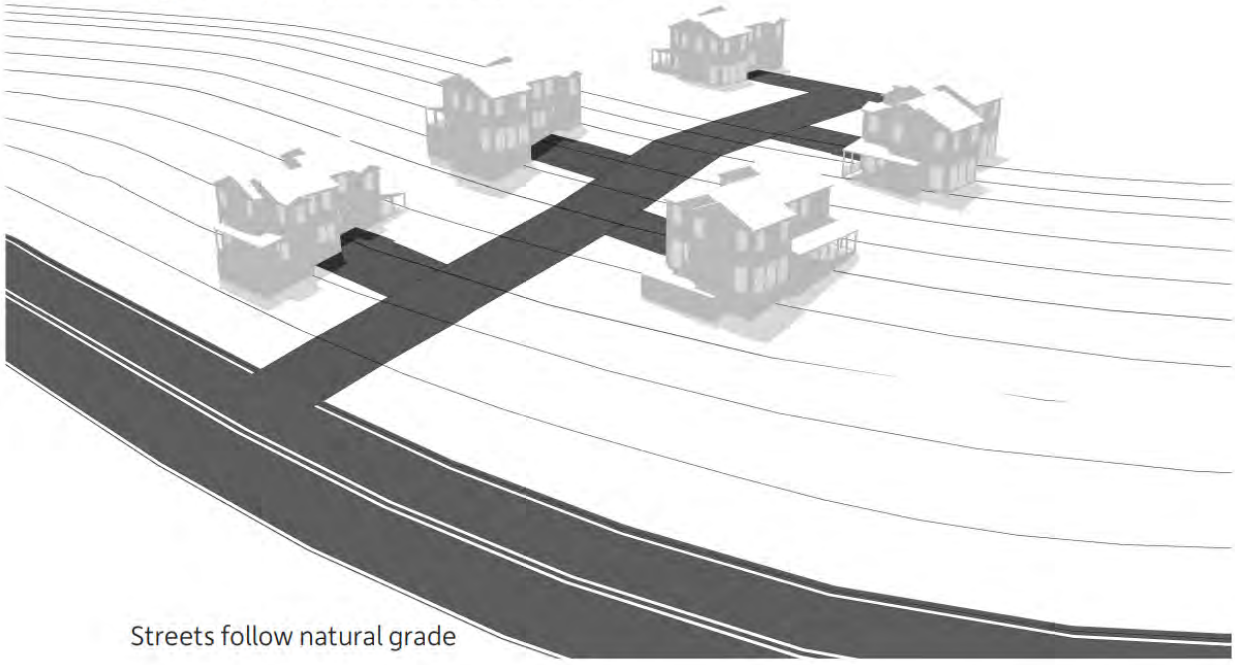


FIGURE 16.24-7
ROADWAY PLACEMENT AT A SITE

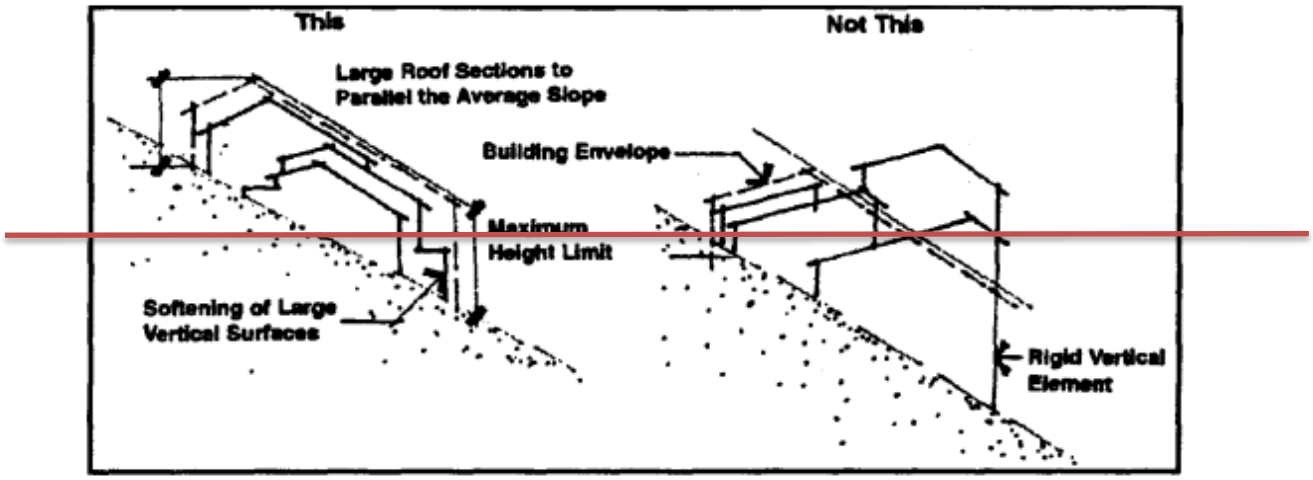
C. Architecture.

1. The form, mass, and profile of the individual buildings and architectural features shall~~should~~ be designed to blend with the natural terrain and preserve the character and profile of the natural slope. Techniques ~~that should be considered~~ to accomplish this include:

a. Detaching the garage from the residence;~~:~~

b. Integrating retaining walls into garage walls on sloping lots to reduce ~~grading~~*grading* and minimize visibility of walls;~~:~~ and

c. Including architectural enrichments and variations in roof massing. Roofs ~~should have~~shall incorporate low profiles (for example 3:12 slope) to minimize their visual impact. On sloping land, the roof pitch ~~should~~shall follow the slope of the hill-side, instead of being perpendicular to the hillside or opposing hillside slope. ~~Care should be taken to avoid the use of gabled ends on downhill elevations.~~Gabled ends shall not be used on downhill elevations. Upper stories ~~should~~shall not be cantilevered out of the opposite direction of the hillside slope.



2. The design of the structure ~~should~~shall give consideration to the lot's size and configuration in order to avoid the appearance of ~~overbuilding~~building scale and to minimize the blocking of views as demonstrated on the project plans. For example, within a development, the majority of the units should not be designed with minimum setback to minimum setback. See additional criteria as provided under Section 16.08.030 “Single-family Residential Design Standards and Design Features” and Section 16.08.040 “Multi-family Residential Design Standards”.

~~3. Large expanses of a single material on walls, roofs, or paving areas should be avoided. Create interesting, small scale patterns by breaking up building mass, varying building materials, and through design and placement of windows and doors. Building plans and elevations should be varied throughout a development to avoid a monotonous "cookie-cutter" look.~~

D. Walls and Fences.

~~1. Walls and fences can be used to define a sense of place and create an attractive appearance. However, walls should not dominate a view, and their height should be limited adjacent to a street or trail or within a rear yard. Extensive landscaping should be used to~~

~~reduce the visual impact of walls. In addition, street front walls should incorporate varying design and natural materials. The use of open view fencing is encouraged, so long as adequate public safety and residential privacy are maintained.~~

1. In *Hillside Areas* with slopes greater than 25 percent and in order to maximize view opportunities, fencing on sloped areas shall incorporate the use wrought-iron, tubular steel, plexi-glass (for noise attenuation or aesthetics), or similar materials consistent with the maximum height criteria as provided under Section 16.22 “Fences, Hedges, and Walls.” Masonry walls may be provided at locations that contain refuse and recycling enclosures, playgrounds, or similar.

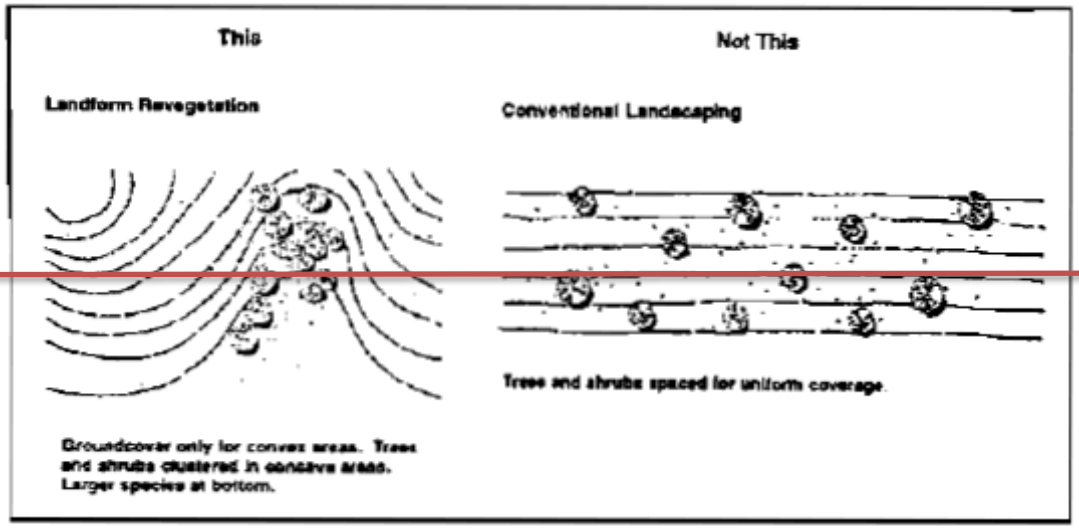
2. When possible, walls and fences ~~should~~shall be designed as an integral part of the building in order to minimize the visual impact on surrounding areas.

~~3. Visually obtrusive solid fencing should be avoided in highly visible areas (unless required for sound attenuation), with the preference being for open (wrought iron) fencing.~~

E. Landscaping.

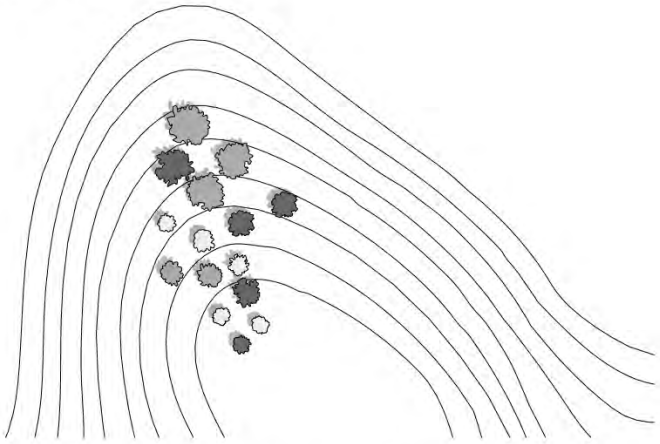
1. Street trees ~~should~~shall be provided in select areas to enhance the natural character of the areas and to create a more rural appearance. Street tree species selection, and spacing of trees, ~~should~~shall be sensitive to the context in which they are planted. Species selection shall be considered to minimize potential impacts to infastructure~~should also be respectful of potential impact on infra-structure~~ improvements (i.e. root damage to streets, sidewalks, etc.).

2. ~~Slopes~~*Slopes* ~~should~~shall be designed with informal clusters of trees and shrubs to soften and vary the slope planes, consistent with ~~landform~~*landform* ~~grading~~*grading* concepts.



This

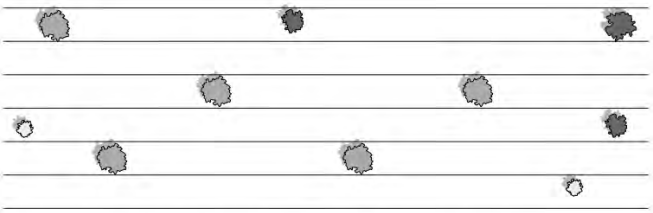
Landform Revegetation



Groundcover only for convex areas. Trees and shrubs clustered in concave areas. Larger species at bottom.

Not This

Conventional Landscaping



Trees and shrubs spaced for uniform coverage.

FIGURE 16.24-8
BUILDING ENVELOPE ON SLOPE

F. Grading.

There are three distinct types of ~~grading~~*grading* proposed in these guidelines, each with a unique quality, and each with an individual and appropriate application as determined by the *City Engineer* or designee. Larger sites will most likely incorporate all three concepts in various parts of the plan.

1. Minimal Grading. This is typically used for large lot single family homes, custom homes with variable foundations that conform to the existing ~~slopes~~*slopes*, and other uses that utilize

the least amount of ~~grading~~*grading* in order to get the facility and structures built. This technique embraces the following concepts:

a. ~~Grading~~*Grading* ~~should~~shall be limited to individual flat graded pad areas for residential building sites. ~~Grading~~*Grading* ~~should~~shall be limited to only the required building areas and adjacent outdoor amenities in steep ~~hillside areas~~*hillside areas*;

b. Foundation systems that require little or no ~~grading~~*grading* are encouraged, forcing the architecture to ~~con-form~~conform to the land rather than the land to conform to the dwelling:

~~c. Roadways, driveways, and individual building pads should be designed to conform with the contours and to attempt to daylight in the center of the road or building pad to ensure a minimum cut and fill situation; and~~

c. *Cut* and *fill* lines delineating the grading activity whereby *cut* areas adjoin next to *fill* areas shall be situated outside of areas where differential settlement is not desirable (e.g., roadways, building pads, driveways, etc.).

d. The balancing of ~~grading~~*grading* is the concept to minimize~~s~~ the ~~amount~~volume of cubic yards of earth excavated and filled.

2. Contour Grading. This concept results in post-development landforms that exhibit many of the characteristics present within natural landforms. ~~Contour~~*Contour* ~~grading~~*grading* is typically used in situations where conventional, terraced, ~~grading~~*grading* with benches and ~~slopes~~*slopes* might be used but a "softened" ~~grading~~*grading* look is desired. This would be desirable for areas that are limited in public view (i.e. concealed rear yards). Typically, ~~contour~~*contour* ~~grading~~*grading* can reduce required ~~cut~~*cut* and ~~fill~~*fill* volumes as compared with traditional, terraced, ~~grading~~*grading*. The design elements associated with this type of ~~grading~~*grading* include: (See Figure ~~3-9~~16.24-9 “Contour Grading”)

a. The use of horizontal and vertical curve variations for slope banks creating a curvilinear pattern;

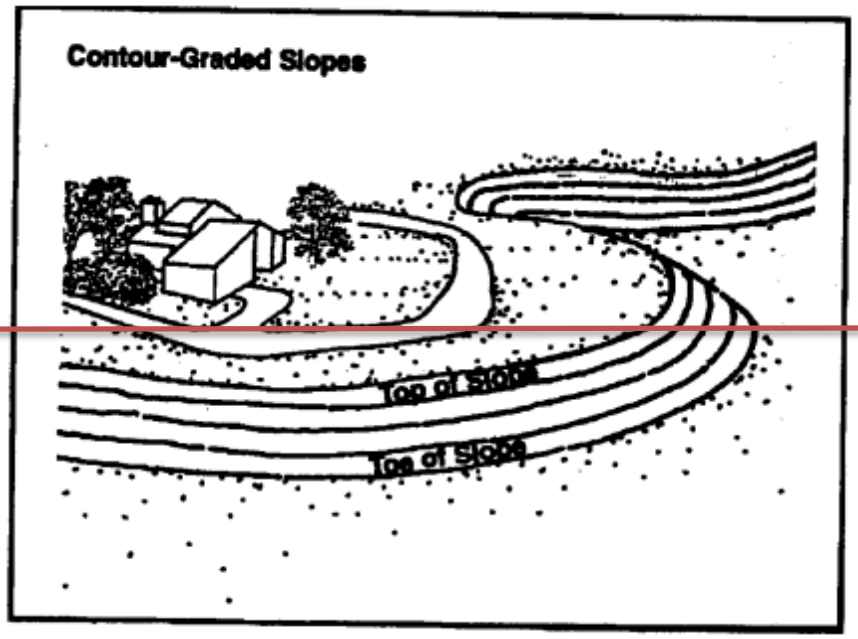
b. Post-development landforms that exhibit natural terrain characteristics (without the heavy modeling effects of ~~landform~~*landform* ~~grading~~*grading*);

c. A general rounding of ~~slopes~~*slopes* at slope intersections and transition zones with natural grade;

d. ~~Pad~~*Pad* configurations that are curvilinear; and

e. ~~Slopes~~*Slopes* that are designed with ~~contour~~*contour* ~~grading~~*grading* techniques (e.g., the location of ~~slopes~~*slopes* behind structure (not in side yards), ~~slopes~~*slopes* in hidden locations, or ~~slopes~~*slopes* less than ten feet in height).

~~**FIGURE 3-9**~~
~~**CONTOUR GRADING**~~



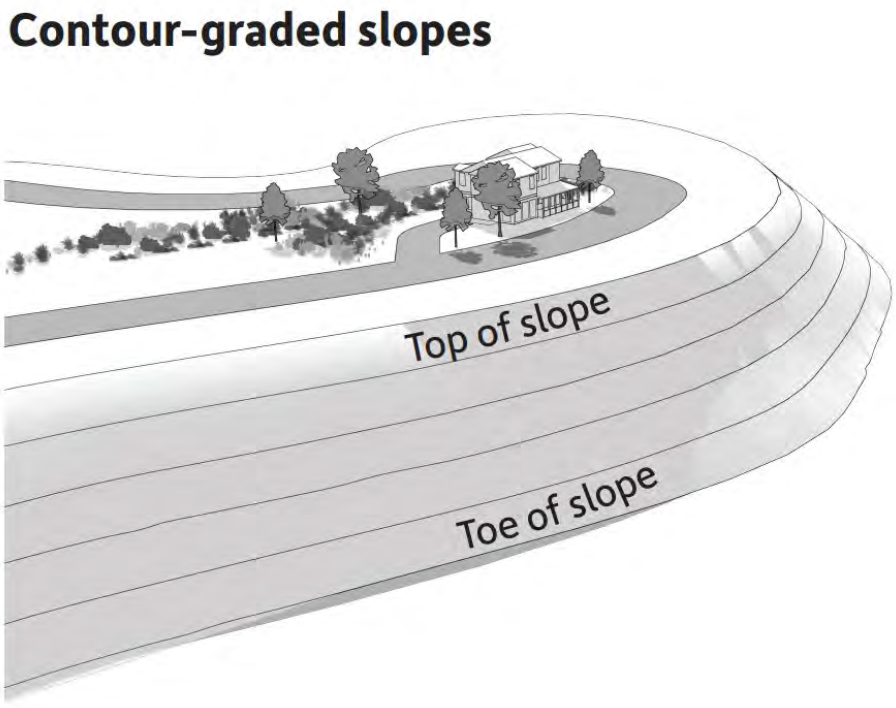
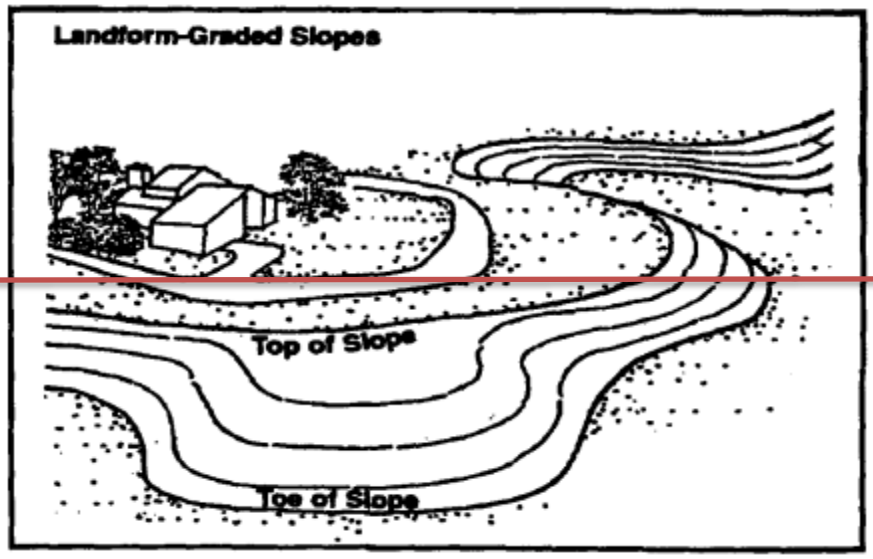


FIGURE 16.24-9
CONTOUR GRADING

~~FIGURE 3-10~~
~~LANDFORM GRADING~~



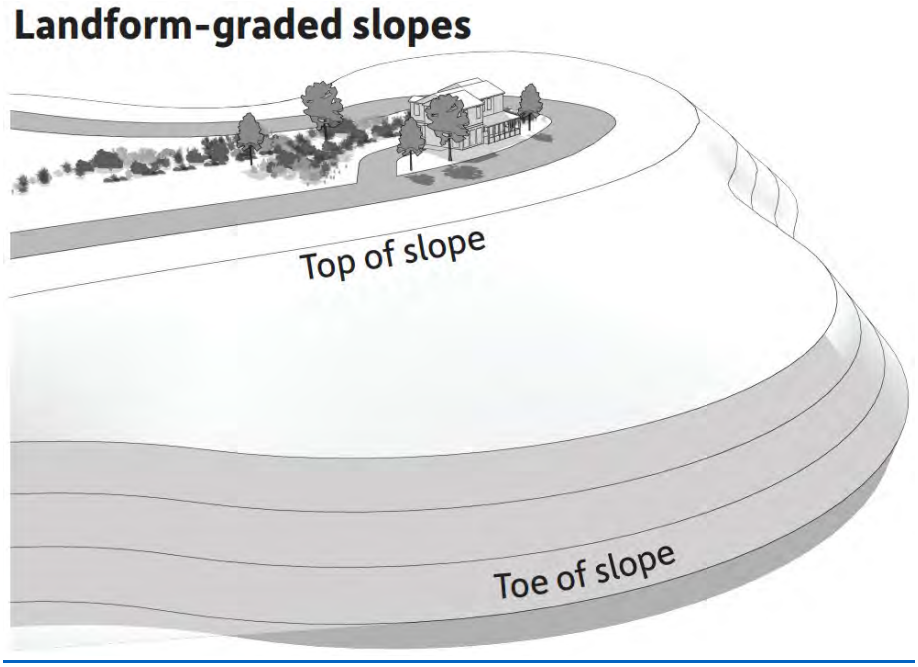


FIGURE 16.24-10
LANDFORM GRADING

3. Landform Grading. Graded ~~slopes~~*slopes* in this category will replicate the irregular shapes of natural ~~slopes~~*slopes*. ~~Landform~~*Landform* ~~grading~~*grading* techniques ~~should~~shall be used whenever ~~slopes~~*slopes* are created that will be open to public view. ~~This is particularly true for slopes that exceed ten feet in height.~~

The intent of these ~~grading~~*grading* guidelines~~,~~ is to incorporate the basic principles of the ~~landform~~*landform* ~~grading~~*grading* concept as the preferred method in the design and construction of hillside development projects. ~~so that they w ill be in harmony with the natural~~

~~topography and reflect natural plant distribution patterns.~~ (See Figure ~~3-10~~16.24-10 (Landform Grading))

~~Landform~~*Landform* ~~grading~~*grading* techniques ~~embrace~~shall incorporate the following ~~concepts~~features:

a. Land plans ~~should~~shall flow with the natural topography rather than against it. This means that street ~~pat terns~~patterns and building ~~pad~~*pad* configurations shall follow the underlying topographic features rather than cutting across them~~:~~;

b. Landform graded ~~slopes~~*slopes* are characterized by a continuous series of concave and convex forms interspersed with mounds that blend into profiles with varying slope gradients and with significant transition zones between ~~man-made~~*man-made* and natural ~~slopes~~*slopes*;

c. ~~Pad configurations are irregular.~~ Slope ~~down-drain~~drainage devices shall either be placed to follow the natural topographic lines of the ~~slopes~~*slopes*, or shall be ~~are tucked away~~located in ~~special S~~swale and berm combinations in order to conceal the drains from view. Exposed segments in visible areas, as determined by the *City Engineer*, shall be~~are~~ treated with natural rock ~~for a more aesthetically pleasing appearance~~;

d. ~~The~~This technique ~~should~~shall be used wherever possible to provide for a variety of ~~both~~ slope percentage, slope direction, and topographical detailing in a three-dimensional, undulating~~.~~ pattern similar to existing terrain~~:~~; and

e. Manufactured ~~cut~~*cut* and ~~fill~~*fill* ~~slopes~~*slopes* ~~exceeding~~in excess of ten feet in height that will be either exposed to permanent public view, or are adjacent to environmentally sensitive areas, ~~should~~shall be designed with features characteristic ~~of~~of natural ~~slopes~~*slopes*.~~,~~ This design shall be implemented, ~~where physically feasible~~ as determined by the *City Engineer*, so that ~~their~~the ultimate appearance will resemble a natural slope. This ~~will include~~is applicable to, but not limited to, ~~slopes~~*slopes* along streets, ~~and~~ highways, adjacent to parks, schools, open spaces, ~~. other~~ public facilities, and other prominent and visible ~~slopes~~*slopes*.

4. The following ~~basic grading~~*grading* guidelines and techniques serve to implement preferred ~~landform~~*landform* ~~grading~~*grading* techniques and to ~~help avoid unnecessary~~eliminate or minimize ~~cut~~*cut* and ~~fill~~*fill*:

a. ~~Cuts~~*Cuts*. When convex shaped natural features. (e.g., protruding minor landforms) are ~~cut~~*cut*, the residual landform ~~should~~shall be in a form to maintain positive and resemble the original *slope*. ~~not be a flat slope face, but rather should be restored to resemble the original. This will require more than just rounding at the edges but, in effect, reconfiguring it so the final result will give the appearance of a protruding ridgeline.~~

b. Use of variable ~~slope ratios~~*slope ratios*. ~~Because Landform grading designs require the use of variable slope ratios at greater than 2:1 and may create valleys or concave indentations on building pad areas, they may result in loss of usable area. In addition, engineering and construction costs may increase. Be-cause of this, segments of a cut or fill slopes may be designed with variable slope ratios less than 2:1, but not less than 1.5: I within the following guidelines and subject to third party review at the applicant's expense:~~ Because landform grading designs require the use of variable *slope ratios*, this may result in loss of usable area near building *pads*. Therefore, only *cut slopes* may be steeper than 2:1, but not steeper than 1.5:1 and shall meet the following guidelines:

1) A geotechnical engineer shall certify that ~~slopes~~*slopes* will meet standard stability requirements;

2) A licensed landscape architect shall certify the plantability of the slopes, with an emphasis on the slopes steeper than 2:1; and

3~~2~~) The overall ratio from top to toe will be 2:1 or flatter; and

4~~3~~) Ratios flatter than 2:1 will also be used in the slope design.

c. ~~Grading~~*Grading* operations ~~should be planned~~shall occur to avoid the rainy season, October fifteenth (15th) to April fifteenth (15th~~l 5th~~). ~~Grading~~*Grading* permits shall only be issued when a plan for *erosion*~~erosion control~~ and ~~silt retention~~sediment control has been approved by the ~~city~~*City* without regard to time of year. Additionally, those projects also requiring a Storm Water Pollution Prevention Plan (SWPPP) shall obtain approval of the SWPPP prior to any grading permit issuance.

d. ~~A r~~Rounded and smooth transitions ~~should be made~~shall occur where ~~when the planes of man-made~~man-made and natural ~~slopes~~*slopes* intersect. Where ~~cut~~*cut* or ~~fill~~*fill* conditions are created, ~~slopes~~*slopes* ~~should~~shall be varied. ~~rather than left at a constant angle or create an unnatural, rigid, ``engineered" appearance.~~The angle of a graded *slope*~~slope should~~shall be gradually adjusted to the angle of the natural terrain.

e. Manufactured ~~slopes~~*slopes* adjacent to roadways shall be consistent with the ~~landform~~*landform* ~~grading~~*grading* and revegetation techniques. ~~where physically feasible to create visually interesting and pleasing streetscapes. The higher the slope becomes, the more important the modeling effect of landform grading becomes.~~

~~f. Top of slope berms shall be used to eliminate the possibility of drainage sheet flow over the slope that would potentially cause an unstable condition. Tops of slopes should be rounded in conformance with landform grading techniques, or increased in size to reduce the visual impact of the back of a home.~~

f. *Slopes* shall implement drainage measures as detailed within Sub-article 11 of the City of Murrieta Grading Manual.

~~G.~~**G. Drainage.**

1. Natural drainage courses shall~~should~~ be preserved and enhanced to the ~~extent possible~~maximum extent practicable. ~~Rather than filling them in, drainage features should be incorporated as an integral part of the project design in order to enhance the overall quality and aesthetics of a site, to provide attractive open space vistas, and to preserve the natural character of the site. Encourage the use of natural drainage courses as natural boundaries between neighborhoods.~~Rather than eliminate existing natural drainage features and courses, preservation of existing natural drainage features and courses is encouraged. Moreover, the National Pollutant Discharge Elimination System (NPDES) Permit requires this of all projects, to the maximum extent practicable.

2. ~~Storm drainage runoff resulting from project development should be minimized. Where possible, flood control plans for storm water should encourage the detention of water for percolation in to the ground-water to conserve it for future uses and to mitigate downstream flooding.~~The NPDES Permit also requires project's stormwater runoff to be retained onsite via infiltration to the maximum extent practicable under California law. Runoff not retained onsite

shall be conveyed offsite per general standards and practices, to the satisfaction of the *City Engineer*.

16.24.080 Exceptions.

A. No Grading Permit Required. A grading permit is not required if the project meets the criteria as provided under Section 15.52.040 (Permit Exceptions). Additionally, flatwork, pools, or spas, which results in the disturbance of 50 cubic yards or less, does not require a grading permit. For the purpose of this section, flatwork is hardscaping (such as concrete or pavers) for patios, walkways, etc. All other activities resulting in the disturbance of 50 cubic yards or less (excluding those areas that are identified within Section 16.24.060(G) (Grading)), shall require the applicant to provide a statement to that effect, which shall be filed with the City Engineer including the following information: parcel boundaries, pad elevations, on or off-site existing grade elevations, vehicular access to and from the project site with both private and public roadways, existing utilities, and, if applicable, septic system location(s). The plan may be prepared on a topographic map drawn at a scale as large as one (1) inch to one-hundred (100) feet subject to the satisfaction of *City Engineer*.

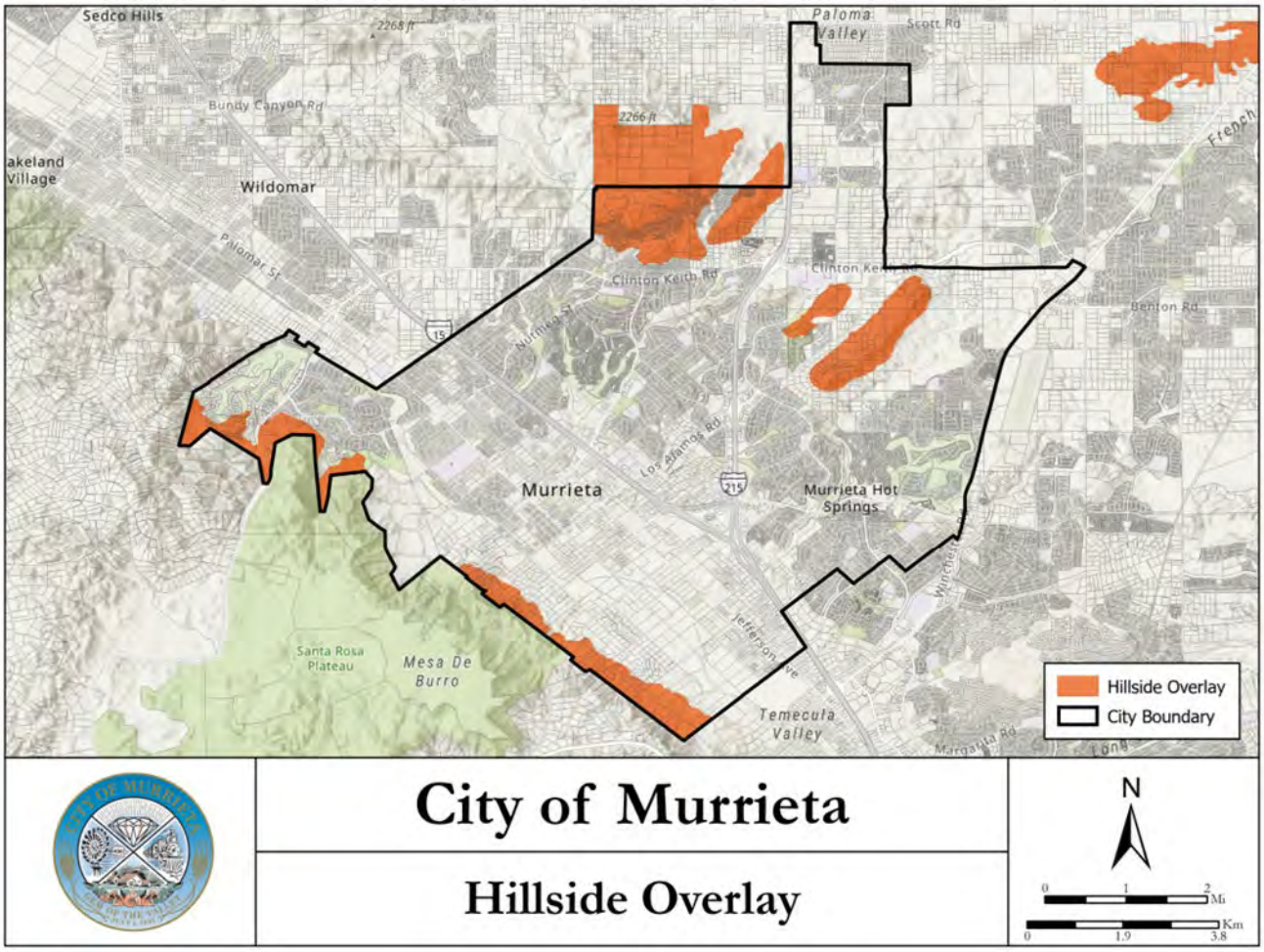
B. Residential Accessory Structures and Accessory Dwelling Units. This Chapter shall not apply to development of residential accessory structures and accessory dwelling units on parcels with existing development approvals when the new construction:

1. Requires the removal of no more than 50 cubic yards of soil;
2. Does not require the use of a retaining wall;
3. Meets the criteria as described within Section 16.44.150 (Residential Accessory Uses and Structures) and Section 16.44.160 (Accessory Dwelling Units); and,
4 . Satisfies the criteria as identified within Section 16.24.060(G)

16.24.090 (Reserved).

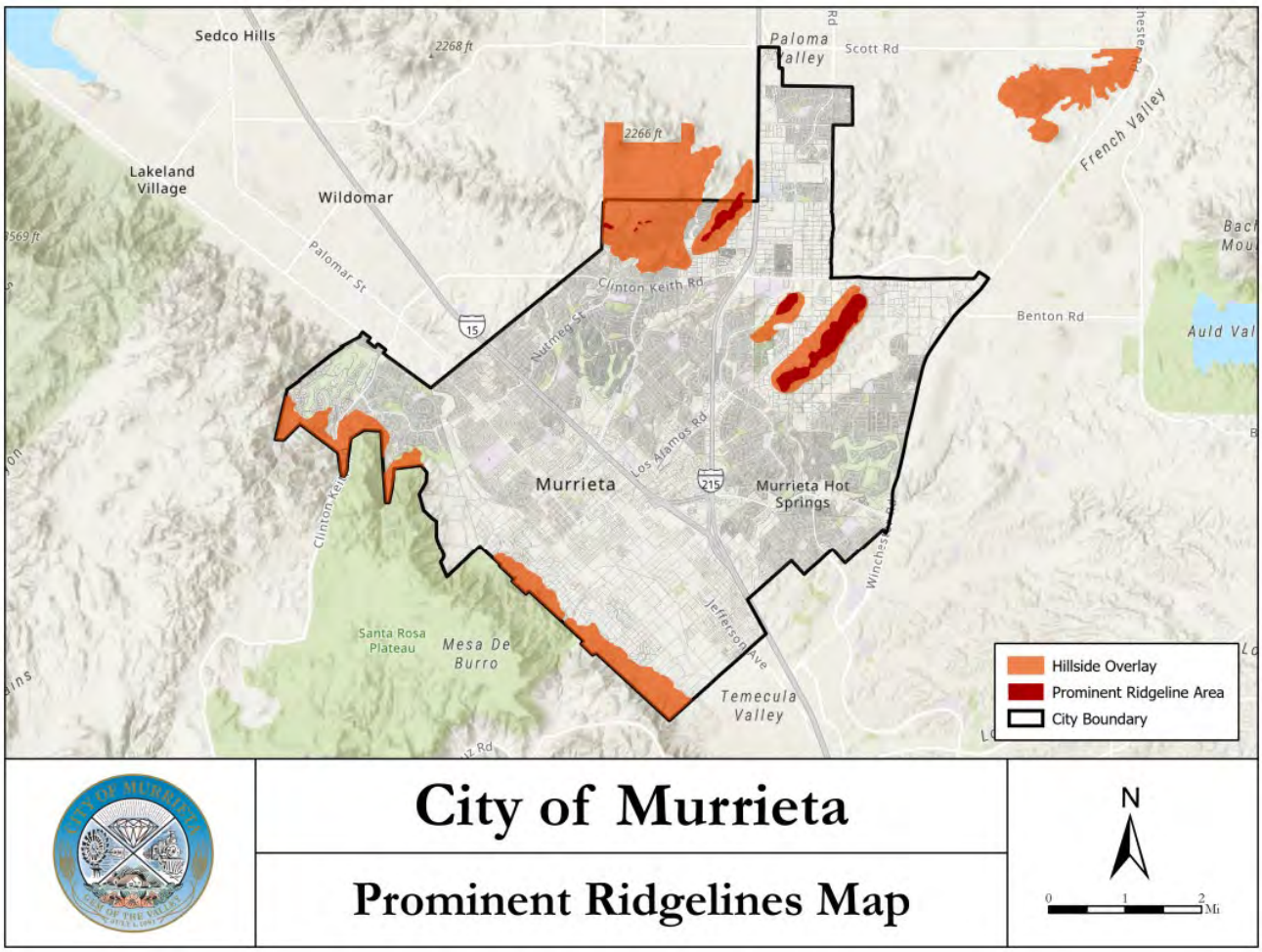
Reserved for future updates

16.24.100 Hillside Overlay Map.



A. Refer to the *City's* online Geographic Information System (GIS) as an additional mapping resource for project review.

16.24.110 Prominent Ridgelines Map.



A. Refer to the *City's* online Geographic Information System (GIS) as an additional mapping resource for project review.

Section 16.28.080 (Landscaping Standards) is hereby amended to read as follows:

16.28.080 Landscape Standards.
Landscape areas and materials shall be designed, installed, and maintained in compliance with the following:

A. General Design Standards. The following features shall be incorporated into the design of the proposed landscape and shown on required landscape plans:

1. Landscaping shall be planned as an integral part of the overall project design and not simply located in excess space after parking areas and structures have been planned;

2. Pedestrian access to sidewalks and structures shall be considered in the design of all landscaped areas;

3. Landscape planting shall be provided for all adjacent public rights-of-way, in compliance with Chapter 16.108 (Improvements);

4. With the exception of single-family residential units, landscape adjacent to driveways and parking areas shall be protected from vehicle damage through the provision of minimum six (6) inch high concrete curbs or other types of barriers as approved by the director;

5. Landscaped areas shall not be less than five (5) feet in width, except where determined by the director;

6. Concrete strips, a minimum of four (4) inches in width, shall be provided to separate all turf areas from other landscaped areas, except for single-family residential landscape projects;

7. Permeable surfaces shall be used wherever permissible in place of impervious paving, to encourage on-site water infiltration and support water conservation measures. Permeable surfaces shall be identified on plans; and

8. Protective tree grates shall be provided for trees planted in pedestrian areas, except for single-family residential landscape projects and as determined by the director.

B. Plant Materials. Plant materials shall be selected and installed to comply with the following requirements:
1. A mix of plant materials shall be provided in compliance with the following table (Table ~~3-5~~16.28-2). Calculations documenting the required mix shall be shown on the landscape plan;

~~Table 3-5~~TABLE 16.28-2 MINIMUM REQUIRED MIX OF PLANT MATERIALS	
Plant Material	**Minimum Required Percentage**
Trees	
Twenty-four (24) inch box	35%*
Fifteen- (15)-gallon	65%
Shrubs	

Five- (5-) gallon	70%
One- (1-) gallon (herbaceous only) with city approval	30%
Groundcover	
Coverage within two (2) years	100%
A greater percentage of specimen trees may be utilized with a corresponding reduction in the number of fifteen- (15-) gallon trees subject to the review of the director.	

2. Trees for shade shall be provided for buildings/structures, as well as for parking lots and open space areas. These trees can be deciduous or evergreen and are to be incorporated to provide natural cooling opportunities for the purpose of energy and water conservation;

3. Trees shall be planted in areas of public view adjacent to and along structures, at an equivalent of at least one (1) tree per thirty (30) linear feet of structure. Other areas shall provide trees at a ratio of one (1) tree for each three hundred (300) square feet of landscaped area. The clustering of trees is encouraged;

4. Mature specimen trees in thirty-six (36) inch and forty-eight (48) inch boxes shall be provided for large projects in sufficient quantity subject to the approval of the Director, to provide variety and emphasis at main focal areas;

5. All trees shall be staked or guyed (on a case-by-case basis) subject to the review of the director and in compliance with city standards;

6. Trees and shrubs shall be planted so that at maturity they do not interfere with service lines and traffic safety sight areas;

7. Trees and shrubs shall be planted and maintained in a manner that protects the basic rights of adjacent property owners, particularly the right to solar access;

8. Trees planted near public sidewalks or curbs shall be of a species and installed in a manner that prevents physical damage to sidewalks, curbs, gutters and other public improvements; and

9. Groundcover shall be of live plant material. Limited quantities of gravel, colored rock, bark, and similar materials may be used in combination with a living groundcover.

MULTI-FAMILY RESIDENTIAL & MIXED-USE RESIDENTIAL
OBJECTIVE DESIGN STANDARDS

CITY OF MURRIETA | CA

DRAFT, APRIL 2023

MURRIETA
SOUTHERN CALIFORNIA
CONNECTED BY COMMUNITY

ACKNOWLEDGMENT

Prepared for: MURRIETA SOUTHERN CALIFORNIA CONNECTED BY COMMUNITY

Prepared by: PLACEWORKS

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1.0 PURPOSE

1.1 Introduction

1.2 Purpose

1.3 Who Is This Document For?

1.4 Where Do the Guidelines Apply?

1.5 How to Use This Document?

1.6 User Guide

1.1 INTRODUCTION

Development and design Standards regulate development intensity, style, size, and orientation. Objective Design Standards are measurable, verifiable, and quantifiable. They provide for a predictable and equitable path to housing approvals in an effort to streamline and support community consistent housing design.

1.2 PURPOSE

The city developed objective design standards (ODS) to support and guide the development of housing and affordable housing in Murrieta. As the state continues to experience a housing crisis and the availability of housing is a key issue, transparency and objectivity are both tools that can streamline and support the development of new housing. Additionally, the city must comply with state legislation (SB 35 and 330), which requires jurisdictions to review new multi-family and mixed-use residential housing projects ministerially or "over-the-counter," guided by objective design and development standards. These new laws prevent cities from denying approvals for certain multifamily housing projects based on discretionary design guidelines. Additionally, ODS set standards that can improve the quality of design.

This document provides the required standards for housing development and complies with Senate Bill (SB) 35 and SB 330. The goal of this document is to provide clear and useful recommendations for the design, construction, review, and approval of residential and mixed-use development in Murrieta. Through this document, applicants and developers, as well as city staff, have a clear understanding of the City's minimum design expectations. ODS are written as minimum standards for site and structure design but also offer various recommendations and guidelines for quality and character. Projects must also comply with all applicable building permit requirements, zoning code requirements and development standards as outlined.

SB 35

- A streamlined approval process for housing projects with a specified amount of affordable housing.
- Applies to jurisdictions that haven't made enough progress in meeting their RHNA.
- Applications must be for infill sites and comply with existing GP or zoning provisions.
- Can only apply objective zoning, subdivision, or design review standards to determine consistency.
- https://www.hcd.ca.gov/policy-research/docs/sb-35-guidelines-update-final.pdf

1.2.1 COMMUNITY INPUT

To inform and engage the public, the City released a survey regarding architectural styles and development preferences. The survey was available from November 2022 through February 2023 and garnered 56 responses. A mix of people from the community participated in the survey, including renters, homeowners, developers, and business owners.

Participants identified Spanish Colonial Revival, Craftsman, and Farmhouse as highly favorable architectural styles and noted that American Mercantile reflected historic properties of the community and best fits in the downtown and commercial areas. Participants also highlighted shared open space, trees, and bike and pedestrian pathways as priorities in development. The feedback received from the survey informed the development of these guidelines.

1.3 WHO IS THIS DOCUMENT FOR?

Developers

The document will provide clear direction for renovation and new construction. The checklist will serve as an information tool that will link the property owner and the designer/developer; it will also clarify the aspects of quality design.

Property Owners

The document will provide property owners with a clear understanding of the design elements that are desired for development projects in the City of Murrieta. This document will work in conjunction with the General Plan and Murrieta Development Code and will provide a clear set of expectations and responsibilities.

City Staff

City staff will use the guidelines in assisting applicants and their representatives with project processing. The document and checklist will serve as the basis for evaluating proposals for quality of design.

Review Bodies and Decision Makers

The document will provide the City of Murrieta Planning Commission, City Council, and other reviewing bodies with a basis for evaluating an application's quality of design.

> "(7) Objective Design Standards "involve no personal or subjective judgment by a public official and are uniformly verifiable by reference to an external and uniform benchmark or criterion available and knowable by both the development applicant or proponent and the public official before submittal."
>
> - GOVERNMENT CODE SECTIONS 65913.4 AND 66300(A)

1.4 WHERE DO THE GUIDELINES APPLY?

The ODS document provides guidance and standards for housing developments, which can be built in the following areas (as shown in Figure 1):

- Multi-family Residential districts (MF-1, MF-2, MF-3, and MF-4)
- Commercial, Office and Innovations districts through SB6 and AB2011 (given all criteria are met)
- The Downtown Murrieta Specific Plan
- The Transit Oriented Development (TOD) Overlay zone

A housing development project includes (1) a multi-family residential project with two or more units, or (2) a mixed-use development that includes housing. These standards apply citywide but shall not apply to a project if it is otherwise prohibited by State law.

Downtown Specific Plan

The City of Murrieta Downtown Specific Plan (DTSP) was adopted in March 2017. The Specific Plan focuses on creating a vibrant cultural center to serve the community in housing and economic needs. The Specific Plan area is located one-half mile west of Interstate 15 and is bordered by Kalmia Street to the north, Ivy Street to the south, Hayes Avenue to the west, and Jefferson Avenue to the east. The area covers approximately 320 gross acres.

The DTSP considers existing architecture in the city, historical precedence, and future growth to create a plan that both respects Murrieta's heritage and engages new opportunities. The specific plan provides guidance for future development and land use decisions in the downtown area, and improves the area's physical and economic environment. The vision for the downtown area is a place where the community can gather, live, and work and that can serve as place of community pride. The ODS guide will work in collaboration with the DTSP to provide guidance and standards in order to achieve such goals and create housing that is consistent with community character and the city's standards.

Transit Oriented Development Overlay

The Transit Oriented Development (TOD) Overlay zone focuses on supporting more housing opportunity near economic centers and transportation. The Overlay has been applied to approximately 78 acres and encompasses land on either side of Interstate 15 (I-15). The area is bounded by Los Alamos Road to the north, Jefferson Avenue to the west, Vista Murrieta and Hancock to the east, and Guava and Murrieta Hot Springs Road to the south. This area is also uniquely situated adjacent to the convergence of two freeways (I-15 and I-215) and along the route of the proposed High-Speed Rail.

The TOD zone creates more housing opportunity in a unique center of the city where existing commercial centers intersect with potential future transit. The overlay allows for housing at 30 dwelling units per acre with development standards for a variety of multifamily and moved housing. Future residential in this area can create a lively center for people who live and work in Murrieta or live in Murrieta and commute to the Temecula, San Diego, or Orange County area for work. Guidelines and standards to direct development are a key component to creating a dynamic, beautiful, and functioning area.

Multi-family Residential

Multi-family residential housing provides both ownership and rental opportunities to a variety of households. Single family homes can be unaffordable to portions of the population; so, families, young couples and those looking to transition into the housing market or college students and young professionals will rent or purchase smaller multi-family units. Additionally, affordable housing is commonly produced as multi-family housing.

Multi-family residential housing should be functional, accessible, and well designed. New state laws (SB9, SB6, AB2011) expand housing access in California and allow multifamily housing in both residential zones and commercial zones (With the appropriate standards and

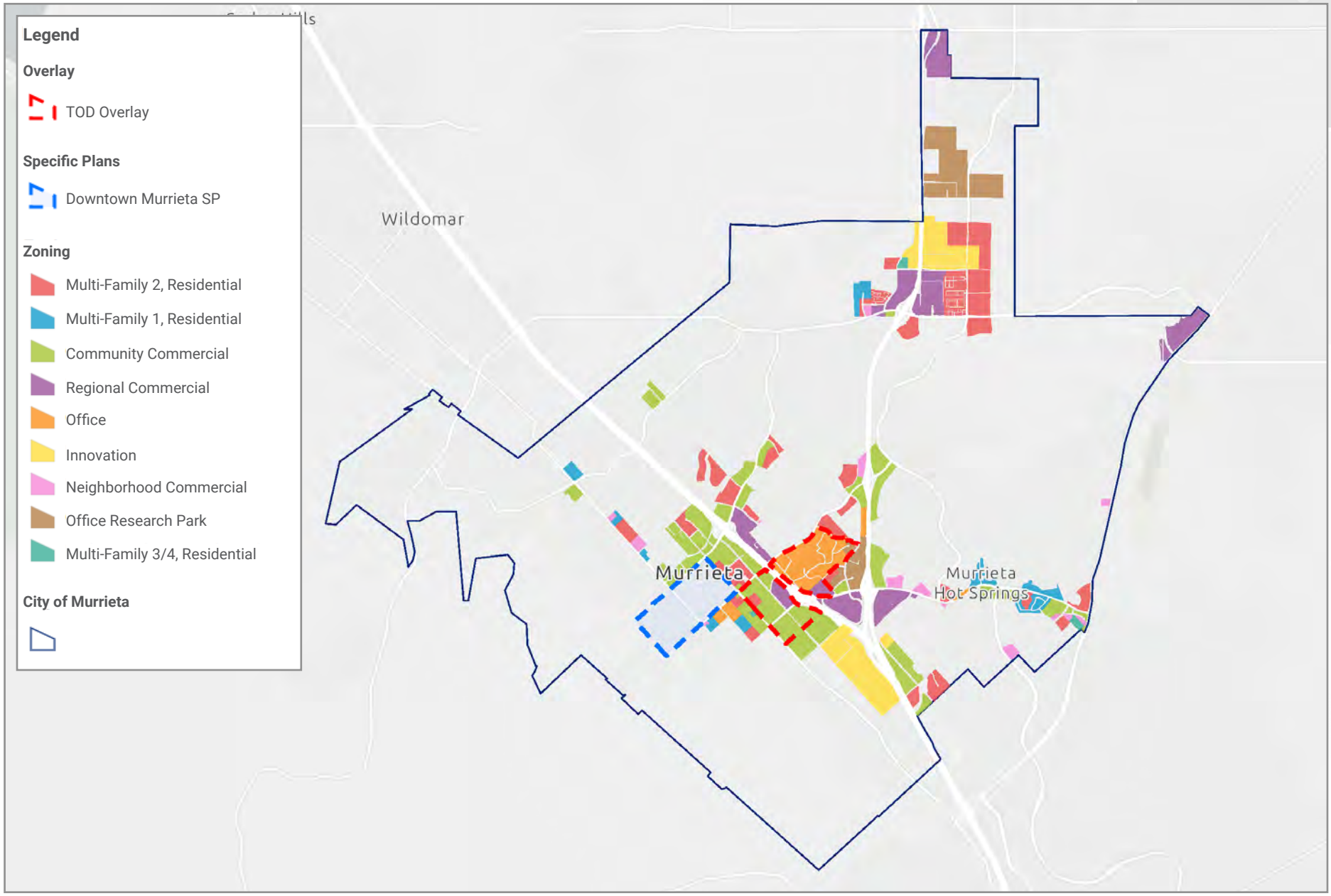
conditions met). The ODS document will streamline and standardize the approach to housing in Murrieta to ensure quality design and development, while meeting the requirements of state laws.

Innovation, Commercial and Office

AB 2011, the Affordable Housing and High Road Jobs Act of 2022, and SB 6, the Middle-Class Housing Act of 2022, are intended to permit residential development on sites currently zoned and designated for commercial or retail uses. Both bills were signed into law in 2022, effective July 2023.

- AB 2011: This bill creates a CEQA-exempt, ministerial approval process for multifamily housing developments on sites within a zone where office, retail or parking is the principally permitted use. The law provides different qualifying criteria for 100-percent affordable projects, and mixed-income projects located in "commercial corridors." AB 2011 also requires projects to pay prevailing wages to construction workers, among other labor standards.
- SB 6: A project proposed under SB 6 may be either a 100-percent residential project or a mixed-use project where at least 50 percent of the square footage is dedicated to residential uses. SB 6 projects are not exempt from CEQA but need not provide any affordable housing. SB 6 also requires projects to pay prevailing wages and utilized a "skilled and trained workforce."

FIGURE 1. OBJECTIVE DESIGN STANDARDS APPLICABLE AREAS



Multi-Family Residential 1 District (MF-1)

The MF-1 zoning district is applied to parcels appropriate for low density multi-family subdivisions which may include stacked flats or townhouse development, with ample amounts of open space, including required commonly maintained recreational and open space facilities. Air space, or postage stamp subdivisions providing individual ownership are allowed. The allowable density range is from 10.1 to fifteen (15) units per acre. Clustering of units to provide aggregate open space is encouraged, with commonly maintained open space, and on-site recreation facilities.

Multi-Family Residential 2 District (MF-2)

The MF-2 zoning district is applied to parcels appropriate for high density multi-family development, in which attached or detached dwelling units may be air-space condominiums, or rented as apartments under single ownership. Senior housing, congregate care or group facilities are allowed, with commonly maintained recreational facilities and open space required. The allowable density range is from 15.1 to eighteen (18) units per acre.

Multi-Family Residential 3 District (MF-3)

The MF-3 zoning district is applied to parcels appropriate for medium-high density multi-family development, in which attached dwelling units, senior housing and assisted living facilities are allowed with commonly maintained recreational facilities and open space required. The allowable density range is eighteen 18.1 to 29 units per acre.

Multi-Family Residential 4 District (MF-4)

The MF-4 zoning district is applied to parcels appropriate for higher density multi-family development, in which attached dwelling units, senior housing and assisted living facilities are allowed with commonly maintained recreational facilities and open space required. The allowable density range is a minimum of 30 units per acre.

Downtown Specific Plan (SP-8):

The Downtown Murrieta Specific Plan provides guidance for future development of the Downtown area. The Specific Plan is the primary document to guide land use decisions, improve the area's physical and economic environment, and establish the City's goals and expectations for Downtown development. The allowable density range for multifamily development is 18 to 30 units per acre and up to 24 for mixed use.

Transit Oriented Development (TOD) Overlay

The TOD Overlay District allows a mixture of residential and non-residential development in close proximity to transit to encourage mixed land uses for enhanced transit and pedestrian activity. This designation is applied to parcels in the designated TOD area, shown on the map. The overlay intends to stimulate economic development and reinvestment, create a pedestrian-oriented mix of uses, facilitate well-designed new mixed-use development and encourage the development of a unique zone character through a streetscape that provides attractive features. Residential projects may be developed at a minimum of 30 dwelling units per acre.

Neighborhood Commercial District (NC)

The NC zone is applied to areas appropriate for convenience shopping, including individual retail and service uses and small destination centers on sites generally three to ten acres in size. Appropriate buffering between adjacent residential designations is required.

Regional Commercial District (RC)

The RC zone is applied to areas appropriate for major regional centers containing several major anchor tenants, including, but not limited to, financial, hotel, motel, restaurant, smaller retail, theater, and accessory uses, with landscaping, parking access, and signs designed and provided in common.

Office District (O)

The Office zoning district is applied to areas appropriate primarily for office uses with commercial uses (financial, hotel, personal services, restaurant, etc.) oriented to serve the customers and employees of the office uses, and limited community services to serve the residents of the city.

Community Commercial District (CC)

The CC zone is applied to areas appropriate to serve the daily shopping needs of the community, including destination centers, supermarkets, and smaller, single-lot, commercial activities. Financial, office and restaurant activities are also allowed. Appropriate buffering between adjacent residential designations is required.

Innovation District (I)

The Innovation District is applied to areas primarily for business and medical offices, corporate headquarters, medical services, business campuses with associated research and development facilities, education, technological advancement, makers labs such as people using digital tools to design new products, and craftsman products such as furniture and window design/construction. A limited amount of commercial uses are allowed within the Innovation Zoning District.

Office Research Park District (ORP)

The ORP zoning district is applied to areas appropriate primarily for office, medical, business campuses with associate research and development facilities. Commercial uses (financial, hotel, retail, personal service, and restaurant, etc.) are intended as accessory or support uses for the employees and customers of the office, business, and medical uses with their associate and research and development operations.

1.5 HOW TO USE THIS DOCUMENT?

The document includes the following:

- **General Standards**: These apply to all residential and mixed-use projects regardless of density, location, or style
- **Standards by Building Types**: These apply based on project height and building types. For example, if, a new mixed-use podium project is proposed at five (5) stories, standards from page 35 to 39 will apply.
- **Architectural Styles**: These apply based on chosen architectural style for the proposed project. This section includes both minimum design standards as well as recommended and optional designs.
- **Checklist**: The checklist is a summary of all applicable standards based on location, project intensity and architectural style. The checklist should be used prior to submittal to ensure all required standards are met and understood by the applicant.

1.6 USER GUIDE

Step 1: Review the General Design Standards (Chapter 2 – Part A and B)

For new development to be appropriate and conducive to the surrounding environment, mass and scale shall respect adjacent building context and uses. The General Building Design Standards establish requirements on these issues. Chapter 2 also provides standards and guidance for site planning and appropriate project layout. Standards related to mixed-use development and entries and doorbells are also established here. These standards apply to all projects, regardless of the architectural style that is utilized for project design.

Step 2: Review the Design Standards by Building Types (Chapter 3)

While most multi-family residential development falls within the two (2) to four (4) story range in Murrieta, the development code allows residential development up to 100 feet in multifamily zones and up to 150 feet in the TOD zone. To create variety of scale and design, different building types shall adhere to the supplemental standards set forth in this chapter.

Step 3: Review the Architectural Style Standards (Chapter 4)

The design and detailing of buildings are paramount to a quality environment, and the City of Murrieta is committed to authentic expressions of architectural style. Architectural design elements and materials shall be consistent throughout the project, recognizing that a building is 3-dimensional and must be well designed on all sides. Detailing, choice of materials, window and door choices shall reinforce the overall project design. To provide guidance on architectural styles, the standards offer a menu of architectural traditions individual buildings may be designed in. The styles are as follows:

- Mission - Spanish Colonial Revival
- Craftsman
- American Mercantile
- Tuscan
- Modern
- Farmhouse

Within each style description, various elements related to roof forms, windows, decorative details, and other topics are enumerated. The Architectural Style Standards require certain elements, while other decorative elements may be selected from a menu of options. To encourage variety in design, projects proposed with more than 15 buildings must utilize more than one architectural style. However, styles may not be mixed within a single building.

While architectural styles provide design and visual diversity in many areas of the city, they can also emphasize the historic and cultural significance of areas. For this reason, architectural styles are required or limited to the specific zones detailed in Table 1.1.

Step 4: Review the Murrieta Development Code and Complete the ODS Checklist (Chapter 5)

All developments must comply with the standards of the Murrieta Municipal Code Title 16 (Zoning), and any applicable Specific Plan.

To summarize requirements, this document includes a checklist of the standards as they relate to product type and location. The checklist should be reviewed and completed prior to project submittal to ensure all requirements are met and all guidelines have been considered.

Step 5: Consult with the Community Development Department (Planning)

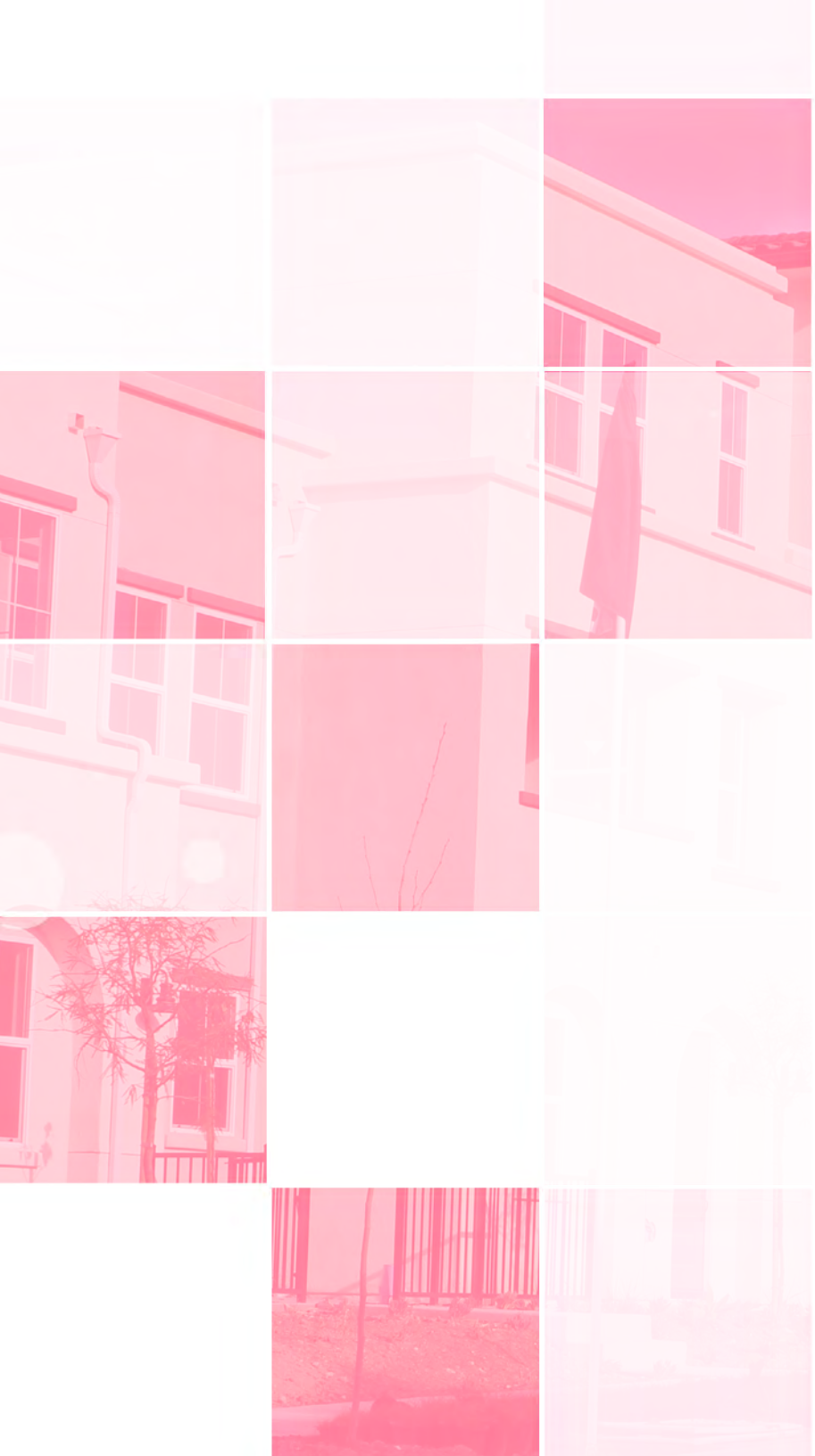
It is highly recommended for prospective applicants to meet with planning staff and obtain and become familiar with the application and submittal requirements for a project, prior to a formal submittal. Additionally, the Community Development Department requires a Pre-Application Service required for all projects. A pre-application allows applicants to receive staff review from various departments prior to a formal application submittal. Formal submittal will also include the signed checklist to be reviewed by planning staff, approval will not be given or determined without a signed checklist.

Applicants shall follow application procedures as directed by staff. The City of Murrieta Municipal Code (MMC) establishes required procedures for submitting and reviewing development applications.

TABLE 1.1 ARCHITECTURAL STYLES PERMITTED BY ZONE

ZONE	MAX PERMITTED HEIGHT[1]	BUILDING TYPES	PERMITTED ARCHITECTURAL STYLE	NOTES
Downtown Murrieta Specific Plan (DTSP)	100 Feet	See Specific Plan	» Mission - Spanish Colonial Revival (Max 6 stories) » Craftsman (Max 4 stories) » American Mercantile (Max 8 stories)	The following styles may be built up to 4 stories, provided the fourth story is less than 70 percent of the ground floor footprint: » Craftsman
Multi-Family 1 (MF-1)	50 Feet	Townhome, multiplex, Garden	» Mission - Spanish Colonial Revival (Max 6 stories) » Craftsman (Max 3 stories) » Tuscan (Max 4 stories) » Farmhouse (Max 3 stories)	The following styles may be built up to 4 stories, provided the fourth story is less than 70 percent of the ground floor footprint: » Craftsman » Farmhouse
Multi-Family 2 (MF-2)	50 Feet	Townhome, multiplex, Garden	» Mission - Spanish Colonial Revival (Max 6 stories) » Craftsman (Max 3 stories) » Tuscan (Max 4 stories) » Farmhouse (Max 3 stories)	See above, same as MF-1.
Multi-Family 3 (MF-3)	100 Feet	Townhome, Multiplex, Garden, Wrap, Podium	» Mission - Spanish Colonial Revival (Max 6 stories) » Craftsman (Max 3 stories) » Tuscan (Max 4 stories) » Farmhouse (Max 3 stories)	See above, same as MF-1.
Multi-Family 4 (MF-4)	100 Feet	Townhome, Multiplex, Garden, Wrap, Podium	» Mission - Spanish Colonial Revival (Max 6 stories) » Tuscan (Max 4 stories) » Modern (No limit)	See above, same as MF-1.
Transit Oriented Development (TOD) Overlay	150 Feet	Garden, Wrap, Podium, Tower	» Mission - Spanish Colonial Revival (Max 6 stories) » American Mercantile (Max 8 stories) » Modern (No limit) » Farmhouse (Max 4 stories)	The following styles may be built up to 4 stories, provided the fourth story is less than 70 percent of the ground floor footprint: » Farmhouse
Commercial, Office and Innovation (per SB 6 and 2011)	Varies by location	Townhome, Multiplex, Garden, Wrap, Podium	» Modern (Varies by location) » Farmhouse (Varies by location)	

NOTES: 1. BUILDING HEIGHT AS DEFINED BY THE MURRIETA DEVELOPMENT CODE.



2.0 GENERAL STANDARDS

2.1 Site Planning
2.2 Building Orientation
2.3 Standard Parking
2.4 Tandem Parking
2.5 Common Open Space
2.6 Private Open Space
2.7 Landscaping
2.8 Frontage Types
2.9 Lighting
2.10 Trash & Recycling Enclosure
2.11 Door Bells

2.1 SITE PLANNING

a. Site design requirements (including density, building height, site coverage, setbacks, parking ratio, and open space requirement) shall be that specified for the zoning district in which the project is located.

b. Residential complex developments with 8-14 buildings[1] shall provide a minimum of two (2) distinct color schemes. A single-color scheme shall be dedicated to no less than 30% of all residential buildings.

c. Residential complex developments with 15-29 buildings shall provide the following. The number of buildings in single style shall be no less than 30%.

   i. Two architectural styles from Chapter 4, **and**;

   ii. Two distinct different color schemes.

d. Residential complex developments with 30 or more buildings shall provide the following. The number of buildings in single style shall be no less than 30%.

   i. Three architectural styles from Chapter 4, **and;**

   ii. Three distinct different color schemes.

e. Pedestrian linkages to nearby neighborhoods, schools, parks, commercial projects, and parking areas shall be provided.

f. Architectural styles capped at three (3) stories (ie. Craftsman and Farmhouse) may be allowed to build an additional story if the fourth story footprint is less than 70 percent of the ground level footprint.

Buildings along streets shall provide visual interest by using different layouts or architectural features.

Large residential complex developments shall provide diversity through different architectural styles or colors.

1 EXCLUDING EXCLUDE NON-RESIDENTIAL BUILDINGS SUCH AS COMMONS BUILDINGS, CARPORTS, SERVICE STRUCTURES, ETC.

g. Larger projects (greater than 150 units) shall contain at least two of the following to reduce the appearance of bulk:
   - Vary roof heights
   - Vertical planes
   - Different materials and colors

h. Roof forms and roof lines should be broken into a series of smaller building components when viewed from the street. Long, linear unbroken roof lines shall not exceed 50 feet.

i. Visual interest shall be provided through architectural variety, especially where several new buildings face streets, such as by using different layouts and/ or architectural features. Abutting buildings shall have complimentary architectural styles.

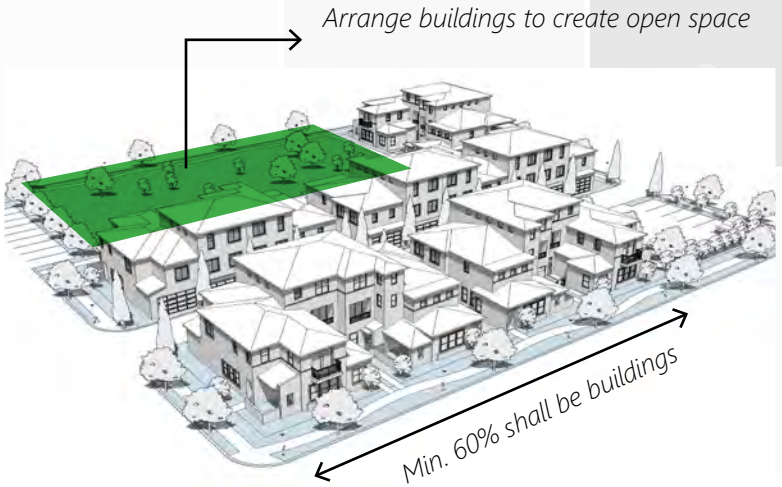
j. Proposed cut and fill slopes shall be rounded off both horizontally and vertically.

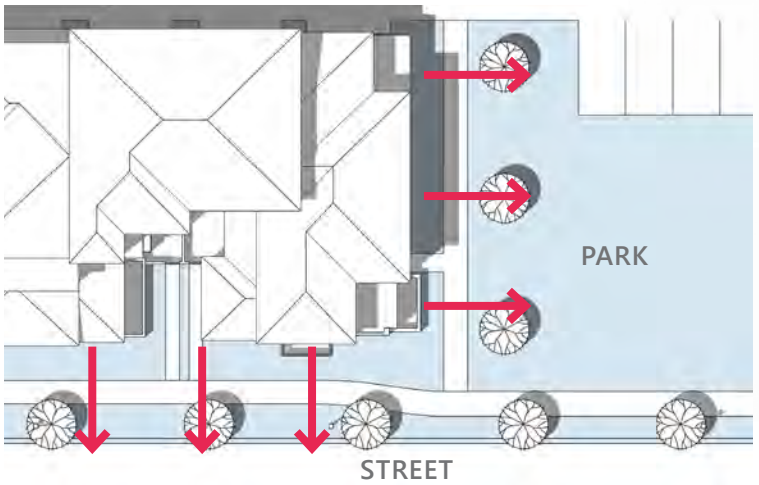
k. Where pedestrian circulation crosses vehicular routes, a change in grade materials, textures or colors shall be provided to emphasize the conflict point and improve its visibility and safety.

l. Orient buildings towards public (and private) streets to positively define street edges. Buildings located adjacent to both public streets and public open space amenities, such as parks, shall be designed with a dual orientation.

m. A minimum of 60 percent of the street frontage shall be devoted to buildings. The remaining 40 percent may be devoted to parking, landscaping, and driveways. Except for urban area or area with slope restrictions

n. Except for garage entrances, structured parking shall not be visible from the primary streets or any public open space.





Building shall be designed with a dual orientation when it is adjacent to both street and open space.

o. Loading docks and service areas on a corner lot must be accessed from the side street.

p. Gates which control vehicular and pedestrian access to a residential site are considered privacy gates, and shall be subject to review and approval of the Development Services Department and Fire Department.

q. Arrange buildings to provide functional common outdoors spaces (such as courtyards, paseos, or parks) for the use of residents.

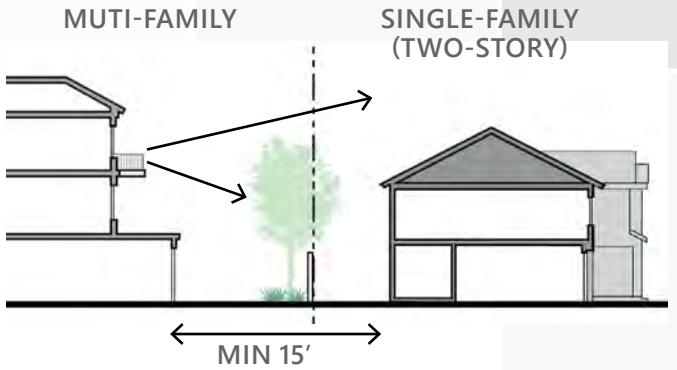
r. If adjacent to a single-family residential zone, buildings shall be designed so as not to have a direct line-of-sight into adjacent units or onto private patios or backyards adjoining the property line. This can be accomplished through:

- Stepbacks of upper stories, (setback and stepback distance see Table 16.08-4 in MMC 16.08.020)
- Windows or balconies placement
- Use of clerestory windows, glass block, or opaque glass
- Mature landscaping within the rear or side setback areas

s. Residential structures on the same lot (not attached) shall maintain a minimum separation of at least ten (10) feet for one-story structures, fifteen (15) feet for two-story structures, and 20 feet for three-story structures. (MMC 16.18.130)

t. Mixed-use Building Orientation shall comply with all the standards mentioned above and the following standards.

- Commercial/Office Units. Commercial/Office unit entrances shall face the street, a parking area, or an interior common space.
- Entrances to residential units shall be physically separated from the entrance to the permitted commercial uses and clearly marked with a physical feature.



Large plants create a living privacy wall that block the direct line-of-sight and protect the privacy of the adjacent single family property.

Commercial/Office unit entrances shall face the street, a parking area, or an interior common space.

2.2 PARKING

Parking standards shall comply with the standards stated in Murrieta Municipal Code (MMC) 16.08.040 and MMC 16.34, as well as the following:

2.2.1 SURFACE PARKING

a. Parking lots shall be placed to the side or rear of buildings. There shall be no vehicular parking between townhouse fronts and the public right-or way.

b. Parking lots shall be connected to all building entrances by means of internal pedestrian walkways

c. Landscaped planters shall be not less than five (5) feet in width in all interior dimensions.

d. Adjacent to Side or Rear Property Lines: Parking areas shall provide a perimeter landscaped strip at least five feet wide.

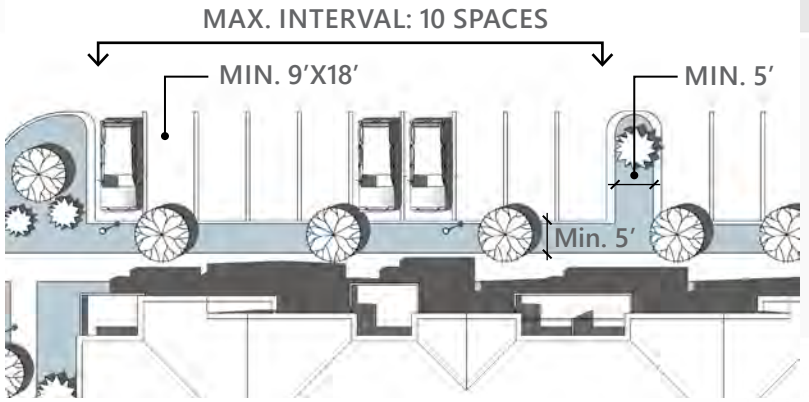
e. Adjacent to Streets: Parking areas shall provide a perimeter landscaped strip at least fifteen (15) feet wide between the street right-of-way and parking area.

f. Lighting standards shall comply with MMC 16.18.110 with a minimum of one footcandle throughout the parking area and two-foot candles at ground level in front of the entrance/exit.

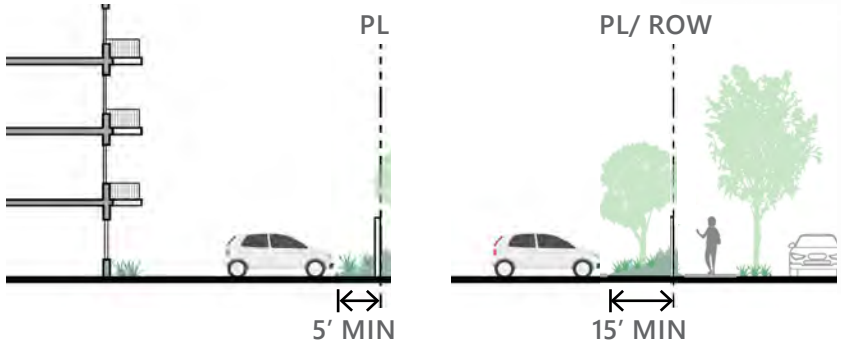
g. Access drives shall be located at least 200 feet apart and at least 100 feet from property lines and street intersections unless an approved shared drive is provided, or the driveway location does not create a traffic hazard to adjacent property. (MMC 16.08.040).

h. Maximum number of driveway:

- One driveway for lot frontage up to 150 feet



A landscaped island shall be at least five feet in all interior dimensions.



Parking areas adjacent to a side or rear property line, a minimum of 5-foot wide landscape buffer shall be provided. Parking area adjacent to public rights-of-way shall provide a minimum of 15-foot wide landscape buffer.

- Two driveways for lot frontage 150 feet to 299 feet
- One driveway for each additional 300 feet

i. Bicycle parking requirement shall comply with the standards in MMC 16.34.090

j. Numbers of required vehicle parking space are listed under MMC 16.34.040 Table 3.7

k. Disabled/Handicapped Parking Requirements shall comply with the standards in MMC 16.34.060.

l. Electric Vehicle Parking. Electric vehicle parking spaces shall be implemented consistent with Section 16.44.115 (Electric Vehicle Parking Requirements) and California Vehicle Code Section 22511.2.

m. Open parking areas shall be screened from view from adjacent properties and streets using walls, berms and/or evergreen landscaping.

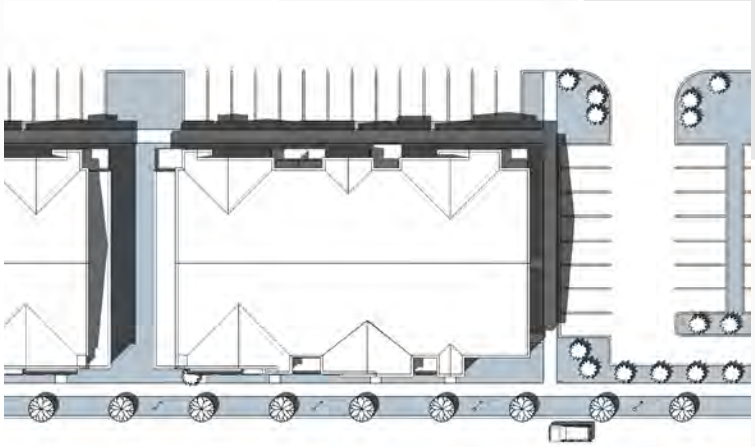
n. Parking lot landscaping shall be located so as to discourage pedestrians from having to cross any landscaped areas to reach building entrances from parked cars.

2.2.2 RESIDENTIAL GARAGE

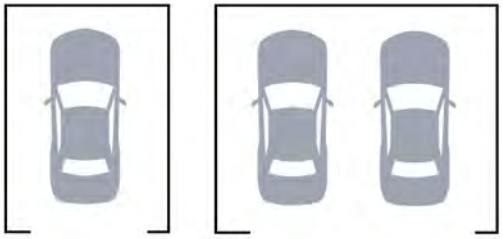
a. Garage doors may occupy no more than 40 percent of a building's street frontage and shall be recessed a minimum of eighteen (18) inches from a street-facing wall plane.

b. Street-facing garage doors serving individual units that are attached to the structure must incorporate one or more of the following so that the garage doors are visually subservient and complementary to other building elements:

- Garage door windows or architectural detailing consistent with the main dwelling.



Surface parking shall be located to the side or rear of the building.



1-Car Garage 10'x20'

2-Car Garage 20'x20'

- Arbor or other similar projecting feature above the garage doors.
- Landscaping occupying 50 percent or more of driveway area serving the garage (e.g, "ribbon" driveway with landscaping between two parallel strips of pavement for vehicle tires)

c. Minimum Interior Dimensions for Residential Enclosed Garages.
   - A single-car garage shall be at least ten (10) feet wide and 20 feet long.
   - A standard double-car garage shall be at least 20 feet wide and 20 feet long.
   - Each garage space shall be equipped with an automatic door opener and a roll-up sectional or similar garage door which does not extend onto the apron. On multifamily dwellings, a security gate on a multi-space garage is permitted.

d. Numbers of required off-street parking space and bicycle parking slots are listed under MMC 1107.0304.

e. For attached private garage, the design shall include adequate space for waste/solid storage and a water heater unit.

2.2.3 PARKING STRUCTURE AND LOADING

a. Any driveway providing access to a parking structure shall have a minimum width of 28 feet.

b. Parked vehicles at each level within the structure shall be shielded from view from adjoining streets

c. The exterior elevations of parking structures shall be designed to minimize the use of blank concrete facades. This can be accomplished through the use of textured concrete, planters or trellises, or other architectural treatments

Any driveway providing access to a parking structure shall have a minimum width of 28 feet.

d. If a toll or fee booth is located in the driveway area, the driveways on either side of the booth shall have a minimum width of fourteen (14) feet.

e. Three hundred (300) feet shall be the maximum length of a parking aisle without being intersected by another parking aisle or driveway.

f. The parking areas of sloped floor parking structures shall not exceed a grade of five (5) percent as measured across the width of a 90 degree parking stall. The grade of a straight internal ramp shall not exceed fifteen (15) percent. The grade of a circular ramp shall not exceed twelve (12) percent as measured at the outside ramp wall.

g. A straight one-way ramp shall be at least fourteen (14) feet in width. A two-way ramp shall be at least 24 feet in width. The minimum outside wall radius of a circular ramp shall be 36 feet.

h. All ramps shall be provided with transition zones at the top and bottom of the ramp. Ramps with a grade of ten (10) percent or less shall have a transition zone at least eight (8) feet in length. Ramps with a grade of greater than 10 percent shall have transition zones at least twelve (12) feet in length. The grade of a transition zone shall not exceed one-half (1/2) the grade of the ramp it serves.

i. Minimum lighting requirement of entrances and exits is 50 footcandles. Minimum lighting requirement of parking areas is five (5) footcandles.

j. The minimum distance of entry/exits from corner intersections is 150 feet.

k. Large illuminated signs with architectural features, such as an arch, canopy shall be used at the entrance to emphasize the facility entry and attract patrons.

l. Off-Street Loading Space Requirements

m. One loading space is required in any parking lot with fifteen (15) or more spaces serving any nonresidential or mixed use.

n. Loading docks and service areas are prohibited on the primary street building frontage.

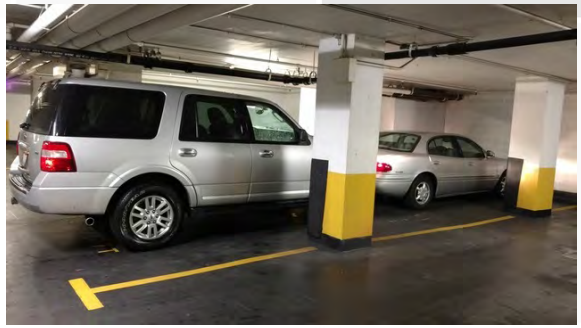
o. Loading requirement are listed under MMC 16.34.100.

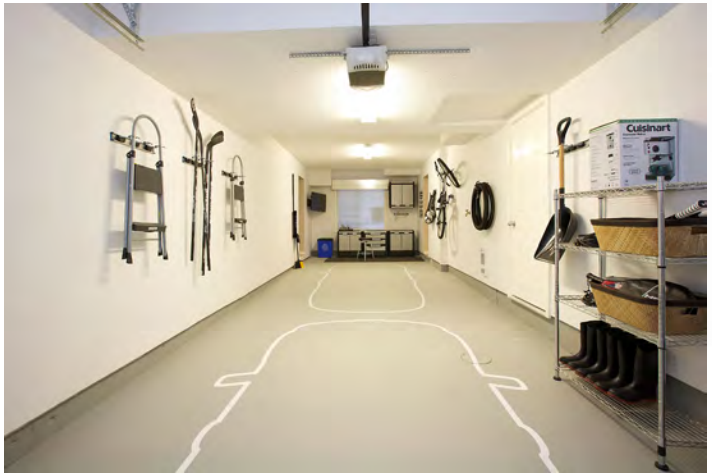
2.2.4 TANDEM PARKING

a. Tandem parking may be permitted to satisfy the off-street parking requirement for a residential unit in accordance with the following.

- No more than two vehicles shall be placed one behind the other.
- Both spaces shall be assigned to a single dwelling unit.
- The tandem parking bay shall be a minimum 40 feet by ten (10) feet in interior dimension.
- Tandem parking to meet required parking for multi-unit development shall be located within an enclosed structure and the number of tandem parking spaces shall not exceed 50 percent of the total provided number of spaces.
- Tandem parking shall not be used to satisfy the parking requirement for guest parking.
- The minimum vertical clearance for shall be eight (8) feet (per MMC 16.34.070).

2-Car Tandem Parking
10'x40'





2.3 COMMON OPEN SPACE

b. In projects containing fewer that ten (10) units, the common open space shall have a minimum width and depth of ten (10) feet.

c. In projects containing ten (10) or more or units, where the required common area is less than 3,000 square feet, the common outdoor space shall be concentrated in one area. The common recreation area shall be at least 25 feet in width. Where the required common area is 3,000 square feet or more, the space may be divided among multiple areas; provided, that at least one recreation area is a minimum of 2,000 square feet in area with a minimum width of 25 feet. All other areas shall be at least 1,000 square feet in area with a minimum width of ten (10) feet.

d. Primary common open space shall not be located at an extreme edge of the property or dispersing smaller less usable areas throughout the site.

e. Residential units shall be within a 1/4 mile (1,320 feet) walking distance of common open space.

f. Minimum Open Space Requirement:

ZONE	COMMON OPEN SPACE	PRIVATE OPEN SPACE	RECREATIONAL AMENITIES
MF-1	200 sq. ft.	60 sq. ft./upper floor 100 sq. ft./ground floor	For projects containing 25 or more dwelling units, provide one recreational amenity for each 30 dwelling units or fraction thereof
MF-2	200 sq. ft.	60 sq. ft./upper floor 100 sq. ft./ground floor	
MF-3	150 sq. ft.	All units 50 sq. ft.	
MF-4	150 sq. ft.	All units 50 sq. ft.	
DTSP	150 sq. ft.	See Specific Plan	
TOD	150 sq. ft.	All units 50 sq. ft.	
Others	150 sq. ft.	All units 50 sq. ft.	

g. Pedestrian walkways shall connect the common open space to a public right-of-way or building entrance.

Common open space shall include common amenities (such as community gardens and tot lot) and landscaping.

Common open space shall centrally located and accessible to all the residents. At least one side of the common open space shall border residential buildings.

h. Open space areas shall not be located directly next to arterial streets, service areas, or adjacent commercial development to ensure they are sheltered from the noise and traffic of adjacent streets or other incompatible uses. Alternatively, a minimum of ten (10) foot wide dense landscaping shall be provided as screening.

i. An area of usable common open space shall not exceed an average grade of ten (10) percent. The area may include landscaping, walks, recreational facilities, and small decorative objects such as artwork and fountains.

j. All common open spaces shall include seatings and lights. Site furniture shall use graffiti-resistant material and/or coating and skateboard deterrents to retain the site furniture's attractiveness.

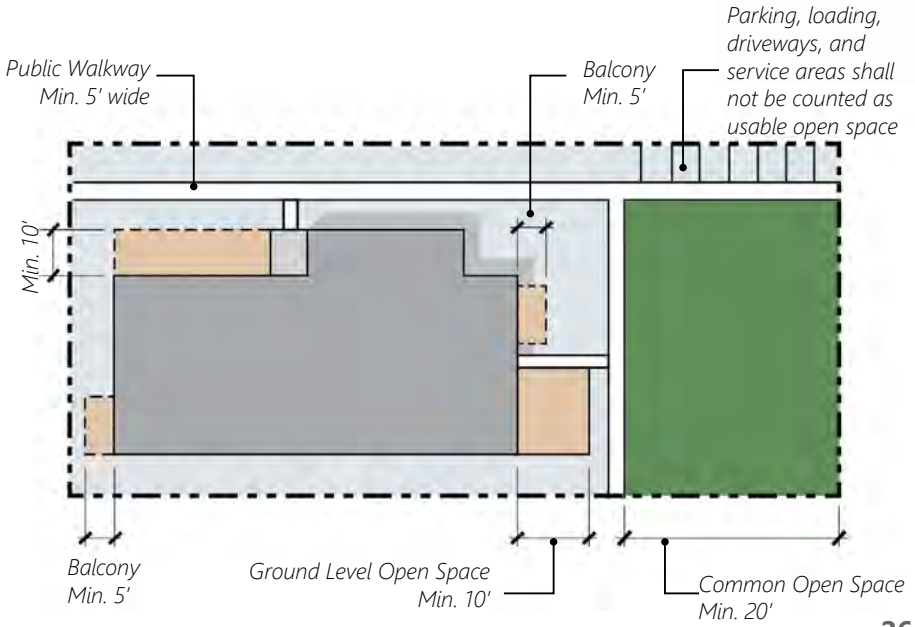
k. Forecourt must be enclosed on at least three sides by buildings. The minimum dimension of any side is 40 feet.

l. Developments that include 30 or more dwelling units shall include at least one play area for children (except for age-restricted to senior citizens; or located within 300 feet of a public park). Such play area shall:

- Have a minimum dimension of 20 feet in any direction and a minimum area of 600 square feet.
- Contain play equipment, including equipment designed for children age five years and younger.
- Be visible from multiple dwelling units within the project.
- Be protected from any adjacent streets or parking lots with a fence or other barrier at least four (4) feet in height.

m. Multifamily developments exceeding 150 units, shall have at least two common open space areas and shall incorporate activities for different age groups.

Children play area shall be protected from any adjacent streets or parking lots with a fence or other barrier at least 4 feet in height.



2.4 RECREATIONAL AMENITIES

a. The required front yard area shall not be counted toward satisfying the common recreation area requirement.

b. Project shall include at least one children play area with a minimum dimension of 150 square feet.

c. Unless otherwise approved by the Planning, Building and Public Works Director, required play spaces for children shall be accessible from all on-site dwellings by pedestrian paths separate from vehicular areas.

d. All play areas shall be located away from high automobile traffic and shall be situated for maximum visibility from the dwelling units.

e. A play area for children under age five (5) shall be provided within direct visibility of common spaces.

f. Senior housing and/or HOPA housing shall be exempt from the requirement to provide play areas, but shall provide areas of congregation that encourage physical activity.

g. One common recreational amenity shall be provided for each 30 units or fraction thereof. Facilities that serve more people could be counted as two amenities. The following listed amenities satisfy the recreational requirements.

- Clubhouse at a minimum of 750 square feet (two)
- Swimming Pool at a minimum of 15x30 feet or equal surface area (two)
- Tennis, Basketball or Racquetball court
- Weightlifting facility
- Children's playground at a minimum of 600 square feet
- Sauna or Jacuzzi
- Day Care Facility (two)
- Other recreational amenities deemed adequate by the director.
- Community garden

2.5 PRIVATE OPEN SPACE

a. Private usable open space shall be accessible to only one living unit by a doorway or doorways to a habitable room or hallway of the unit.

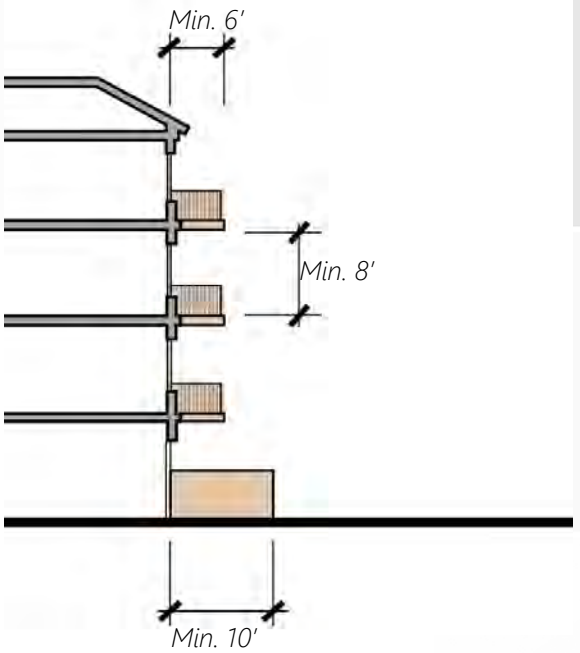
b. Private usable open space located on the ground level (e.g., yards, decks, patios) shall have no horizontal dimension less than ten (10) feet. Private open space located above ground level (e.g., porches, balconies) shall have no horizontal dimension less than six (6) feet.

c. Above ground-level space shall have at least one exterior side open and unobstructed for at least eight (8) feet above floor level, except for incidental railings and balustrades.

d. Guardrails on open-sided surfaces (like stairs, balconies, decks, porches, etc.) must be at least 36 inches in height.

e. Balconies and decks facing shall have walls or railings that are at least 50 percent open.

f. Private open spaces shall be contiguous to the units they serve and screened to a minimum height of four (4) feet by use of plant materials, solid walls, or building surface.



Standard 4.4.b and Standard 4.4.c: *Private open space minimum dimensions requirements.*

Private Open Space at Ground Level

Private Open Space at upper Level

2.6 LANDSCAPING

Landscaping standards shall comply with the standards stated in Murrieta Municipal Code (MMC) 16.28.040, MMC 16.28.070, and MMC 16.28.080 , as well as the following:

a. Landscaping materials shall comply with the following:
   - Shrubs, of at least one-gallon size;
   - Ground cover instead of grass/turf; and/or
   - Decorative nonliving landscaping materials including, but not limited to, sand, stone, gravel, wood or water may be used to satisfy a maximum of 25 percent of the required landscaping area.

a. Trees shall be planted in a manner which maximizes the shading of paved areas, outdoor seating, and both south- and west-facing windows

b. The tree palette shall provide a balanced use of evergreen and deciduous trees

a. A minimum of five (5) feet wide landscaping shall be incorporated around the base of buildings (except for walkways and driveways) to soften the edge between parking, drive aisles and sidewalks.

b. Development on sloped properties shall follow the natural contours of the land by use of design features listed in the MMC (section 16.08.040)

c. The applicant shall choose and group plant species with similar water demands to facilitate efficient irrigation (MMC 16.28.060).

d. High water use plants, characterized by a plant factor of 0.7 to 1.0, can only be used in the common open space.

e. Turf is not allowed on slopes greater that 25 percent where the toe of the slope is adjacent to an impermeable hardscape (MMC 16.28.060).

f. All setbacks and non-work areas shall be landscaped within the development area.

g. Hardscape shall not be used to meet minimum site landscaping requirements in MMC 16.28.070.

h. Pedestrian access to sidewalks and structures shall be considered in the design of all landscaped areas.

i. A mix of plant materials shall be provided in compliance with the Table 3-5, MMC Section 16.28.080

j. Primary street trees, shade trees, and parking lot trees shall choose fifteen (15) gallon trees.

k. Sidewalks and pedestrian walkways shall be a minimum of five (5) feet in width.

2.7 FRONTAGE TYPES

Storefronts

A frontage that reinforces the commercial character and use of the ground floor of the building. The elevation of the ground floor is located at or near the grade of sidewalk to provide direct public access into the building.

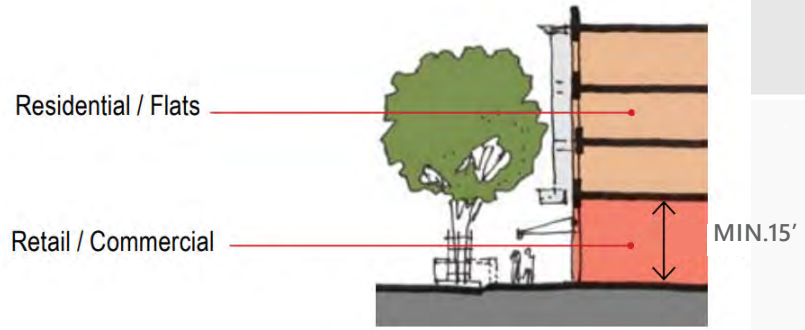
Live-work/office fronts

A frontage that reinforces both residential and work activities that can occur in the building. The elevation of the ground floor is located at or near the grade of sidewalk to provide direct public access to the building.

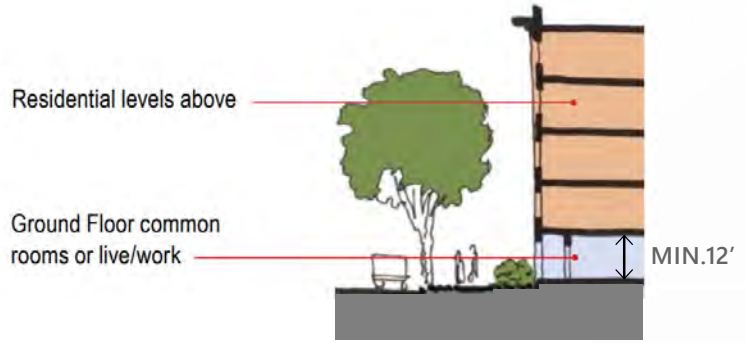
Residential fronts

A frontage that reinforces the residential character and use of the building. The elevation of the ground floor is elevated above the grade of the lot to provide privacy for residences by preventing direct views into the home from the sidewalk.

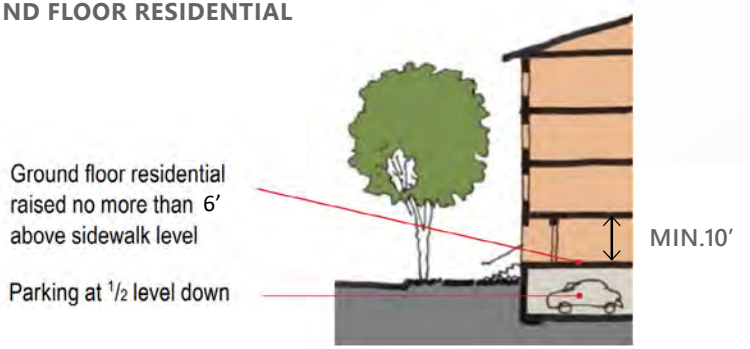
GROUND FLOOR COMMERCIAL



GROUND FLOOR LIVE-WORK / OFFICE



GROUND FLOOR RESIDENTIAL



2.7.1 STOREFRONTS

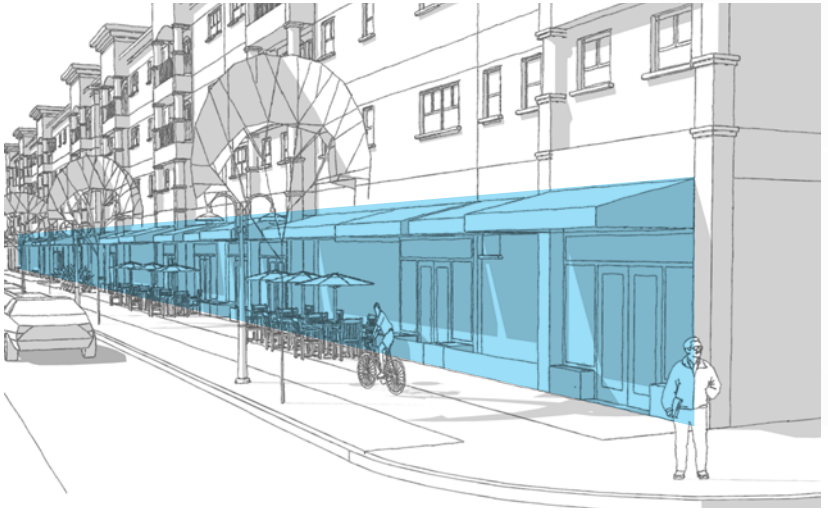
Landscaping standards shall comply with the standards stated in Murrieta Municipal Code (MMC) 16.44.100.

a. The ground floor elevation shall be located near the elevation of the sidewalk to minimize the need for external steps and external ADA ramps at public entrances.

b. All ground floor tenant spaces that have street frontage shall have storefront entrances on the façade fronting a street.

c. Entrance shall be emphasized and clearly recognizable from the street. One or more of the following methods shall be used to achieve this result:

- Projecting non-fabric awnings or canopies above an entry (covered entry);
- Varied building mass above an entry, such as a tower that protrudes from the rest of the building surface;
- Special corner building entrance treatments, such as a rounded or angled facets on the corner, or an embedded corner tower, above the entry;
- Special architectural elements, such as columns, porticos, overhanging roofs, and ornamental light fixtures;
- Projecting or recessed entries or bays in the facade;
- Recessed entries must feature design elements that call attention to the entrance such as ridged canopies, contrasting materials, crown molding, decorative trim, or a 45-degree cut away entry; and
- Changes in roofline or articulation in the surface of the subject wall.



d. Lobby entrances to upper floor uses shall be located on a façade fronting a street.

e. A minimum of ten (10) feet wide frontage shall be provided from the back of curb to the building.

f. The ground between the curb and the building face shall be paved with hard surfaces to maximize the walkable area and provide flexible spaces to accommodate commercial uses.

g. Windows and/or glass doors shall cover not less than 50 percent of the first floor elevation along street frontages.

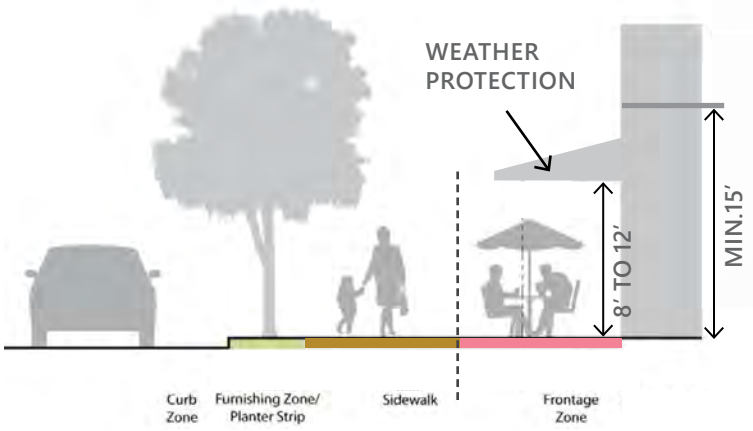
h. At least 25 percent of the surface area of each upper floor façade shall be occupied by windows.

i. Projecting elements on upper floors may project five (5) feet from the façade and project into the setback.

j. Development with retail, commercial, community or public uses on the ground floor shall have a clear floor-ceiling height of at least fifteen (15) feet.

k. The minimum height for awnings or marquees is eight (8) feet above finished grade and the maximum height for awnings or marquees is twelve (12) feet above finished grade; except as otherwise required in the Building Code approved by the City.

l. If the front façade is set back from the public sidewalk, the setback shall be improved as an extension of the public sidewalk.



2.7.2 LIVE-WORK/OFFICE FRONTS

a. The ground floor elevation shall be located near the elevation of the sidewalk to minimize the need for external steps and external ADA ramps at public entrances.

b. All ground floor tenant spaces that have street frontage shall have entrances on a façade fronting a street. All other ground floor uses may have a common lobby entrance along the front façade or private entrances along other facades.

c. Entrances to upper floor units may be provided through a common lobby entrance and/or by a common entrance along a façade fronting a street.

d. At least 40 percent of the surface area of the ground floor façade shall be occupied by display windows or translucent panels.

e. At least 25 percent of the surface area of each upper floor façade shall be occupied by windows

f. Projecting elements on upper floors may project three (3) feet from the façade and project into the setback.

g. The ground floor shall have a clear floor-ceiling height of at least twelve (12) feet.

h. The minimum height for awnings or marquees is eight (8) feet above finished grade and the maximum height for awnings or marquees is twelve (12) feet above finished grade; except as otherwise required in the Building Code approved by the City.

i. If the front façade is set back from the public sidewalk, the setback shall be landscaped and/or improved as an extension of the public sidewalk.

2.7.3 RESIDENTIAL FRONTS

a. Garages shall not exceed 40 percent of the length of the building facade.

b. The ground floor elevation shall be located within six (6) feet of the ground surface of the adjacent sidewalk or walkway.

c. Entrances to ground floor units that have street frontage may be provided through a common lobby entrance and/or by private entrances from the adjacent sidewalk.

d. Entrances to upper floor units may be provided through a common lobby entrance and/or by a common entrance along a façade fronting a street.

e. At least 25 percent of the surface area of the ground and upper floor façade shall be occupied by windows.

f. The ground floor shall have a clear floor-ceiling height of at least ten (10) feet.

g. Stoops and front porches may be provided in front of building and unit entrances. Stoops and front porches may project up to five (5) feet from the façade and project into the setback.

h. Projecting elements on upper floors may project three (3) feet from the façade and project into the setback.

i. The public sidewalk shall be improved with street trees standards per MMC 16.28.080.

j. If the front façade is set back from the public sidewalk, the setback shall be landscaped (excluding stoops/front porches and paved paths to building entrances).

2.8 EXTERIOR LIGHTING

Lighting plan shall be prepared and shall demonstrate the dispersal of light on the ground surface and compliance with the requirements in MMC 16.18.100.

a. Lighting shall be shielded and directed downward, with location of lights coordinated with the approved landscape plan.

a. Exterior lamps shall be low wattage, LED, and except for outdoor Christmas lights, shall not be colored.

b. All exterior lighting shall be dark sky compliant, and designed, located and lamped in order to prevent overlighting, energy waste, glare, and light trespass.

c. Bollard lighting may be used to light walkways and other landscape features, but shall cast its light downward.

d. All parking lot lights shall be full cutoff luminaires, as certified by the manufacturer, with the light source directed downward and away from adjacent residences.

a. Street lights shall use decorative lighting poles that match with the community theme.

b. Outside and parking lot lighting shall not exceed 0.1 footcandles at residential property lines.

c. Lighting shall be located so as to minimize the impact of lighting upon adjacent buildings and properties, especially residential uses. Any lighting source, including illuminated signs, shall be positioned so that light does not shine directly into residential windows. (DTSP section 4.8)

2.9 TRASH & RECYCLING ENCLOSURE

d. The location of storage areas shall be conveniently accessible for trash removal by standard refuse disposal vehicles.

a. Enclosures shall be finished using materials compatible with the surrounding architecture.

b. Trash storage areas that are visible from the upper stories of adjacent structures shall have an opaque or semi-opaque horizontal cover/screen to mitigate unsightly views.

c. Provide a concrete pad within the fenced or walled area(s) and a concrete apron which facilitates the handling of the individual bins or containers.

d. The location of storage areas shall be conveniently accessible for trash removal by standard refuse disposal vehicles.

e. Loading areas and refuse storage facilities shall be located as far as possible from residential units and shall be completely screened from view from adjacent residential portions of the project. The location and design of trash enclosures shall account for potential nuisances from odors.

f. For sites having 2-6 units, a minimum of twelve (12) square feet waste and twelve (12) square feet recycling enclosure shall be provided.

g. For sites having 7-15 units, a minimum of 24 square feet waste and 24 square feet recycling enclosure shall be provided.

h. For sites having 16-25 units, a minimum of 48 square feet waste and 48 square feet recycling enclosure shall be provided.

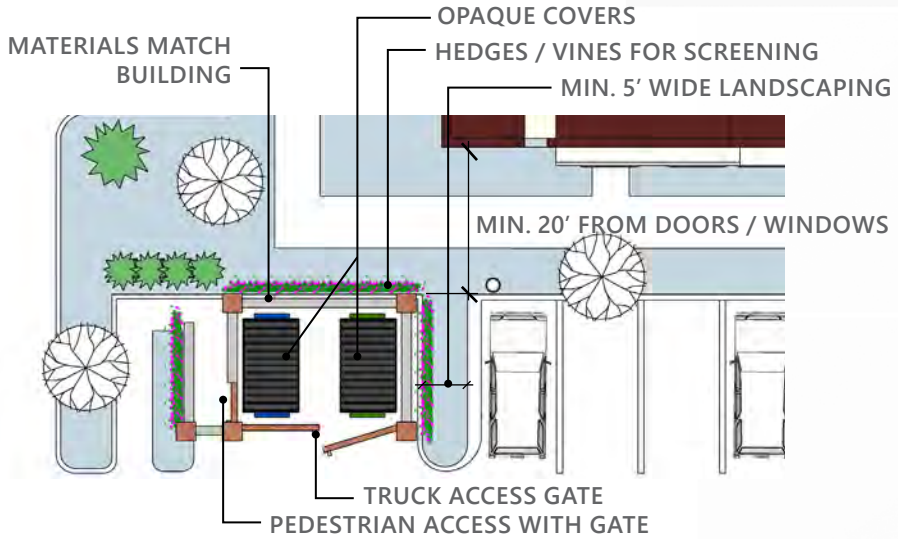
i. For sites having 25 more units, every additional 25 dwellings or fraction thereof shall require an additional 48 square feet for solid waste and 48 square feet for recyclables.

j. All recycling areas in multifamily residential developments shall be located within 250 feet of any residential unit.

k. Storage areas shall not be closer than twenty (20) feet from doors or operable windows of adjacent structures.

l. For individual unit, a minimum of three (3) cubic feet shall be provided for the storage of refuse and a minimum of three (3) cubic feet shall be provided for the storage of recyclable material.

m. Garbage and/or solid waste storage shall be screened from public view and landed on a concrete pad.



Solid waste and/or recycling enclosure shall have reasonable access for both pedestrian and collection trucks.

2.10 DOOR BELLS

a. Every dwelling consisting of more than five (5) dwelling units shall be equipped with doorbells, intercoms or other signaling device attached to the front exterior of the dwelling accessible to all visitors to the dwelling.

b. Doorbell locations shall meet the ADA requirement.

c. If a gate is provided between the front door and the street, the gate shall be clearly marked as the main entrance to the business and include a doorbell, directory, call box, or other means of communication for patients and patrons to be allowed access to the business.

3.0 BUILDING STANDARDS BY TYPES

3.1 Low-Rise (3 Stories or Less)

3.2 Mid-Rise (4-6 Stories)

3.3 High-Rise (7 Stories or More)

3.1 LOW RISE (2 OR 3 STORIES)

Low-rise multifamily are buildings two (2) or three (3) stories with a maximum building height of 40 feet. The housing products include townhomes, duplex, triplex, fourplex, and courtyard. Low-rise multifamily are the major multifamily housing group in Murrieta. It is allowed in all the objective design standards applicable area. All the architectural styles in Chapter 4 could be applied in low-rise projects.

3.1.1 Site Design for Low Rise

Each unit shall have an individual entry facing a street or a common open space.

d. Maximum building coverage: 40 percent.

e. Parking for residents must be in the garage. Guest parking may be surface parking (covered or uncovered). Parking requirement and standards shall be in accordance with MMC 16.34.040 and Chapter 2.2 Parking in this book.

f. Open Space requirement shall be in accordance with MMC 16.34.040 and Chapter 2.3 Common Open Space, Chapter 2.4 Recreational Amenities, and Chapter 2.5 Private Open Space in this book.

g. The area between a building and the street must be landscaped

h. Site development standards and required setbacks shall be in accordance with Table 16.08-4 in MMC 16.08.020.

i. A street-facing primary entrance must feature a porch, covered entry, or recessed entry clearly visible from the street that gives the entrance visual prominence. Entrances must be connected to the adjacent sidewalk with a pedestrian walkway.

j. A minimum of 20 percent of the site shall be landscaped with a mix of vegetative ground cover, shrubbery, and trees.

k. All landscaping shall be irrigated with a permanent irrigation system unless a licensed landscape architect submits written verification that the proposed plant materials do not require irrigation. The property owner shall maintain all landscaping.

Townhome

Triplex

Courtyard

3.1.2 Product Types

A. Townhome

A dwelling unit constructed in a group of three or more attached units in which each unit extends from the foundation to roof. Each unit have its own driveway and garage and accessed from an alley. Each unit shares one to two walls with adjacent properties but have their own entrances. Each unit has its own driveway and garage. Townhomes are typically two (2) stories, sometimes with a reduced footprint for the third floor.

Townhome Building Massing Standards

a. The minimum unit of a townhome shall be three (3) units. The maximum building length shall be 150 feet or six (6) units, whichever is less.

b. Entrance frequency: At least one every 50 feet

c. Maximum elevation of the front entrance shall be 30 inches above adjacent sidewalk. If the elevation exceeding 30 inches, projects are subject to accessibility design reviews.

d. Parking (garage) may be front-loaded or rear-loaded, but must be entered from alley.

e. Architectural articulation and projection shall follow the requirement in MMC 16.08.040

f. Primary elevations (facades) shall incorporate design features such as offsets, balconies, projections, window reveals, or similar elements to preclude large expanses of uninterrupted building. Along the vertical face of a structure, such features shall occur at a minimum of every 35 feet and on each floor shall contain at least two of the following features:

g. Recess (e.g., deck, patio, courtyard, balcony, garage, entrance, or similar feature) that has a minimum depth of four (4) feet;

h. Extension (e.g., floor area, deck, porch, bay window, patio, entrance, or similar feature) that projects a minimum of two (2) feet and runs horizontally for a minimum length of four (4) feet; and/or

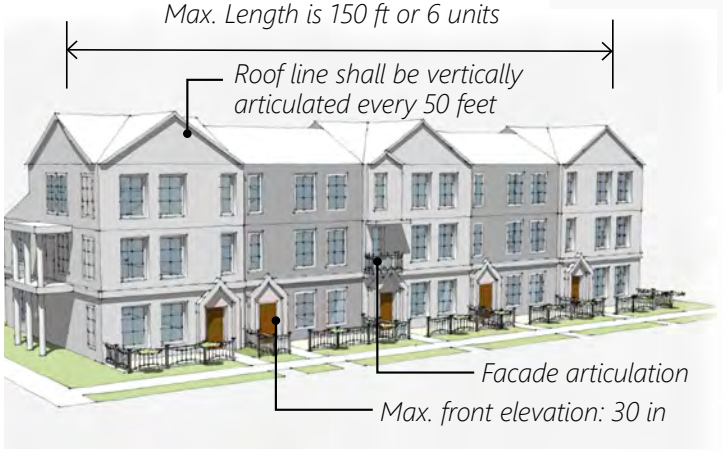
i. Offsets of facade or roof elevation of two (2) feet or greater;

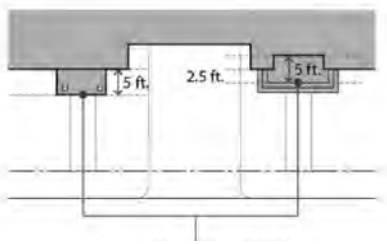
j. The vertical massing of buildings shall be articulated to express each individual unit.

k. Avoid having primary entry directly faces another unit's garage door.

l. A covered porch or covered recess entry is required for each townhouse, with a minimum depth of five (5) feet and a minimum area of 40 square feet.

m. Rooflines shall be vertically articulated at least every 50 feet along the street frontage, through the use of architectural elements such as parapets, varying cornices, reveals, clerestory windows, or varying roof height and/or form.

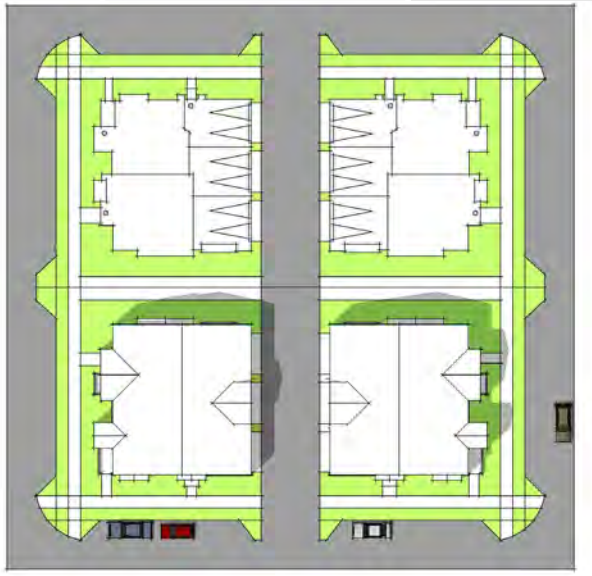




Building Entrance: Porch or covered recess of 5-foot deep and a minimum of 40 square feet

B. Duplex, Triplex, and Fourplex

Building that consists of two to four side-by-side and/or stacked units, typically with individual entries along the front. Each unit have its own driveway and garage. It fits within low- to moderate-intensity neighborhoods.



Multiplex Building Massing Standards

a. The maximum building length shall be 150 feet.

b. Alley or courtyard provides access to units and garages.

c. Entrance frequency: At least one every 50 feet

d. Maximum elevation of first inhabited level: 30 inches above adjacent sidewalk.

e. Parking (garage) shall be rear-loaded or detached.

f. Architectural articulation and projection shall follow the requirement in MMC 16.08.040

g. Primary elevations (facades) shall incorporate design features such as offsets, balconies, projections, window reveals, or similar elements to preclude large expanses of uninterrupted building. Along the vertical face of a structure, such features shall occur at a minimum of every 35 feet and on each floor shall contain at least two of the following features:

   - Recess (e.g., deck, patio, courtyard, balcony, garage, entrance, or similar feature) that has a minimum depth of four (4) feet;
   - Extension (e.g., floor area, deck, porch, bay window, patio, entrance, or similar feature) that projects a minimum of two (2) feet and runs horizontally for a minimum length of four (4) feet; and/or
   - Offsets of facade or roof elevation of two (2) feet or greater;

h. The vertical massing of buildings shall look like large residences.

C. Courtyard

Building that consists of up to 16 multiple attached and/or stacked units, accessed from a shared courtyard. The shared court could be common open space (known as garden-court) or shared driveway (known as motor-court). The type is typically integrated as a small portion of lower-intensity neighborhoods or more consistently into moderate-intensity neighborhoods.

Garden-Court

Motor-Court

Garden-Court

Motor-Court

Courtyard Building Massing Standards

i. The maximum building length shall be 150 feet at any side.

j. Courtyard(s) shall be accessible from the residential street.

k. If courtyard is common open space, the front facade shall face the open space.

l. Alley or courtyard provides access to units and garages.

m. Entrance frequency: At least one every 50 feet

n. Maximum elevation of first inhabited level: 30 inches above adjacent sidewalk.

o. The courtyard shall be easily accessed from the street.

p. Recessed entries with arches or canopies, stoops, low privacy walls.

q. Parking (garage) shall be rear-loaded or detached.

r. Architectural articulation and projection shall follow the requirement in MMC 16.08.040

s. Primary elevations (facades) shall incorporate design features such as offsets, balconies, projections, window reveals, or similar elements to preclude large expanses of uninterrupted building. Along the vertical face of a structure, such features shall occur at a minimum of every 35 feet and on each floor shall contain at least two of the following features:

- Recess (e.g., deck, patio, courtyard, balcony, garage, entrance, or similar feature) that has a minimum depth of four (4) feet;
- Extension (e.g., floor area, deck, porch, bay window, patio, entrance, or similar feature) that projects a minimum of two (2) feet and runs horizontally for a minimum length of four (4) feet; and/or
- Offsets of facade or roof elevation of two (2) feet or greater.

3.2 MID-RISE (4-6 STORIES)

Low-rise multifamily are buildings four (4) to six (6) stories with a maximum building height of 80 feet. Four (4) story products includes apartment flat with surface parking or wrap with parking structure. Five (5) story and six (6) story housing products include wrap and wood structure podium. Four (4) story buildings are allowed in all the objective design standards applicable areas. The applicable architectural styles are Spanish Colonial, American Mercantile, Tuscan, and Modern. Craftsman and Farmhouse may also have a four (4) story addition if the addition doesn't exceed 70 percent of the building footprint. Five (5) story and six (6) story buildings are allowed in the MF-3, MF-4, and TOD zone. The applicable architectural styles are Spanish Colonial, American Mercantile, and Modern.

Wrap building

Garden building

Podium building

3.2.1 Site Layout for Mid Rise

a. Upper floor units shall be accessed by a common entry along the front street.

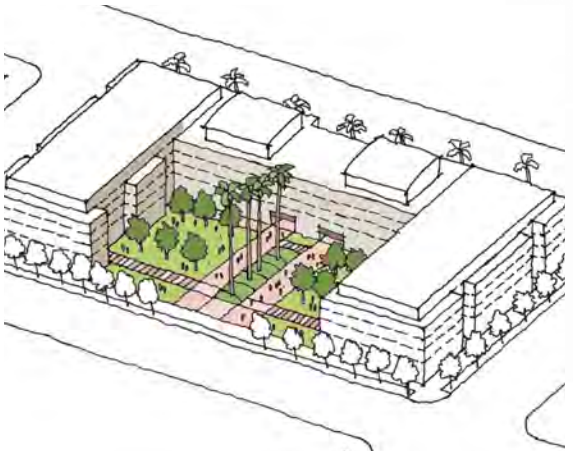
b. For mixed-use, ground floor shops or office shall have individual entries along the adjacent street.

c. Parking may be covered, uncovered, or in a garage. Standards shall be in accordance with MMC 16.34.040 and Chapter 2.3 Parking in this book.

d. Open Space requirement shall be in accordance with MMC 16.34.040 and Chapter 2.3 Common Open Space, Chapter 2.4 Recreational Amenities, and Chapter 2.5 Private Open Space in this book.

e. Site development standards and required setbacks shall be in accordance with Table 16.08-4 in MMC 16.08.020.

f. For wrap or podium building types, parking structure must be mostly enclosed within, below, or behind buildings in a manner that conceals it from predominant public view and that does not interrupt the continuity of the pedestrian environment.



3.2.2 Building Massing

Structures with heights greater than three (3) stories shall set back upper portions of the structure a minimum of ten (10) feet for each additional two (2) stories. (MMC 16.44.100)

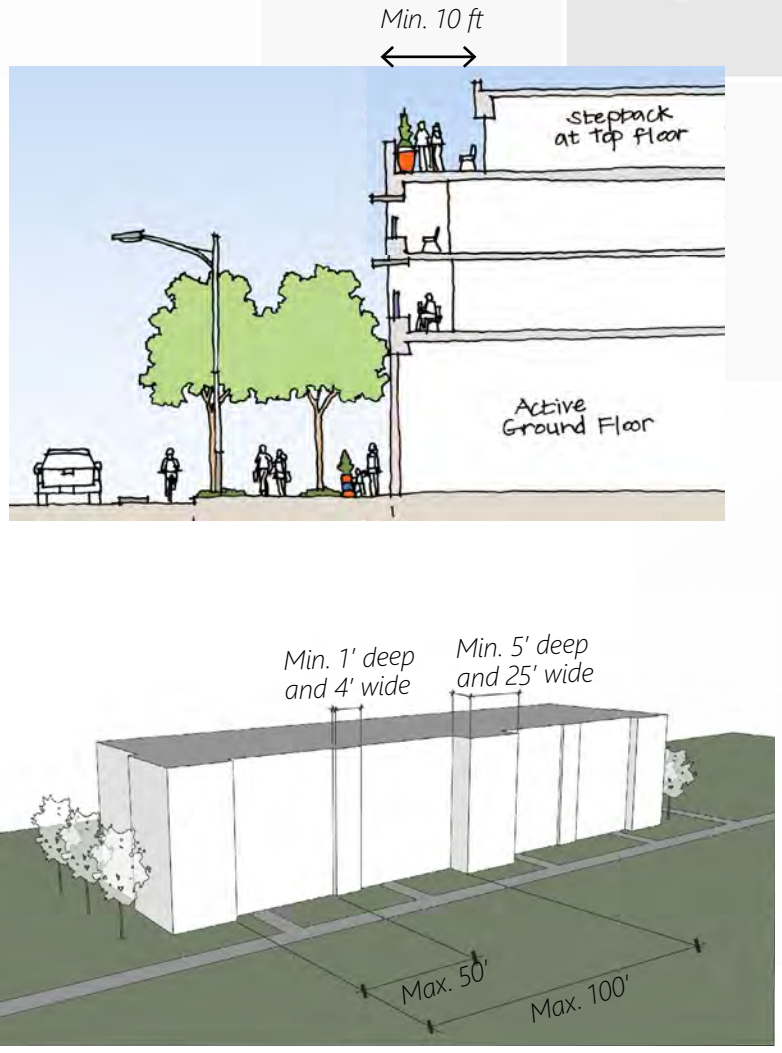
g. Buildings over three (3) stories shall have major massing breaks at least every 100 feet along any street frontage, adjacent public park, publicly accessible outdoor space, or designated open space, through the use of varying setbacks and/or building entries.

h. Major breaks shall be a minimum of five (5) feet deep and 25 feet wide and shall extend at least two-thirds (2/3) of the height of the building. Exceptions include, for buildings with upper stories (above first floor) stepped back at least five feet; or the major break need only extend two-thirds (2/3) of the height of the portion of the front façade that is not stepped back.

i. Buildings shall have minor massing breaks at least every 50 feet along the street frontage. Minor breaks shall be a minimum of one (1) foot deep and four (4) feet wide and extend the full height of the building.

j. Where parking structures are planned, the street side shall be composed of pedestrian-active uses (such as stores, lobby) on the ground level to screen parking structures.

k. Residential ground floor uses in multi-family buildings, other then accessible units, shall be no more than four (4) feet above the public sidewalk grade, if setback is fifteen (15) feet or less.



Multi units building shall have Major and minor massing breaks to reduce bulkiness.

l. At least one elevator shall be provided in each multi-family building containing 21 or more units, where some of those units have primary accesses only to the third-story or higher stories.

m. The ground floor elevation shall consist of at least one of the following:

- A line of awnings or canopies over ground floor storefronts or amenity space windows extending at least 75 percent of the elevation width.
- Unobstructed transparent glass storefronts for at least 75 percent of the elevation width.
- A different exterior cladding material than the middle/body separated from the middle/body above with either an overhang or recess of two (2) feet or more, or a horizontal belt course with a dimension of at least twelve (12) inches, consisting of a different color and material separating the base from the middle section.
- A series of individual residential entries with recessed entryways.
- A series of individual residential entries with porches with roofs.

n. The cap is at the top of the building and shall include at least one of the following:

- If the building has a parapet wall, add a cornice feature, consisting of a different material and a depth of at least twelve (12) inches over the wall below.
- If a building has a pitched roof, an eave overhang of at least two (2) feet.
- A building stepback of at least three (3) feet from the main wall plane of the story below.
- A change in exterior cladding material at the top story that is different than the story below, effectively using the top story as a wall cap.

3.3 HIGH-RISE (7 STORIES OR MORE)

High-rise multifamily are buildings seven (7) stories or higher with a maximum building height of 150 feet. They have steel or concrete frame. Common open space is provided at a roof top and/ or indoor room. The applicable architectural styles are American Mercantile and Modern. High-rise is only allowed in TOD zone.

3.3.1 Building Massing for High Rise

a. The minimum height of the base should be two (2) stories.

b. The maximum height of the base of a proposed high-rise building should be equal to the width of the right-of -way to provide sufficient enclosure for the street without overwhelming the street.

c. Additional height may be appropriate through the provision of step backs and architectural articulation, particularly on wider streets and deeper lots.

d. For sites where the adjacent context is lower-scale and not anticipated to change:

- the height of the base or the portion of the base immediately adjacent to the neighboring lower-scale buildings should match the height of the neighboring buildings; and
- provide a transition in height on the base through setbacks and

e. Use bird-friendly best management practices in accordance with the City's guidelines. In particular, apply visual markers or use low reflectance materials on all exterior glazing within the first 65 feet of the building above grade.

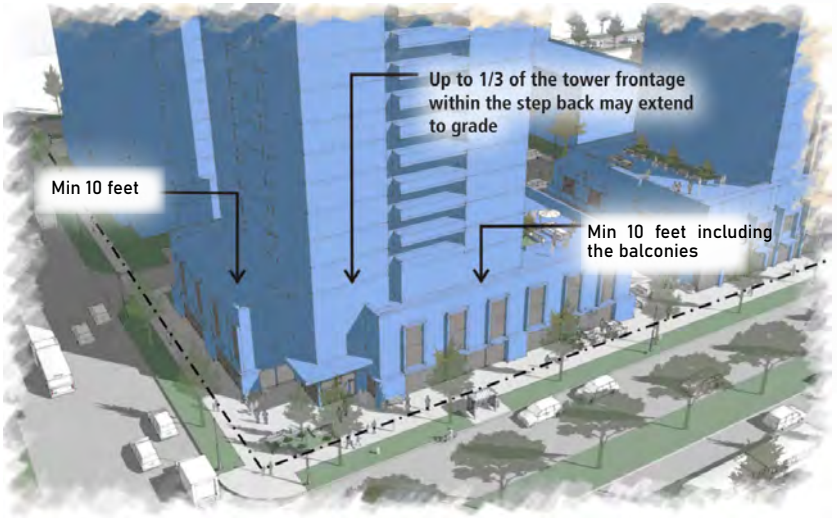
f. Eighty (80) percent of the ground floor should be highly transparent.

g. The maximum tower floor plate for a high-rise residential building should be 8,000 square feet to minimize shadow and wind impacts.

h. The tower, including the balconies, should be stepback a minimum of ten (10) feet from the base.

i. Up to one-third (1/3) of a tower frontage along a street or a public space may extend straight down to the ground

j. Orienting and shaping the tower to improve building energy performance, natural ventilation, and daylighting



3.3.2 Open Space (Rooftop)

Any rooftop uses shall require a full plan review, permits and inspections for occupants and structural safety based on how the building roof is to be used.

a. The rooftop garden shall be located on the third or higher story.

b. The rooftop garden shall be accessible to all residents of dwelling units on the parcel, but not to commercial tenants of a residential mixed-use development.

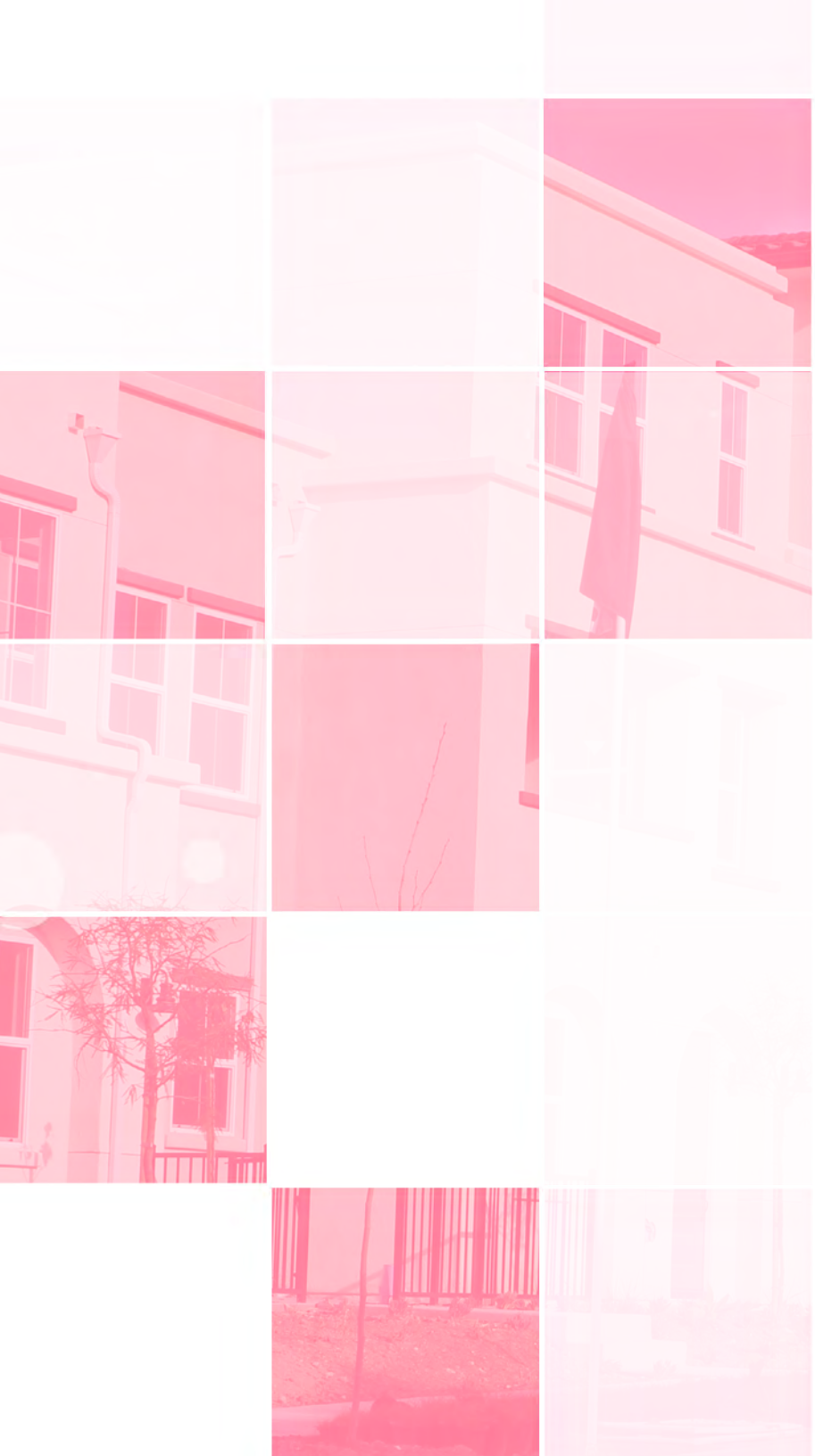
c. Minimum dimensions of rooftop garden is fifteen (15) feet.

d. Permanent fixtures associated with the usable open space, such as trellises, shade structures, furniture, and furnishings such as planters, lighting and heaters, may exceed the height limit by up to twelve (12) feet.

e. At least 15 percent but no more than 25 percent of the rooftop shall be landscaped with raised beds for gardening, stormwater planters, or other landscaping. All required landscaped areas should be equipped with automatic irrigation systems and be properly drained.

f. Rooftop equipment shall be screened by a parapet or enclosure.

g. Where rooftops are visible from offsite, they should be treated to minimize aesthetic impacts.



4.0 ARCHITECTURAL STYLES

4.1 Mission - Spanish Colonial Revival (Max. 6 Story)

4.2 Craftsman (Max. 3 Story)

4.3 American Mercantile (Max 8 Story)

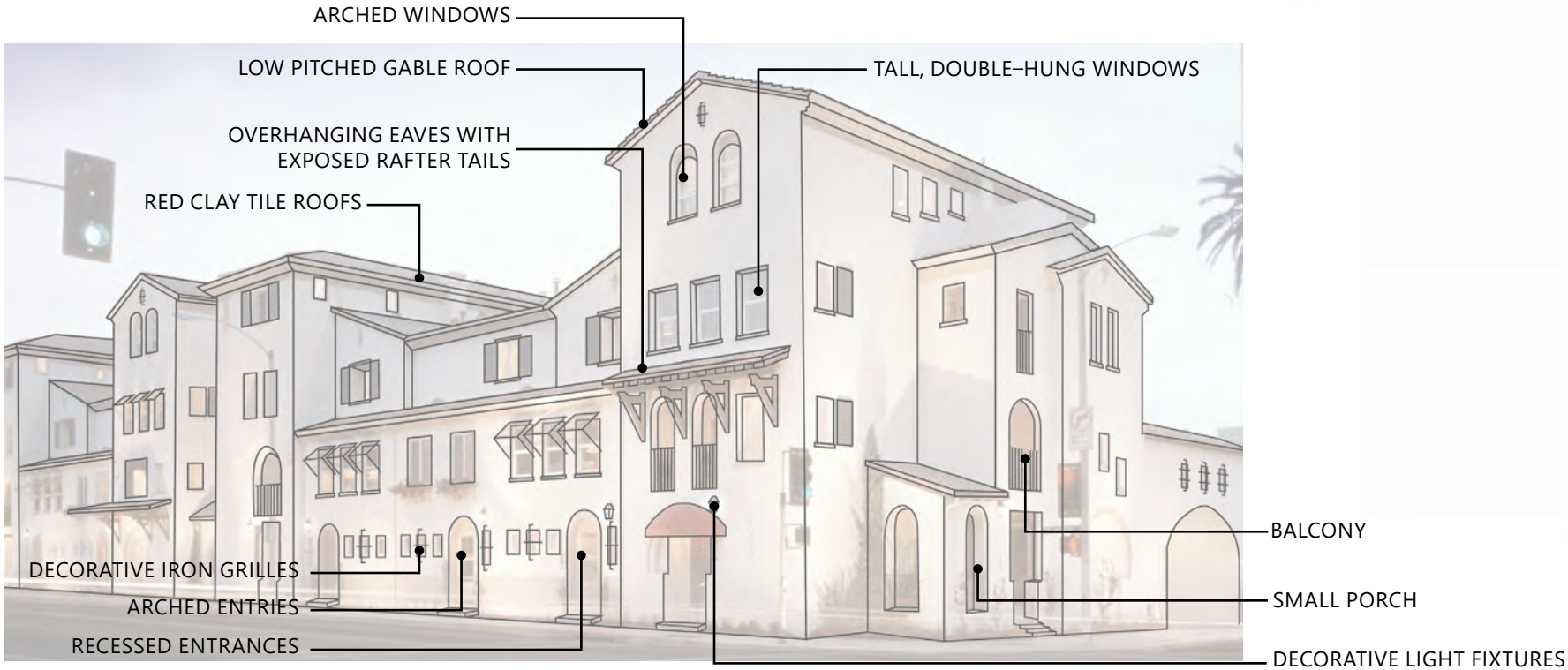
4.4 Tuscan (Max. 4 story)

4.5 Modern (No Limit on Height)

4.6 Farmhouse (Max. 3 Story)

4.1 MISSION - SPANISH COLONIAL REVIVAL

Derived from Spanish/Mediterranean and early Californian influences, this style emerged in the late 19th and early 20th centuries. Projects a visually rich environment with allusions to regional history. Generally, Spanish Colonial Revival style buildings are asymmetrically arranged. The style features low-pitched roofs with little or no overhang covered with S-Type clay red roofing tiles. These houses were almost always wood frame with stucco siding. The use of the arch was common, especially above doors, porch entries, and main windows.



4.1.1 FORM & MASSING

a. Asymmetrical façade/elevations

b. Three (3) or more roof planes

c. At least 50 percent of the units shall have balconies or window treatments (such as shutters or awnings)

d. Entrances are recessed at least twelve (12) inches

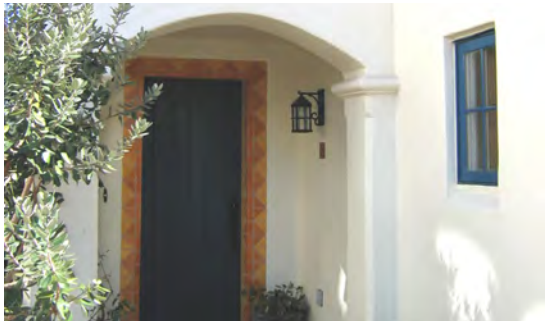
Additional details for projects four (4) stories and taller, mixed use, or for a project with more than fifteen (15) buildings (required two details)

e. Include two (2) add-on projections such as verandas, arcades, balconies and exterior stairs.

f. The ends of building massings shall be stepped down to create a more pedestrian scale.

g. One focal point, such as courtyard, tower, or fountain

h. Wingwall or columns on the ground level



4.1.2 ROOF

a. Low pitched (4:12 maximum) cross- or side-gable roofs. The pitch shall remain constant except for a veranda or arcade.

b. Red, fired, clay tile roofs. Common tile shapes include both Spanish (S-shaped) and Mission (half-cylinder) types

c. The gable has little or no overhang on the rake.

d. Thirty (30) percent of the primary facade length shall have a six (6) to twelve (12) inches eave overhang and 20 percent shall have a 24 inches overhang with exposed rafter tails.

e. Hipped roofs shall only be used in combination with gables or on a tower element.

f. Shed roofs are only used in conjunction with verandas.

g. When a flat roof is used it shall be screened by a parapet that is an extension of the wall plane or by a modified Mansard roof.

4.1.3 MATERIALS & COLORS

a. Roof tiles shall use terracotta, brown earth tones, or rustic red color palette.

b. White, cream, or tan stucco wall with smooth or lightly textured finish (i.e. hand troweled or smaller particles)

c. Re-sawn wood shall be used as secondary wall material for the following and similar elements:

   1) Posts and exposed beams

   2) Railing, spindles and grill work

   3) Shutters, window frames and doors

d. If windows have shutters, the shutter's color shall match the accent color that is use for doors or decorative trim.

e. At least one wrought iron elements (such as railings, hardwares, and gates) shall be used.

4.1.4 DOORS & WINDOWS

a. Accent windows shall be less than 20 percent of the total windows.

b. The primary facade shall include at least one arched elements.

c. At least 50 percent of the windows shall be casement windows.

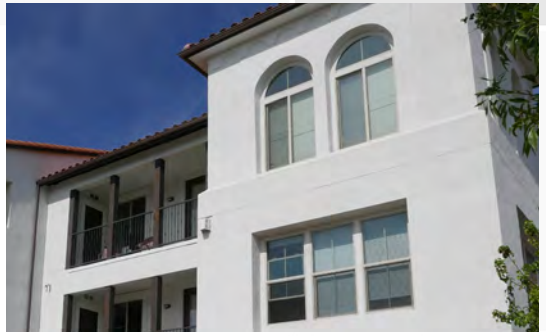
d. All entrance door surrounds shall be banded with ceramic tile, molded plaster or painted accents.

e. All the casement windows and double hung windows shall have wooden frame.

f. At least two types/shapes of windows shall be used

g. A minimum three (3) inches wide flat casting shall be used on all non-recessed casement windows.

h. Eighty (80) percent of the primary windows shall have window muntins



4.1.5 DECORATIVE DETAILS

All residential projects shall provide at least four of the following. Residential projects four (4) stories and taller, mixed use projects, or projects more than fifteen (15) buildings shall provide at least six of the following.

a. Entry/Front porch or patio

b. Decorative tiles

c. Clay tile vents

d. Wrought iron balcony railings or support brackets

e. Dark metal light fixture and hardwares

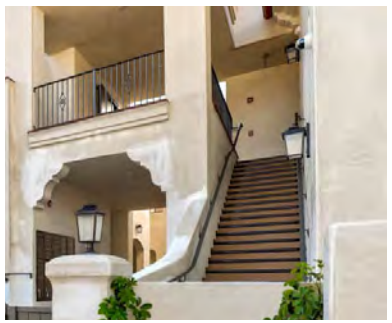
f. Paired wood (or wood simulated) garage doors with iron hardware

g. Stone or brick accented elements

h. Verandas, pergolas or arcades

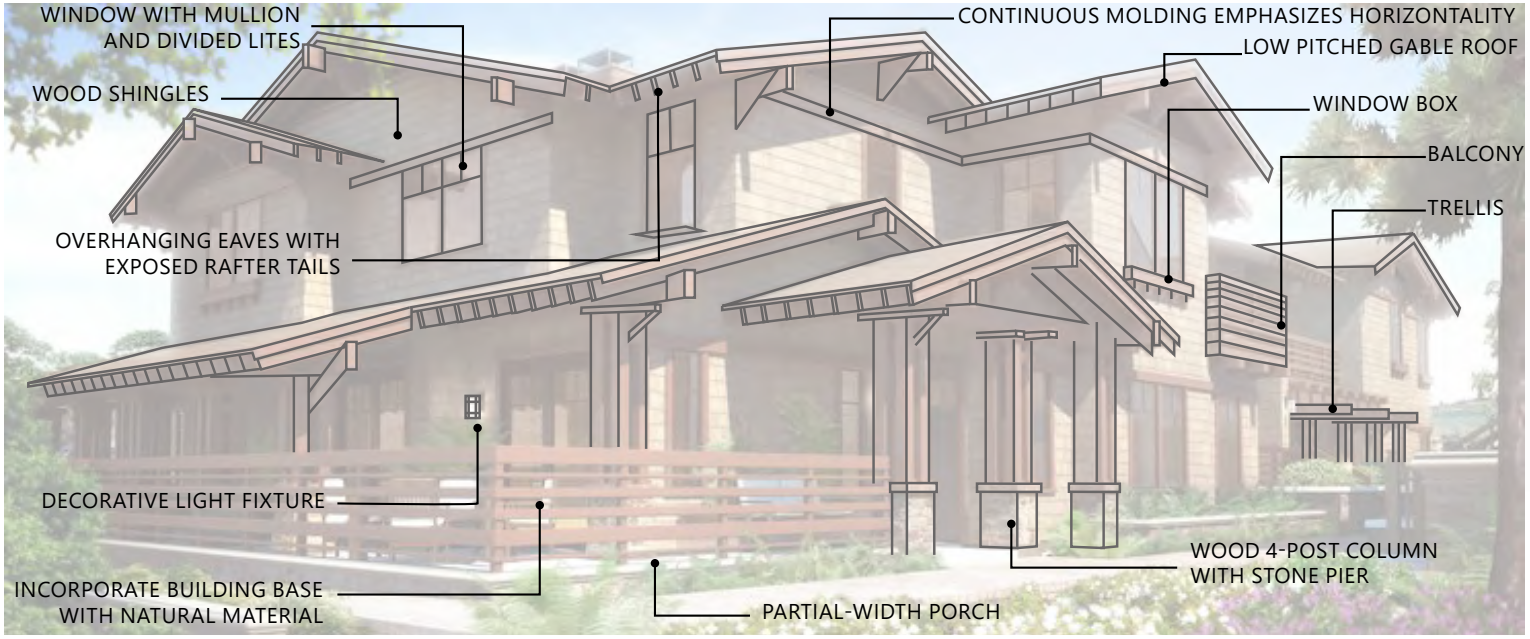
i. Exterior stairs

j. Fabric awnings with metal spear supports



4.2 CRAFTSMAN

The Craftsman or California Bungalow style is derived from the influential residential style that emerged in the early 20th century out of the Arts and Crafts movement. In City of Murrieta, this style is deployed to create a visually rich residential environment with allusions to regional history. As indicated in the accompanying precedent images and illustrative diagram, recognizable elements include the artful use of wood and natural materials, low-pitched gabled or hipped roofs, horizontal orientation and earth-toned colors. Common design elements also include exposed rafters and beams under eaves, decorative brackets and fasteners, full- or partial-width porches and large columns or piers. Though this style exhibits a horizontal emphasis, vertical architectural elements are often deployed to accentuate corners and entrances. Period Craftsman residences often featured exterior cladding of wood shingles or clapboard siding and details such as extended lintels and decorative lighting with geometric detailing.



4.2.1 FORM & MASSING

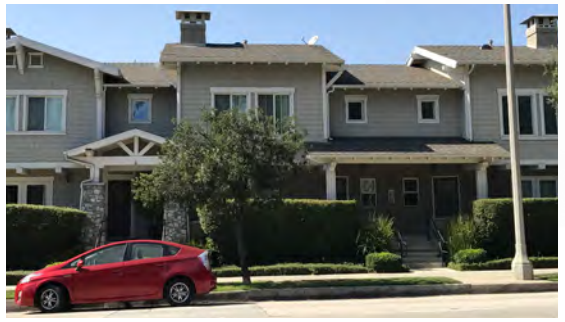
a. Asymmetrical façade/elevations

b. Three (3) or more roof planes on the primary facade

c. Front-facing gable roofs

d. At least 30 percent of the street-facing units shall have balconies or porches.

e. Primary walls shall have two to three materials/colors, with no more than ninety percent (90 percent) of the total wall surface in one material / color.



4.2.2 ROOF

a. Low- to moderate-pitched gable or hipped roofs (typically from 6:12 to 8:12)

b. Overhanging eaves (minimum 24 inches along primary elevation) with exposed rafter tails or beams

c. Brackets or knee braces at gabled ends

d. Use of wood or asphalt shingle (or fiber cement imitation or imitation synthetic asphalt shingles)

4.2.3 MATERIALS & COLORS

a. Brick, stone and concrete blocks are the most common materials used in the base.

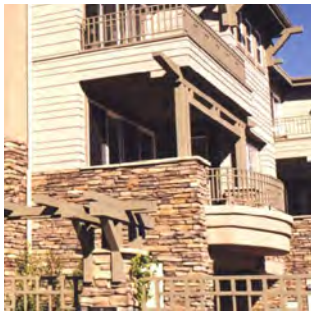
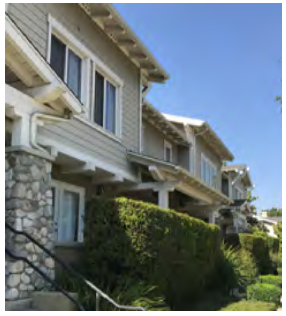
b. Primary walls shall show no more than two materials along any vertical section of the building, with no more than ninety percent (90 percent) of the total wall surface in one material.

c. Primary wall materials shall include dark color wood shingles, clapboard siding, or fiber cement siding and natural materials such as arroyo stone or bricks.

d. Use of dark, neutral, earth-toned color palette, such as browns and greens

e. Lighter paint palettes may also be appropriate, particularly for details (columns, rafter tails)

f. The primary facade shall have at least three paint colors: one for the cladding, one for trim, and one or two for accents such as windows and decorative details

4.2.4 DOORS & WINDOWS

a. At least 50 percent of the windows shall be casement windows.

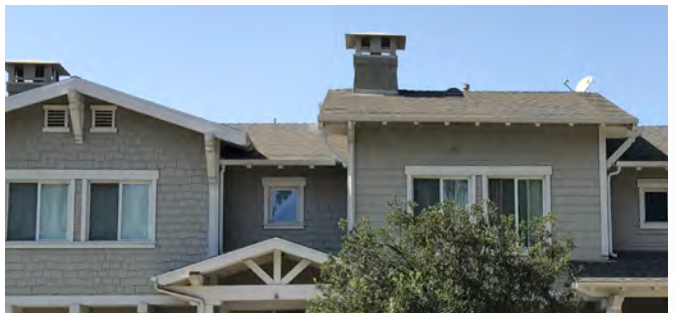
b. Eighty (80) percent of the primary windows shall have grilles

c. At least two types/shapes of windows shall be used

d. Utilize flat wood trims (typically 4½ inches or 5½ inches wide) around the primary windows and entry doors.

e. Window and door trim color shall contrast with color of walls

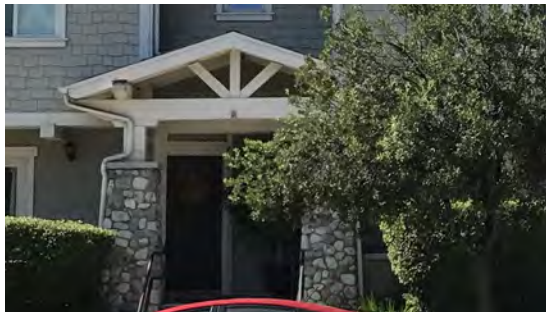
f. Entry doors and garage doors have glass panels



4.2.5 DECORATIVE DETAILS

All residential projects shall provide at least four of the following. Residential projects four (4) stories and taller, mixed use projects, or projects more than fifteen (15) buildings shall provide at least six of the following.

a. Stone pier and battered wood support
b. Exposed rafter tails and knee-brace brackets
c. Dormers shall located on the front façade
d. Second-story balcony
e. Decorative attic/gable vent
f. Light fixtures shall box-shaped, with metal frame and geometric pattern.
g. Chimneys are visible at the exterior and arranged on a side elevation
h. Stained glass windows or transom windows
i. Covered front porches with tapered pillars
j. Ground level windows have muntins
k. Decorative joinery



4.3 AMERICAN MERCANTILE

This building type began in the late 19th century when, in the process of identifying towns and cities, housing and offices were built over retail stores. This mixed-use strategy is still relevant today, as the re urbanization of existing urban centers becomes an established pattern.

4.3.1 FORM & MASSING

a. Simple, rectangular form

b. Rhythmic placement of piers, columns, ground-floor storefronts, and openings on upper levels

c. Transparent windows and doorways shall be no less than 80 percent of the street frontage at the ground level.

d. Multi-story facades are divided into base, body, and top with the ground floor taller than the upper floors

e. Engaged columns or lintels over openings

f. Bases are articulated by changes in material or changes in wall plane

g. Minimal projections or recessions on wall plane

4.3.2 ROOF

a. Flat roof

b. A projecting cornice or a receding, stepped parapet

c. Cornice and details mimic and reference historical detailing.

d. Roofs may be accessible and be used as balconies or terraces.

e. Street-facing gable roof with roof pitches at least 5:12 unless concealed behind a parapet.

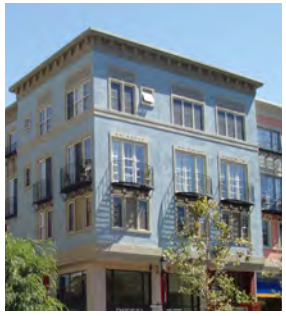
4.3.3 MATERIALS & COLORS

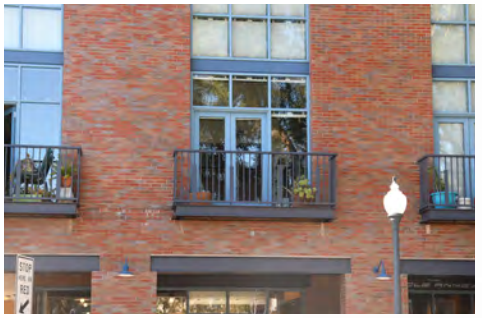
a. The primary walls, shall composed of brick, comprise the main body of the building's tripartite facade structure. The masonry-work can be very plain or highly decorative.

b. Decorative moldings, cornices, or an applied ornament of stone or cast concrete may be used to express the vertical division between the base, the body, and the top.

c. No more than three (3) colors shall be used on any given facade.

d. Stucco and clapboard shall be avoided.





4.3.4 DOORS & WINDOWS

a. Ground floor windows and doors shall be large and expansive, typically with a transom.

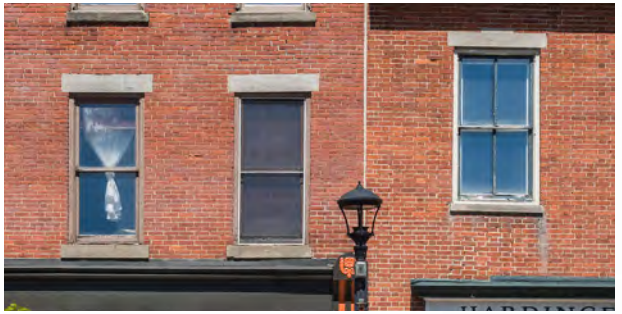
b. Upper floor windows shall be double-hung (two lites), vertically, and grouped with a rhythm relating to the major storefront openings below

c. Entrance shall be visually distinct by higher bays, recessed entries with a minimum of three (3) feet, or different color/materials.

d. Upper floor windows typically have window lintel and sill.

e. Transom windows above the doors and windows on the ground level

f. Fifty (50) percent windows shall have muntins.



4.3.5 DECORATIVE DETAILS

All residential projects shall provide at least four of the following. Residential projects four (4) stories and taller, mixed use projects, or projects more than fifteen (15) buildings shall provide at least six of the following.

a. Awnings, canopies, and second floor balconies may extend into the public right-of-way. Such attachments provide shelter to passing pedestrians, emphasize the ground floor uses, and add interest to the box-like massing inherent to the style.

b. Pedimented windows

c. Wide window trim with a keystone

d. Double bracketed cornice

e. Gable roof

f. Roof finial

g. Transom above door and windows on the ground level

h. Metal stair and balcony railing

i. Canopy or awning

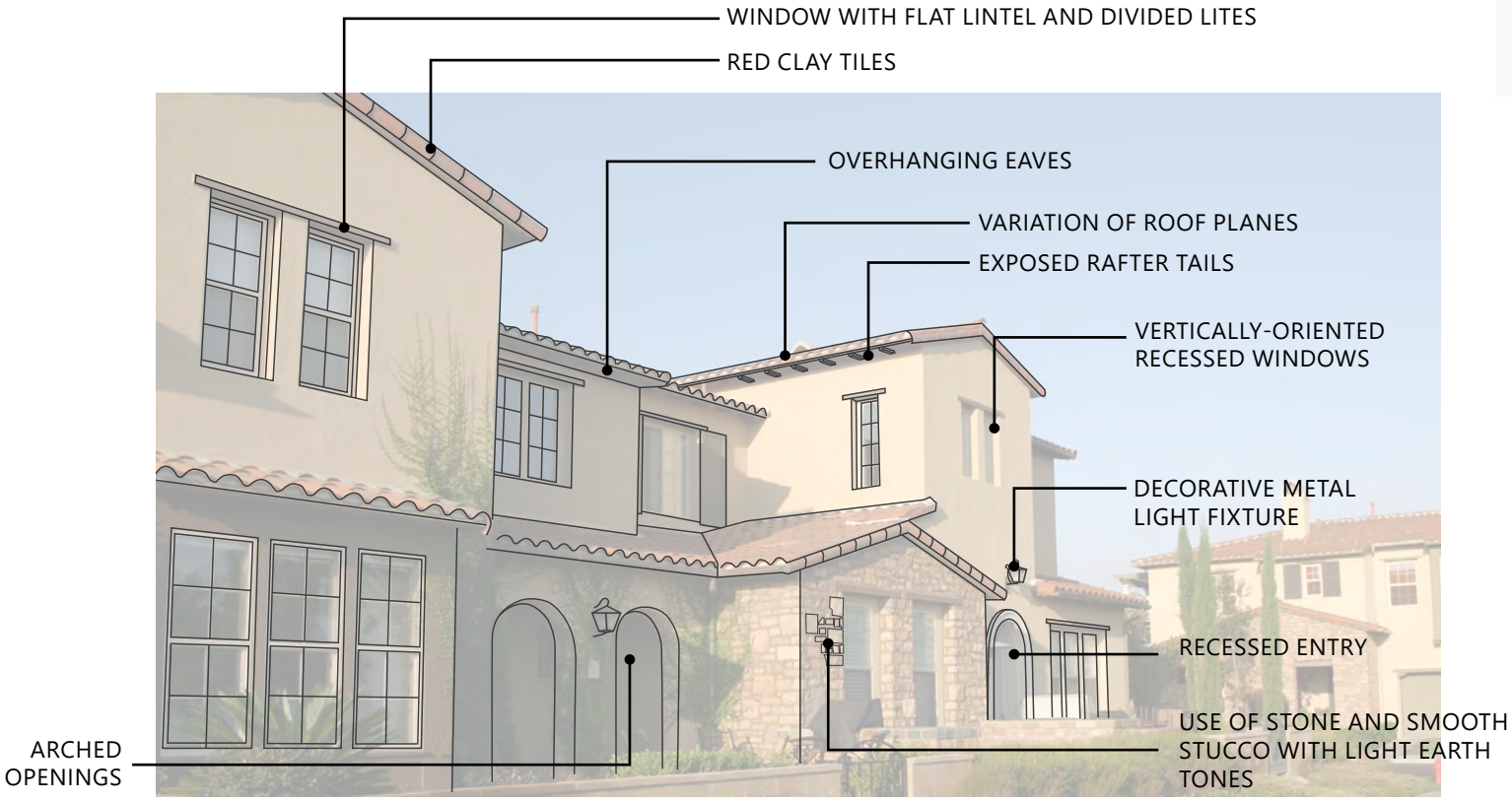
j. Recessed entries

k. Cast-iron columns

l. Shopfront millwork

4.4 TUSCAN

A interpretation of traditional Mediterranean architectural style based on precedents found in the Spanish Revival style joined by rural Italian elements. As indicated in the accompanying precedent images and illustrative diagram, recognizable elements include the use of stone and stucco, light earth tones, and red tiled roofs. Classical elements such as columns and arches and decorative iron work add visual complexity. Squared towers and projections speak to Italianate references. Porches and porticoes are common, as are vertically-oriented recessed windows.



4.4.1 FORM & MASSING

a. Asymmetrical arrangement of windows and design elements along primary elevation

b. Porches, porticoes and/or Juliet balconies

c. Recessed entries (at least three (3) feet)

4.4.2 ROOF

a. Flat or low pitched hip or gable roof (maximum 6:12 slope)

b. Red-toned clay tiles

c. Multiple roof levels (at least three (3))

d. Large overhanging eaves (minimum twelve (12) inches) along primary elevation

e. Shaped timber tiles at eaves

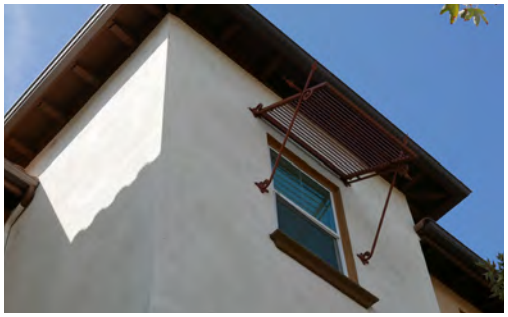
4.4.3 MATERIALS & COLORS

a. Incorporate rough-hewn stone as accent feature

b. Flat stucco walls in light earth tones

c. Earthy tone color palette

d. Brown or beige window frames



4.4.4 DOORS & WINDOWS

a. Single or double-hung windows shall be more horizontal in proportion with six-over-six muntin patterns and 5½ inches wide trim.

b. Casement windows shall paired with either four-pane patterns for narrow windows and eight-pane patterns for wider windows.

c. Vertically oriented rectangular or arched windows arranged in asymmetrical patterns

d. Casement or double-hung sash with flat or arched lintels

e. Windows shall be recessed three (3) to twelve (12) inches from outer wall on primary facade

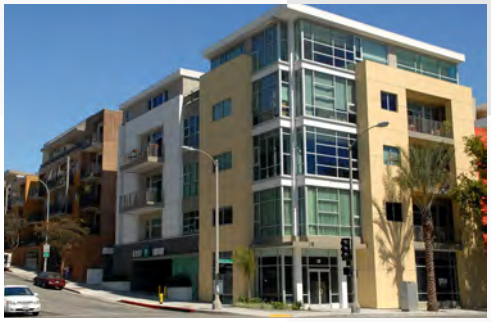
4.4.5 DECORATIVE DETAILS

All residential projects shall provide at least four of the following. Residential projects four (4) stories and taller, mixed use projects, or projects more than fifteen (15) buildings shall provide at least six of the following.

a. Shallow Juliet balconies
b. Rafter extensions and brackets
c. Stone or stucco window /door trim
d. Rectangular or arched wooden door
e. Arcade or porch at entry
f. Decorative ironwork (window grilles, railings, light fixtures, decorative planters)
g. Arched windows
h. Paired decorative wood shutters. Shutters shall be equal to half the width of the window. Shutter styles can either be paneled or louvered
i. Use of brick, stone or wood columns
j. Stucco or stone chimneys or tower
k. Dark color wood trellis
l. Arched openings and doorways at the ground level

4.5 MODERN

Modern architecture exhibits clean lines, geometry shapes and uses unconventional or industrial building materials, rejecting designs that are ornate, that use resources that are expensive to produce, or that damage the environment. Glass, metal, concrete, steel, and reclaimed materials are common building materials. Large windows and lots of them are characteristic of contemporary architecture, with large panels of glass that create opportunities for natural light, passive solar heating and the feel of openness.



4.5.1 FORM & MASSING

a. An irregular, asymmetrical facade
b. Strong emphasis on geometry
c. Rectangular shape structure
d. Horizontal massing
e. Lack of ornament or moldings
f. Straight and continuous lines
g. Multi-faceted appearance
h. Repeating lines and elements

4.5.2 ROOF

a. Flat or low-pitched shed roofs (4:12 slope max)

b. Slope roofs shall have a minimum two-foot deep overhang at the lower end.

c. Tile roof shall be prohibited

d. Mid- and high-rise may have decks or roof gardens

4.5.3 MATERIALS & COLORS

a. Use of raw and natural materials like wood, concrete, metal, and glass

b. Traditional materials (such as stucco, wood, brick and stone) may be used as an accent.

c. Minimum two (2) materials on the building facade

d. Use of bold color blocks to emphasize geometric forms and break down massing elements

e. Building facade shall incorporate at least one of the following as an accent: decorative shutters, popouts, trellis or arbor structures, or balconies.

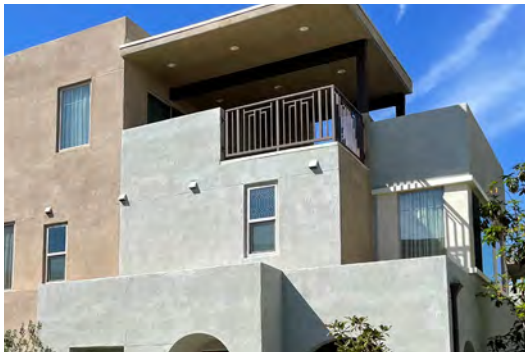
4.5.4 DOORS & WINDOWS

a. Large glass doors and/or window openings
b. Window wrapping around a corner of the building
c. Narrow aluminum window frames with square sticking
d. Valence grids sometimes are applied on windows

4.5.5 DECORATIVE DETAILS

All residential projects shall provide at least four of the following. Residential projects four (4) stories and taller, mixed use projects, or projects more than fifteen (15) buildings shall provide at least six of the following.

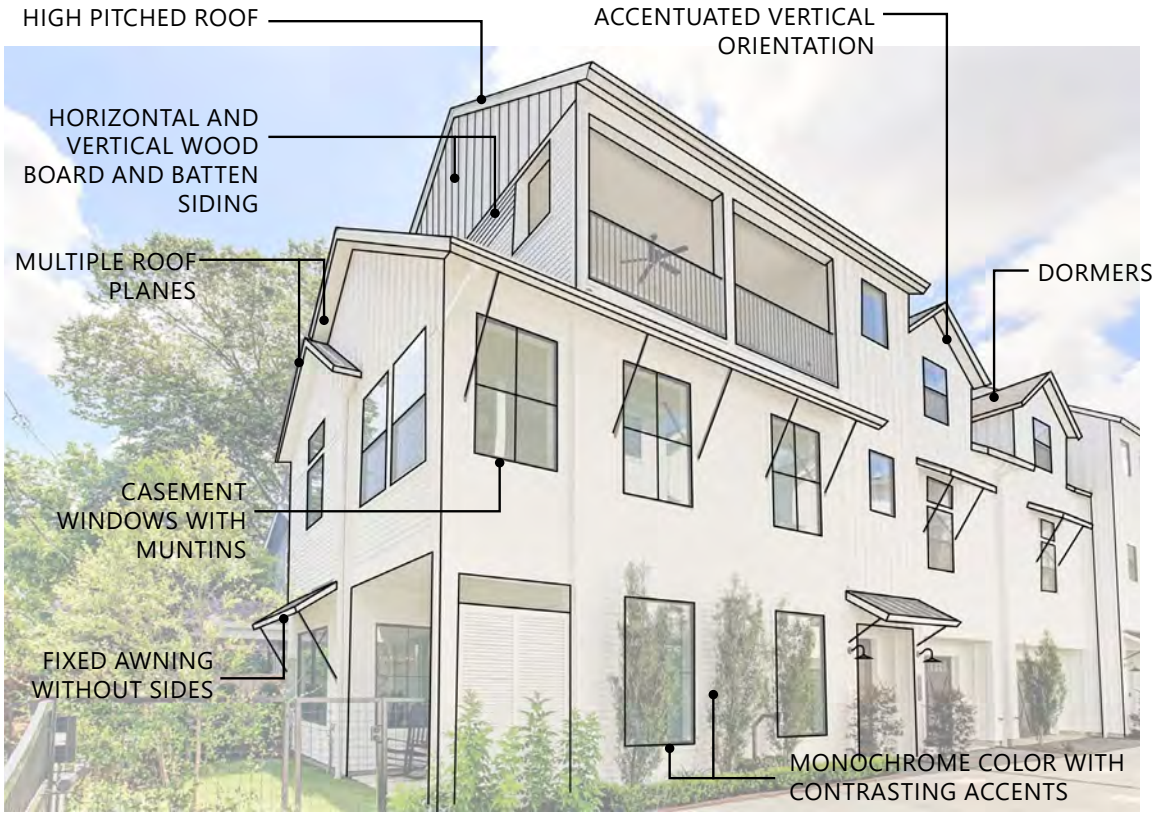
a. Metal balcony railings
b. Picture windows
c. Clerestory windows
d. Floor-to-ceiling glass door
e. Usable outdoor roof decks
f. Trellis shade structures
g. Bright colors to provide contrasting elements
h. Metal awning
i. Bold Branding
j. Floor-to-ceiling glass windows on the ground level
k. Broad roof overhang with exposed wood or steel frame



4.6 FARMHOUSE

Farmhouse is a interpretation of traditional rural residential forms and materials. This style reflects City of Murrieta agricultural and ranching history and regional context. As indicated in the accompanying precedent images and illustrative diagram, the style utilizes elements such as vertical or horizontal wood siding, monochrome colors with contrasting accents and sparse or simple ornamentation. Roofs are typically medium to high-pitched. Minimal detailing often includes awnings, porches and wall-mounted gooseneck lights.

This styles shall be applied to building no taller than 3 stories.



4.6.1 FORM & MASSING

a. Clean and straight exterior lines, geometric form

b. Asymmetrical massing with a gable at the front of the house

c. Repeating shapes and lines

d. Gable roof creating a triangular wall on the ends

e. Incorporate farm and ranch forms inspired by barns, silos, sheds, tank houses and granary towers

f. Multiple gable and shed roof planes

g. Geometric forms, industrial materials, limited palette, and repetition

h. Covered porches and awnings to break up volumes between lower and upper floors

i. Three (3) or more wall planes with a minimum twelve (12) inches difference

4.6.2 ROOF

a. High-pitched gabled roof or shed roof (minimum 6:12 slope)

b. Intersecting gable roofs

c. Dark asphalt shingle, metal roofs or synthetic slate shingles

d. Triangular rooflines emphasizing the height of the unit

e. Large overhangs (minimum two (2) feet in length) above the patio and garage

4.6.3 MATERIALS & COLORS

a. Unadorned materials: metal, wood, masonry

b. Utilize board and batten siding, corrugated panels to give texture and variation to exterior walls

c. Neutral or muted colors shall be predominant

d. Monochrome accents of doors, windows or architectural features

e. Combine contemporary design with rustic materials

f. Stucco is prohibited

4.6.4 DOORS & WINDOWS

a. At least 60 percent windows shall be tall and narrow double hung windows with a proportion of two (2) or 2½ times taller than wide

b. Groupings of two or three double hung units are occasionally used

c. Accent windows shall be no more than 20 percent

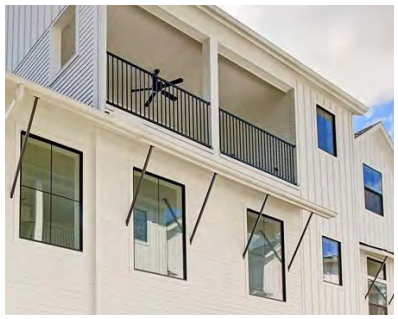
d. Typically have 4½ inches to 5½ inches flat board trim on the sides and head

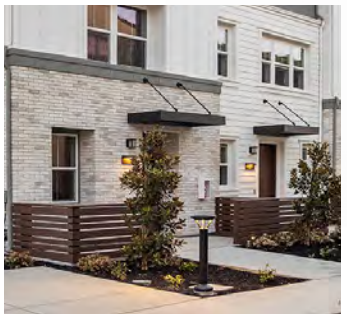
e. Sixty (60) percent windows shall have grilles

f. Minimal molding around window and door openings

g. Double hung or casement windows with muntins

h. Contrast color of window sash with color of the body of the building

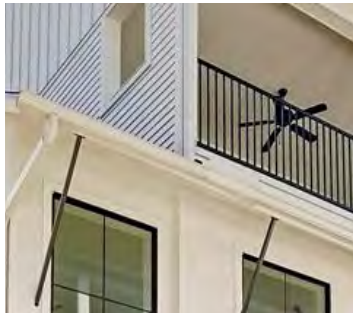




4.6.5 DECORATIVE DETAILS

All residential projects shall provide at least four of the following. Residential projects four (4) stories and taller, mixed use projects, or projects more than fifteen (15) buildings shall provide at least six of the following.

a. Wide front porch with simple columns
b. Covered patio
c. Shed or gabled dormers
d. Carriage-style garage doors
e. Dark shutters and window sashes
f. Shed dormers
g. Simple gable brackets, vents and trim
h. Iron-inspired barn-style lighting
i. Metal awnings without sides
j. Gooseneck light fixtures at the entrance
k. Large doors and windows to maximize natural light
l. Grilles on the ground level windows and doors



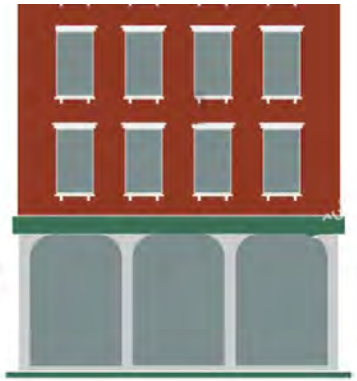
4.7 DEFINITIONS

Accent Window. Accent windows are supplement. It provides aesthetics value and variance to the building. Window types include transom windows, dormer awning windows, picture windows, arch and circle windows, and art glass.

Arcade. A roofed passageway or lane. A series of arches supported by columns, piers, or pillars, either freestanding or attached to a wall to form a gallery.

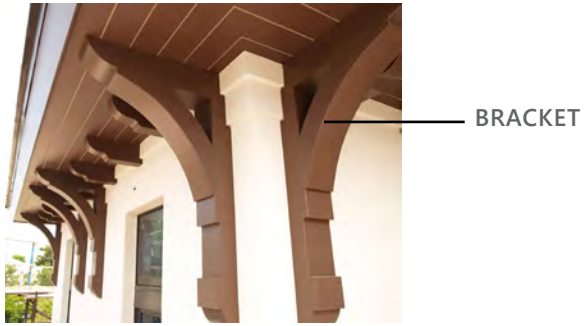
Awning. An architectural fabric or metal projection that provides weather protection, building identity, or decoration, and is wholly supported by the building to which it is attached. An awning is comprised of a lightweight frame structure over which a cover is attached.

Bay. Any division of a building between vertical lines or planes.



Board and Batten. A form of sheathing for wood frame buildings consisting of wide boards, usually placed vertically, whose joints are covered by narrow strips of wood over joints or cracks.

Bracket. A projection from a vertical surface providing structural or visual support under cornices, balconies, windows, or any other overhanging member.



Building Mass (Massing). Mass refers to the general shape and form as well as size of a building.

Cladding. Building cladding is the application of one material over another to add an extra skin or layer to the building. Commonly used exterior wall cladding materials include brick, vinyl, wood, stone, fiber cements, metal, concrete, and stucco.

Cornice. A horizontal molding projecting along the top of a wall, building, etc.

Corbel. A structural piece of stone, wood or metal jutting from a wall to carry a super-incumbent weight, a type of bracket.

Cornice Return. Also called an eave return, a cornice return is a graceful way to transition the eave and the main fascia board around the gable end of a house.

Decorative Gable Vents. A non-venting louver mounted in the top of the gable.

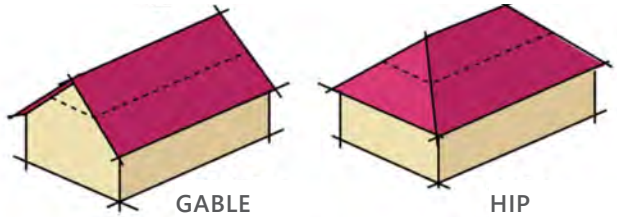
Divided Lite: Individual panes of glass held in place by wood or synthetic material to create a pattern.

Dormer: A structure projecting from a sloping roof usually housing a vertical window that is placed in a small gable, or containing a ventilating louver.

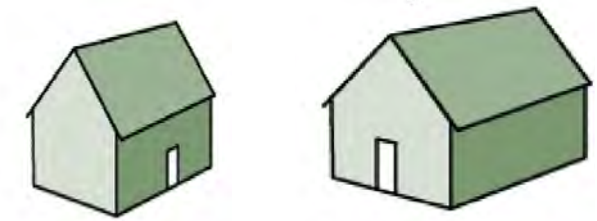
Front-gabled Roof. A gabled-roof that faces the road or main entrance.

Gable Roof. A roof having a gable at one or both ends; a roof sloping downward in two opposite directions from a central ridge, so as to form a gable at each end.

Hipped Roof. A roof which slopes upward from all four sides of a building, requiring a hip rafter at each corner.

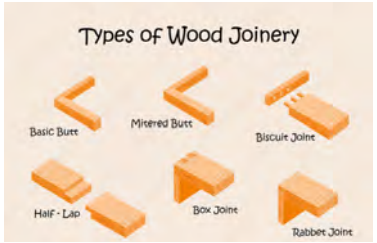


GABLE HIP



SIDE-GABLED FRONT-GABLED

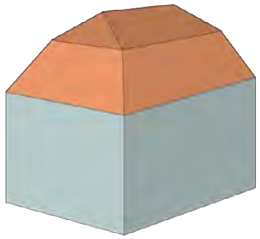
Joinery. It is a part of woodworking that involves joining pieces of wood, engineered lumber, or synthetic substitutes (such as laminate), to produce more complex items.



Juliet Balcony. A pseudo balcony; a low ornamental railing to a window, projecting but slightly beyond the plane of the window, threshold or sill, having the appearance of a balcony when the window is fully open.

JULIET BALCONY

Mansard Roof. A type of roof with the two slopes on each side.

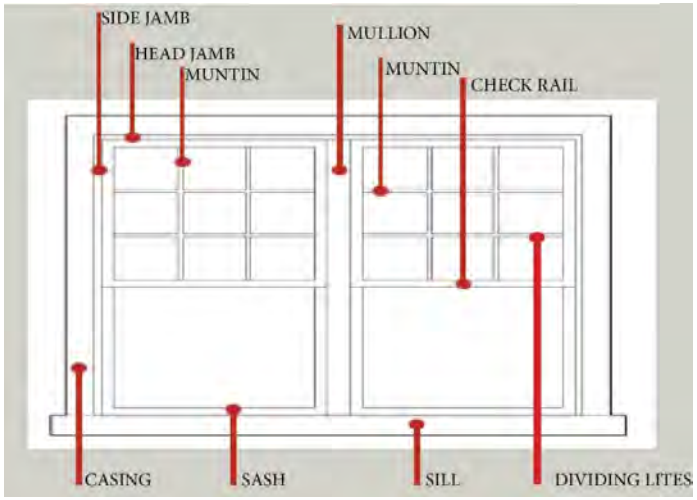


Mission Parapet. A low protective wall or railing along the edge of a roof, balcony, or similar structure; in an exterior wall, the part entirely above the roof.

MISSION PARAPET

Mullion. A dividing piece between the lights of windows, usually taking on the characteristics of the style of the building.

Muntin. A secondary framing member to hold panes in a window, window wall, or glazed door; an intermediate vertical member that divides panels of a door.



PARTS OF A WINDOW

Overhanging Eaves. The projecting overhang at the lower edge of a roof that sheds rainwater.

OVERHANGING EAVES

Pediments. A low-pitched triangular gable above the doorway or above a window; a triangular gable end of the roof above the horizontal cornice, often with sculpture.

Primary Window. Windows that are commonly used and have an independent function. Primary windows shall be able to open from inside. Window types include: casement windows, single-hung, double-hung, slider windows, and bay windows.

EXAMPLES OF PRIMARY WINDOWS

CASEMENT WINDOW

DOUBLE HUNG

BAY WINDOW

EXAMPLES OF ACCENT WINDOWS

CIRCLE WINDOW

DORMER AWNING WINDOW

TRANSOM

Rafter Tails. The portion of the rafter that hangs over the wall.

Roof Plane. The surface of the roof. It could be flat, pitched or on an angle. It is also called the field of the roof.

Shingle. A small thin piece of building material often with one end thicker than the other for laying in overlapping rows as a covering for the roof or sides of a building.

Shutter. Each of a pair of hinged panels, often louvered, fixed inside or outside a window that can be closed for security or privacy or to keep out light.

Side-gabled Roof. A gabled-roof that faces either side of the main entrance.

Sill. The horizontal exterior member at the bottom of a window or door opening, usually sloped away from the bottom of the window or door for drainage of water and overhanging the wall below.

Transom Window. A transom window used above the entry door but can't not open. They usually as wide as the door (or as wide as the door and the sidelights). They can come in square (rectangular), round top, or elliptical.

Valance Grids. Valance grids are similar to the Standard grids but are only across the top of the window or door.

Verandas. A raised, covered, sometimes partly closed area, often made of wood, on the front or side of a building

Window Sash. The movable part of a window made up of the vertical and horizontal frame that holds the glass.

Wingwall. A smaller wall attached or next to a larger wall or structure.

5.0 STANDARDS COMPLIANCE CHECKLISTS

This Checklist is intended as an overview of the requirements for Multifamily development projects in the City of Murrieta. Additional information and plans may be required to evaluate your application following initial review by staff. A copy of this list will be used to check your application for completeness after it is submitted. Applications not containing the necessary information as shown on this Checklist will not be accepted for review.

To use the checklist correctly, follow the steps below:

- The general standards apply to all projects regardless of building height, architectural style(s) or zone. Complete the General Standards section first.
- Next, identify the building type for the projects, based on the typologies outlined in Chapter 3: Low-rise, Mid-rise or High-rise. Use and complete **only** the checklist which applies to the building type of your project.
- Finally, identify the architectural styles for the project based on the definitions in Chapter 4. Whether the project utilizes one, two or three of the Architectural styles, use and complete **only** the checklist(s) which applies to the styles in your project.

As you go through the checklist, check each **"Complete"** box under **"Applicant"** to indicate that the information has been provided and sign below once Checklist is complete. If you believe an item is not applicable to your application, check the "**N/A"** box under **"Applicant"** and provide justification why the standard does not apply.

If you have any questions regarding this form or are uncertain if a specific requirement applies to your project, please contact the Planning Division at (951) 461-6061.

GENERAL STANDARDS

GENERAL STANDARDS

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
Site Planning				
Site design requirements shall be that specified for the zoning district in which the project is located.	☐	☐	☐	☐
Residential complex developments with 8-14 buildings shall provide a minimum of two color schemes complementary to each other. The number of buildings in each color schemes shall be no more than 35 percent.	☐	☐	☐	☐
Residential complex developments with 15-29 buildings shall provide one of the following. The number of buildings in each color schemes shall be no more than 30 percent. • **Two** architectural styles from Chapter 4 • **Two** building types with different color schemes • **Three** building scales and three color schemes	☐	☐	☐	☐
Residential complex developments with more than 30 buildings shall provide one of the following. The number of buildings in each color schemes shall be no more than 30 percent. • **Three** architectural styles from Chapter 4 • **Three** building types with different color schemes • **Four** building scales and four color schemes	☐	☐	☐	☐
Pedestrian linkages to nearby neighborhoods, schools, parks, commercial projects, and parking areas shall be provided.	☐	☐	☐	☐
Architectural styles capped at three (3) stories may allow to build additional story if the fourth story footprint is less than 70 percent of the ground level and is part of the development incentives.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

GENERAL STANDARDS

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
Larger projects (greater than 150 units) shall contain at least two of the following to reduce the appearance of bulk: Vary roof heights, Vertical planes, Different materials and colors.	☐	☐	☐	☐
Roof forms and roof lines should be broken into a series of smaller building components when viewed from the street. Long, linear unbroken roof lines shall not exceed 50 feet.	☐	☐	☐	☐
Visual interest shall be provided through architectural variety, especially where several new buildings face streets, such as by using different layouts and/ or architectural features. Abutting buildings shall have complimentary architectural styles.	☐	☐	☐	☐
Proposed cut and fill slopes shall be rounded off both horizontally and vertically.	☐	☐	☐	☐
Where pedestrian circulation crosses vehicular routes, a change in grade materials, textures or colors shall be provided to emphasize the conflict point and improve its visibility and safety.	☐	☐	☐	☐
Orient buildings towards public (and private) streets to positively define street edges. Buildings located adjacent to both public streets and public open space amenities, such as parks, shall be designed with a dual orientation.	☐	☐	☐	☐
Minimum of 60 percent of the street frontage shall be devoted to buildings. The remaining 40 percent may be devoted to parking, landscaping, and driveways. Except for urban area or area with slope restrictions.	☐	☐	☐	☐
Except for garage entrances, structured parking shall not be visible from the primary streets or any public open space.	☐	☐	☐	☐
Loading docks and service areas on a corner lot must be accessed from the side street.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

GENERAL STANDARDS

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
Gates which control vehicular and pedestrian access to a residential site are considered privacy gates, and shall be subject to review and approval of the Development Services Department and Fire Department.	☐	☐	☐	☐
Arrange buildings to provide functional common outdoors spaces If adjacent to a single-family residential zone, buildings shall be designed so as not to have a direct line-of-sight into adjacent units or onto private patios or backyards adjoining the property line. This can be accomplished through: • **Stepbacks** of upper stories, (setback and stepback distance see Table 16.08-4 in MMC 16.08.020) • **Windows** or balconies placement • **Use** of clerestory windows, glass block, or opaque glass • **Mature** landscaping within the rear or side setback areas (such as courtyards, paseos, or parks) for the use of residents.	☐	☐	☐	☐
Residential structures on the same lot (not attached) shall maintain a minimum separation of at least ten feet for one-story structures, fifteen (15) feet for two-story structures, and 20 feet for three-story structures (MMC 16.18.130).	☐	☐	☐	☐
Mixed-use Building Orientation shall comply with all the standards mentioned above and the following standards. • **Commercial/Office** Units. Commercial/Office unit entrances shall face the street, a parking area, or an interior common space. • **Entrances** to residential units shall be physically separated from the entrance to the permitted commercial uses and clearly marked with a physical feature.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

GENERAL STANDARDS

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
Surface Parking				
Parking lots shall be placed to the side or rear of buildings. There shall be no vehicular parking between townhouse fronts and the public right-or way.	☐	☐	☐	☐
Parking lots shall be connected to all building entrances by means of internal pedestrian walkways.	☐	☐	☐	☐
Landscaped planters shall be not less than five (5) feet in width in all interior dimensions.	☐	☐	☐	☐
Adjacent to Side or Rear Property Lines: Parking areas shall provide a perimeter landscaped strip at least five (5) feet wide.	☐	☐	☐	☐
Adjacent to Streets: Parking areas shall provide a perimeter landscaped strip at least fifteen (15) feet wide between the street right-of-way and parking area.	☐	☐	☐	☐
Lighting standards shall comply with MMC 16.18.110 with a minimum of one footcandle throughout the parking area and two-foot candles at ground level in front of the entrance/exit.	☐	☐	☐	☐
Access drives shall be located at least 200 feet apart and at least 100 feet from property lines and street intersections unless an approved shared drive is provided, or the driveway location does not create a traffic hazard to adjacent property (MMC 16.08.040).	☐	☐	☐	☐
Maximum number of driveway: • **One** driveway for lot frontage up to 150 feet • **Two** driveways for lot frontage 150 feet to 299 feet • **One** driveway for each additional 300 feet	☐	☐	☐	☐
Bicycle parking requirement shall comply with the standards in MMC 16.34.090.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

GENERAL STANDARDS

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
Numbers of required vehicle parking space are listed under MMC 16.34.040 Table 3.7.	☐	☐	☐	☐
Disabled/Handicapped Parking Requirements shall comply with the standards in MMC 16.34.060.	☐	☐	☐	☐
Electric Vehicle Parking. Electric vehicle parking spaces shall be implemented consistent with Section 16.44.115 (Electric Vehicle Parking Requirements) and California Vehicle Code Section 22511.2.	☐	☐	☐	☐
Open parking areas shall be screened from view from adjacent properties and streets using walls, berms and/or evergreen landscaping.	☐	☐	☐	☐
Parking lot landscaping shall be located so as to discourage pedestrians from having to cross any landscaped areas to reach building entrances from parked cars.	☐	☐	☐	☐
Residential Garage				
Garage doors may occupy no more than 40 percent of a building's street frontage and shall be recessed a minimum of eighteen (18) inches from a street-facing wall plane.	☐	☐	☐	☐
Street-facing garage doors serving individual units that are attached to the structure must incorporate one or more of the following so that the garage doors are visually subservient and complementary to other building elements: • **Garage** door windows or architectural detailing consistent with the main dwelling. Arbor or other similar projecting feature above the garage doors. • **Landscaping** occupying 50 percent or more of driveway area serving the garage (e.g., "ribbon" driveway with landscaping between two parallel strips of pavement for vehicle tires).	☐	☐	☐	☐
Minimum Interior Dimensions for Residential Enclosed Garages.				

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

GENERAL STANDARDS

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
• **A** single-car garage shall be at least ten (10) feet wide and 20 feet long.	☐	☐	☐	☐
• **A** standard double-car garage shall be at least 20 feet wide and 20 feet long.	☐	☐	☐	☐
• **Each** garage space shall be equipped with an automatic door opener and a roll-up sectional or similar garage door which does not extend onto the apron. On multifamily dwellings, a security gate on a multi-space garage is permitted.	☐	☐	☐	☐
Numbers of required off-street parking space and bicycle parking slots are listed under MMC 1107.0304	☐	☐	☐	☐
For attached private garage, the design shall include adequate space for waste/solid storage and a water heater unit.	☐	☐	☐	☐
Parking Structure and Loading				
Any driveway providing access to a parking structure shall have a minimum width of 28 feet.	☐	☐	☐	☐
Parked vehicles at each level within the structure shall be shielded from view from adjoining streets.	☐	☐	☐	☐
The exterior elevations of parking structures shall be designed to minimize the use of blank concrete facades. This can be accomplished through the use of textured concrete, planters or trellises, or other architectural treatments.	☐	☐	☐	☐
If a toll or fee booth is located in the driveway area, the driveways on either side of the booth shall have a minimum width of fourteen (14) feet.	☐	☐	☐	☐
Three hundred (300) feet shall be the maximum length of a parking aisle without being intersected by another parking aisle or driveway.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

GENERAL STANDARDS

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
• **The** parking areas of sloped floor parking structures shall not exceed a grade of five (5) percent as measured across the width of a 90 degree parking stall. • **The** grade of a straight internal ramp shall not exceed fifteen (15) percent. • **The** grade of a circular ramp shall not exceed twelve (12) percent as measured at the outside ramp wall.	☐	☐	☐	☐
A straight one-way ramp shall be at least fourteen (14) feet in width. A two-way ramp shall be at least 24 feet in width. The minimum outside wall radius of a circular ramp shall be 36 feet.	☐	☐	☐	☐
All ramps shall be provided with transition zones at the top and bottom of the ramp. • **Ramps** with a grade of ten (10) percent or less shall have a transition zone at least eight (8) feet in length. • **Ramps** with a grade of greater than 10 percent shall have transition zones at least twelve (12) feet in length. • **The** grade of a transition zone shall not exceed one-half (1/2) the grade of the ramp it serves.	☐	☐	☐	☐
Minimum lighting requirement of entrances and exits is 50 footcandles. Minimum lighting requirement of parking areas is five (5) footcandles.	☐	☐	☐	☐
The minimum distance of entry/exits from corner intersections is 150 feet.	☐	☐	☐	☐
Large illuminated signs with architectural features, such as an arch, canopy shall be used at the entrance to emphasize the facility entry and attract patrons.	☐	☐	☐	☐
Off-Street Loading Space Requirements				
One loading space is required in any parking lot with fifteen (15) or more spaces serving any nonresidential or mixed use.	☐	☐	☐	☐
Loading docks and service areas are prohibited on the primary street building frontage.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

GENERAL STANDARDS				
Design Standards	**Applicant**		**City Use Only**	
	Complete	**N/A**	**Complete**	**N/A**
Loading requirement are listed under MMC 16.34.100.	☐	☐	☐	☐
Tandem Parking				
Tandem parking may be permitted to satisfy the off-street parking requirement for a residential unit in accordance with the following.	☐	☐	☐	☐
• **No** more than two vehicles shall be placed one behind the other.	☐	☐	☐	☐
• **Both** spaces shall be assigned to a single dwelling unit.	☐	☐	☐	☐
• **The** tandem parking bay shall be a minimum 40 feet by ten (10) feet in interior dimension.	☐	☐	☐	☐
• **Tandem** parking to meet required parking for multi-unit development shall be located within an enclosed structure and the number of tandem parking spaces shall not exceed 50 percent of the total provided number of spaces.	☐	☐	☐	☐
• **Tandem** parking shall not be used to satisfy the parking requirement for guest parking.	☐	☐	☐	☐
• **The** minimum vertical clearance for shall be eight (8) feet (per MMC 16.34.070).	☐	☐	☐	☐
Common Open Space				
In projects containing fewer that ten (10) units, the common open space shall have a minimum width and depth of ten (10) feet.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

GENERAL STANDARDS

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
• **In** projects containing ten (10) or more or units, where the required common area is less than 3,000 square feet, the common outdoor space shall be concentrated in one area. The common recreation area shall be at least 25 feet in width. • **Where** the required common area is 3,000 square feet or more, the space may be divided among multiple areas; provided, that at least one recreation area is a minimum of 2,000 square feet in area with a minimum width of 25 feet. • **All** other areas shall be at least 1,000 square feet in area with a minimum width of 10 feet.	☐	☐	☐	☐
Primary common open space shall not be located at an extreme edge of the property or dispersing smaller less usable areas throughout the site.	☐	☐	☐	☐
Residential units shall be within a 1/4 mile (1,320 feet) walking distance of common open space.	☐	☐	☐	☐
Minimum open space requirements are met per the requirements on Page 25.	☐	☐	☐	☐
Pedestrian walkways shall connect the common open space to a public right-of-way or building entrance.	☐	☐	☐	☐
Open space areas shall not be located directly next to arterial streets, service areas, or adjacent commercial development to ensure they are sheltered from the noise and traffic of adjacent streets or other incompatible uses. Alternatively, a minimum of ten (10) foot wide dense landscaping shall be provided as screening.	☐	☐	☐	☐
An area of usable common open space shall not exceed an average grade of ten (10) percent. The area may include landscaping, walks, recreational facilities, and small decorative objects such as artwork and fountains.	☐	☐	☐	☐
All common open spaces shall include seatings and lights. Site furniture shall use graffiti-resistant material and/or coating and skateboard deterrents to retain the site furniture's attractiveness.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

GENERAL STANDARDS

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
Forecourt must be enclosed on at least three sides by buildings. The minimum dimension of any side is 40 feet.	☐	☐	☐	☐
Developments that include 30 or more dwelling units shall include at least one play area for children (except for age restricted to senior citizens; or located within 300 feet of a public park). Such play area shall: • **Have** a minimum dimension of 20 feet in any direction and a minimum area of 600 square feet. • **Contain** play equipment, including equipment designed for children age five years and younger. • **Be** visible from multiple dwelling units within the project. • **Be** protected from any adjacent streets or parking lot with a fence or other barrier at least four (4) feet in height.	☐	☐	☐	☐
Multifamily developments exceeding 150 units, shall have at least two common open space areas and shall incorporate activities for different age groups.	☐	☐	☐	☐
Recreational Amenities				
The required front yard area shall not be counted toward satisfying the common recreation area requirement.	☐	☐	☐	☐
Project shall include at least one children play area with a minimum dimension of 150 square feet.	☐	☐	☐	☐
Unless otherwise approved by the Planning, Building and Public Works Director, required play spaces for children shall be accessible from all on-site dwellings by pedestrian paths separate from vehicular areas.	☐	☐	☐	☐
All play areas shall be located away from high automobile traffic and shall be situated for maximum visibility from the dwelling units.	☐	☐	☐	☐
A play area for children under age five (5) shall be provided within direct visibility of common spaces.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

GENERAL STANDARDS

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
Senior housing and/or HOPA housing shall be exempt from the requirement to provide play areas, but shall provide areas of congregation that encourage physical activity.	☐	☐	☐	☐
One common recreational amenity shall be provided for each 30 units or fraction thereof. Facilities that serve more people could be counted as two amenities. The following listed amenities satisfy the recreational requirements. • **Clubhouse** at a minimum of 750 square feet (two) • **Swimming** Pool at a minimum of 15x30 feet or equal surface area (two) • **Tennis,** Basketball or Racquetball court • **Weightlifting** facility • **Children's** playground at a minimum of 600 square feet • **Sauna** or Jacuzzi • **Day** Care Facility (two) • **Other** recreational amenities deemed adequate by the director. • **Community** garden	☐	☐	☐	☐
Private Open Space				
Private usable open space shall be accessible to only one living unit by a doorway or doorways to a habitable room or hallway of the unit.	☐	☐	☐	☐
Private usable open space located on the ground level (e.g., yards, decks, patios) shall have no horizontal dimension less than ten (10) feet. Private open space located above ground level (e.g., porches, balconies) shall have no horizontal dimension less than six (6) feet.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

GENERAL STANDARDS

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
Above ground-level space shall have at least one exterior side open and unobstructed for at least eight (8) feet above floor level, except for incidental railings and balustrades.	☐	☐	☐	☐
Guardrails on open-sided surfaces (like stairs, balconies, decks, porches, etc.) must be at least 36 inches in height.	☐	☐	☐	☐
Balconies and decks facing shall have walls or railings that are at least 50 percent open.	☐	☐	☐	☐
Private open spaces shall be contiguous to the units they serve and screened to a minimum height of four feet by use of plant materials, solid walls, or building surface.	☐	☐	☐	☐
Landscaping				
Landscaping materials shall comply with the following: • **Shrubs,** of at least one-gallon size; • **Ground** cover instead of grass/turf; and/or • **Decorative** nonliving landscaping materials including, but not limited to, sand, stone, gravel, wood or water may be used to satisfy a maximum of 25 percent of the required landscaping area.	☐	☐	☐	☐
Trees shall be planted in a manner which maximizes the shading of paved areas, outdoor seating, and both south and west facing windows.	☐	☐	☐	☐
The tree palette shall provide a balanced use of evergreen and deciduous trees.	☐	☐	☐	☐
A minimum of five (5) foot wide landscaping shall be incorporated around the base of buildings (except for walkways and driveways) to soften the edge between parking, drive aisles and sidewalks.	☐	☐	☐	☐
Development on sloped properties shall follow the natural contours of the land by use of design features listed in the MMC (section 16.08.040).	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

GENERAL STANDARDS

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
The applicant shall choose and group plant species with similar water demands to facilitate efficient irrigation (MMC 16.28.060).	☐	☐	☐	☐
High water use plants, characterized by a plant factor of 0.7 to 1.0, can only be used in the common open space.	☐	☐	☐	☐
Turf is not allowed on slopes greater that 25 percent where the toe of the slope is adjacent to an impermeable hardscape (MMC 16.28.060).	☐	☐	☐	☐
All setbacks and non-work areas shall be landscaped within the development area.	☐	☐	☐	☐
Hardscape shall not be used to meet minimum site landscaping requirements in MMC 16.28.070.	☐	☐	☐	☐
Pedestrian access to sidewalks and structures shall be considered in the design of all landscaped areas.	☐	☐	☐	☐
A mix of plant materials shall be provided in compliance with the Table 3-5, MMC Section 16.28.080.	☐	☐	☐	☐
Primary street trees, shade trees, and parking lot trees shall choose fifteen (15) gallon trees.	☐	☐	☐	☐
Sidewalks and pedestrian walkways shall be a minimum of five (5) feet in width.	☐	☐	☐	☐
Store Fronts				
The ground floor elevation shall be located near the elevation of the sidewalk to minimize the need for external steps and external ADA ramps at public entrances.	☐	☐	☐	☐
All ground floor tenant spaces that have street frontage shall have storefront entrances on the façade fronting a street.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

GENERAL STANDARDS

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
Entrance shall be emphasized and clearly recognizable from the street. One or more of the following methods shall be used to achieve this result: • **Projecting** non-fabric awnings or canopies above an entry (covered entry); • **Varied** building mass above an entry, such as a tower that protrudes from the rest of the building surface; • **Special** corner building entrance treatments, such as a rounded or angled facets on the corner, or an embedded corner tower, above the entry; • **Special** architectural elements, such as columns, porticos, overhanging roofs, and ornamental light fixtures; • **Projecting** or recessed entries or bays in the facade; • **Recessed** entries must feature design elements that call attention to the entrance such as ridged canopies, contrasting materials, crown molding, decorative trim, or a 45-degree cut away entry; and • **Changes** in roofline or articulation in the surface of the subject wall.	☐	☐	☐	☐
Lobby entrances to upper floor uses shall be located on a façade fronting a street.	☐	☐	☐	☐
A minimum of ten (10) feet wide frontage shall be provided from the back of curb to the building.	☐	☐	☐	☐
The ground between the curb and the building face shall be paved with hard surfaces to maximize the walkable area and provide flexible spaces to accommodate commercial uses.	☐	☐	☐	☐
Windows and/or glass doors shall cover not less than 50 percent of the first floor elevation along street frontages.	☐	☐	☐	☐
At least 25 percent of the surface area of each upper floor façade shall be occupied by windows.	☐	☐	☐	☐
Projecting elements on upper floors may project five (5) feet from the façade and project into the setback.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

GENERAL STANDARDS

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
Development with retail, commercial, community or public uses on the ground floor shall have a clear floor-ceiling height of at least fifteen (15) feet.	☐	☐	☐	☐
The minimum height for awnings or marquees is eight (8) feet above finished grade and the maximum height for awnings or marquees is twelve (12) feet above finished grade; except as otherwise required in the Building Code approved by the City.	☐	☐	☐	☐
If the front façade is set back from the public sidewalk, the setback shall be improved as an extension of the public sidewalk.	☐	☐	☐	☐
Live-Work/Office Fronts				
The ground floor elevation shall be located near the elevation of the sidewalk to minimize the need for external steps and external ADA ramps at public entrances.	☐	☐	☐	☐
All ground floor tenant spaces that have street frontage shall have entrances on a façade fronting a street. All other ground floor uses may have a common lobby entrance along the front façade or private entrances along other facades.	☐	☐	☐	☐
Entrances to upper floor units may be provided through a common lobby entrance and/or by a common entrance along a façade fronting a street.	☐	☐	☐	☐
At least 40 percent of the surface area of the ground floor façade shall be occupied by display windows or translucent panels.	☐	☐	☐	☐
At least 25 percent of the surface area of each upper floor façade shall be occupied by windows.	☐	☐	☐	☐
Projecting elements on upper floors may project three (3) feet from the façade and project into the setback.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

GENERAL STANDARDS

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
The ground floor shall have a clear floor-ceiling height of at least twelve (12) feet.	☐	☐	☐	☐
The minimum height for awnings or marquees is eight (8) feet above finished grade and the maximum height for awnings or marquees is twelve (12) feet above finished grade; except as otherwise required in the Building Code approved by the City.	☐	☐	☐	☐
If the front façade is set back from the public sidewalk, the setback shall be landscaped and/or improved as an extension of the public sidewalk.	☐	☐	☐	☐
Residential Fronts				
Garages shall not exceed 40 percent of the length of the building facade.	☐	☐	☐	☐
The ground floor elevation shall be located within six (6) feet of the ground surface of the adjacent sidewalk or walkway.	☐	☐	☐	☐
Entrances to ground floor units that have street frontage may be provided through a common lobby entrance and/or by private entrances from the adjacent sidewalk.	☐	☐	☐	☐
Entrances to upper floor units may be provided through a common lobby entrance and/or by a common entrance along a façade fronting a street.	☐	☐	☐	☐
At least 25 percent of the surface area of the ground and upper floor façade shall be occupied by windows.	☐	☐	☐	☐
At least 25 percent of the surface area of the ground and upper floor façade shall be occupied by windows.	☐	☐	☐	☐
Stoops and front porches may be provided in front of building and unit entrances. Stoops and front porches may project up to five (5) feet from the façade and project into the setback.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

GENERAL STANDARDS

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
Projecting elements on upper floors may project three (3) feet from the façade and project into the setback.	☐	☐	☐	☐
The public sidewalk shall be improved with street trees standards per MMC 16.28.080.	☐	☐	☐	☐
If the front façade is set back from the public sidewalk, the setback shall be landscaped (excluding stoops/ front porches and paved paths to building entrances).	☐	☐	☐	☐
Exterior Lighting				
Lighting plan shall be prepared and shall demonstrate the dispersal of light on the ground surface and compliance with the requirements in MMC 16.18.100.	☐	☐	☐	☐
Lighting shall be shielded and directed downward, with location of lights coordinated with the approved landscape plan.	☐	☐	☐	☐
Exterior lamps shall be low wattage, LED, and except for outdoor Christmas lights, shall not be colored.	☐	☐	☐	☐
All exterior lighting shall be dark sky compliant, and designed, located and lamped in order to prevent overlighting, energy waste, glare, and light trespass.	☐	☐	☐	☐
Bollard lighting may be used to light walkways and other landscape features, but shall cast its light downward.	☐	☐	☐	☐
All parking lot lights shall be full cutoff luminaires, as certified by the manufacturer, with the light source directed downward and away from adjacent residences.	☐	☐	☐	☐
Street lights shall use decorative lighting poles that match with the community theme.	☐	☐	☐	☐
Outside and parking lot lighting shall not exceed 0.1 footcandles at residential property lines.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

GENERAL STANDARDS

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
Lighting shall be located so as to minimize the impact of lighting upon adjacent buildings and properties, especially residential uses. Any lighting source, including illuminated signs, shall be positioned so that light does not shine directly into residential windows. (DTSP section 4.8)	☐	☐	☐	☐
Trash and Recycling Enclosures				
The location of storage areas shall be conveniently accessible for trash removal by standard refuse disposal vehicles.	☐	☐	☐	☐
Enclosures shall be finished using materials compatible with the surrounding architecture.	☐	☐	☐	☐
Provide a concrete pad within the fenced or walled area(s) and a concrete apron which facilitates the handling of the individual bins or containers.	☐	☐	☐	☐
The location of storage areas shall be conveniently accessible for trash removal by standard refuse disposal vehicles.	☐	☐	☐	☐
Loading areas and refuse storage facilities shall be located as far as possible from residential units and shall be completely screened from view from adjacent residential portions of the project. The location and design of trash enclosures shall account for potential nuisances from odors.	☐	☐	☐	☐
For sites having 2-6 units, a minimum of twelve (12) square feet waste and twelve (12) square feet recycling enclosure shall be provided.	☐	☐	☐	☐
For sites having 7-15 units, a minimum of 24 square feet waste and 24 square feet recycling enclosure shall be provided.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

GENERAL STANDARDS

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
For sites having 16-25 units, a minimum of 48 square feet waste and 48 square feet recycling enclosure shall be provided.	☐	☐	☐	☐
For sites having 25 more units, every additional 25 dwellings or fraction thereof shall require an additional 48 square feet for solid waste and 48 square feet for recyclables.	☐	☐	☐	☐
All recycling areas in multifamily residential developments shall be located within 250 feet of any residential unit.	☐	☐	☐	☐
Storage areas shall not be closer than twenty (20) feet from doors or operable windows of adjacent structures.	☐	☐	☐	☐
For individual unit, a minimum of three (3) cubic feet shall be provided for the storage of refuse and a minimum of three (3) cubic feet shall be provided for the storage of recyclable material.	☐	☐	☐	☐
Garbage and/or solid waste storage shall be screened from public view and landed on a concrete pad.	☐	☐	☐	☐
Door Bells				
Every dwelling consisting of more than five (5) dwelling units shall be equipped with doorbells, intercoms or other signaling device attached to the front exterior of the dwelling accessible to all visitors to the dwelling.	☐	☐	☐	☐
Doorbell locations shall meet the ADA requirement.	☐	☐	☐	☐
If a gate is provided between the front door and the street, the gate shall be clearly marked as the main entrance to the business and include a doorbell, directory, call box, or other means of communication for patients and patrons to be allowed access to the business.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

BUILDING STANDARDS BY TYPE

BUILDING STANDARDS BY TYPES - LOWRISE				
Design Standards	**Applicant**		**City Use Only**	
	Complete	**N/A**	**Complete**	**N/A**
Site Design For Low Rise				
Each unit shall have an individual entry facing a street or a common open space.	☐	☐	☐	☐
Maximum building coverage: 40 percent.	☐	☐	☐	☐
Parking for residents must be in the garage. Guest parking may be surface parking (covered or uncovered). Parking requirement and standards shall be in accordance with MMC 16.34.040 and Chapter 2.2 Parking in this book.	☐	☐	☐	☐
Open Space requirement shall be in accordance with MMC 16.34.040 and Chapter 2.3 Common Open Space, Chapter 2.4 Recreational Amenities, and Chapter 2.5 Private Open Space in this book.	☐	☐	☐	☐
The area between a building and the street must be landscaped.	☐	☐	☐	☐
Site development standards and required setbacks shall be in accordance with Table 16.08-4 in MMC 16.08.020.	☐	☐	☐	☐
A street-facing primary entrance must feature a porch, covered entry, or recessed entry clearly visible from the street that gives the entrance visual prominence. Entrances must be connected to the adjacent sidewalk with a pedestrian walkway.	☐	☐	☐	☐
A minimum of 20 percent of the site shall be landscaped with a mix of vegetative ground cover, shrubbery, and trees.	☐	☐	☐	☐
All landscaping shall be irrigated with a permanent irrigation system unless a licensed landscape architect submits written verification that the proposed plant materials do not require irrigation. The property owner shall maintain all landscaping.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

BUILDING STANDARDS BY TYPES - LOWRISE

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
Townhome Building Massing Standards				
The minimum unit of a townhome shall be three (3) units. The maximum building length shall be 150 feet or six (6) units, whichever is less.	☐	☐	☐	☐
Entrance frequency: At least one every 50 feet.	☐	☐	☐	☐
Maximum elevation of the front entrance shall be 30 inches above adjacent sidewalk. If the elevation exceeding 30 inches, projects are subject to accessibility design reviews.	☐	☐	☐	☐
Parking (garage) may be front-loaded or rear-loaded, but must be entered from alley.	☐	☐	☐	☐
Architectural articulation and projection shall follow the requirement in MMC 16.08.040.	☐	☐	☐	☐
Primary elevations (facades) shall incorporate design features such as offsets, balconies, projections, window reveals, or similar elements to preclude large expanses of uninterrupted building. Along the vertical face of a structure, such features shall occur at a minimum of every 35 feet and on each floor shall contain at least two of the following features: • **Recess** (e.g., deck, patio, courtyard, balcony, garage, entrance, or similar feature) that has a minimum depth of four (4) feet; • **Extension** (e.g., floor area, deck, porch, bay window, patio, entrance, or similar feature) that projects a minimum of two (2) feet and runs horizontally for a minimum length of four (4) feet; and/or • **Offsets** of facade or roof elevation of two (2) feet or greater.	☐	☐	☐	☐
The vertical massing of buildings shall be articulated to express each individual unit.	☐	☐	☐	☐
Avoid having primary entry directly faces another unit's garage door.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

BUILDING STANDARDS BY TYPES - LOWRISE				
Design Standards	**Applicant**		**City Use Only**	
	Complete	**N/A**	**Complete**	**N/A**
Townhome Building Massing Standards				
A covered porch or covered recess entry is required for each townhouse, with a minimum depth of five (5) feet and a minimum area of 40 square feet.	☐	☐	☐	☐
Rooflines shall be vertically articulated at least every 50 feet along the street frontage, through the use of architectural elements such as parapets, varying cornices, reveals, clerestory windows, or varying roof height and/or form.	☐	☐	☐	☐
Multiplex Building Massing Standards				
The maximum building length shall be 150 feet.	☐	☐	☐	☐
Alley or courtyard provides access to units and garages.	☐	☐	☐	☐
Entrance frequency: At least one every 50 feet.	☐	☐	☐	☐
Maximum elevation of first inhabited level: 30 inches above adjacent sidewalk.	☐	☐	☐	☐
Parking (garage) shall be rear-loaded or detached.	☐	☐	☐	☐
Architectural articulation and projection shall follow the requirement in MMC 16.08.040.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

BUILDING STANDARDS BY TYPES - LOWRISE

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
Primary elevations (facades) shall incorporate design features such as offsets, balconies, projections, window reveals, or similar elements to preclude large expanses of uninterrupted building. Along the vertical face of a structure, such features shall occur at a minimum of every 35 feet and on each floor shall contain at least two of the following features: • **Recess** (e.g., deck, patio, courtyard, balcony, garage, entrance, or similar feature) that has a minimum depth of four (4) feet; • **Extension** (e.g., floor area, deck, porch, bay window, patio, entrance, or similar feature) that projects a minimum of two (2) feet and runs horizontally for a minimum length of four (4) feet; and/or • **Offsets** of facade or roof elevation of two (2) feet or greater.	☐	☐	☐	☐
The vertical massing of buildings shall look like large residences.	☐	☐	☐	☐
Courtyard Building Massing Standards				
The maximum building length shall be 150 feet at any side.	☐	☐	☐	☐
Courtyard(s) shall be accessible from the residential street.	☐	☐	☐	☐
If courtyard is common open space, the front facade shall face the open space.	☐	☐	☐	☐
Alley or courtyard provides access to units and garages.	☐	☐	☐	☐
Entrance frequency: At least one every 50 feet.	☐	☐	☐	☐
Maximum elevation of first inhabited level: 30 inches above adjacent sidewalk.	☐	☐	☐	☐
The courtyard shall be easily accessed from the street.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

BUILDING STANDARDS BY TYPES - LOWRISE				
Design Standards	**Applicant**		**City Use Only**	
	Complete	**N/A**	**Complete**	**N/A**
Recessed entries with arches or canopies, stoops, low privacy walls.	☐	☐	☐	☐
Parking (garage) shall be rear-loaded or detached.	☐	☐	☐	☐
Architectural articulation and projection shall follow the requirement in MMC 16.08.040.	☐	☐	☐	☐
Primary elevations (facades) shall incorporate design features such as offsets, balconies, projections, window reveals, or similar elements to preclude large expanses of uninterrupted building. Along the vertical face of a structure, such features shall occur at a minimum of every 35 feet and on each floor shall contain at least two of the following features: • **Recess** (e.g., deck, patio, courtyard, balcony, garage, entrance, or similar feature) that has a minimum depth of four (4) feet; • **Extension** (e.g., floor area, deck, porch, bay window, patio, entrance, or similar feature) that projects a minimum of two (2) feet and runs horizontally for a minimum length of four (4) feet; and/or • **Offsets** of facade or roof elevation of two (2) feet or greater.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

BUILDING STANDARDS BY TYPES - MID RISE				
Design Standards	**Applicant**		**City Use Only**	
	Complete	**N/A**	**Complete**	**N/A**
Site Layout for Mid Rise				
Upper floor units shall be accessed by a common entry along the front street.	☐	☐	☐	☐
For mixed-use, ground floor shops or office shall have individual entries along the adjacent street.	☐	☐	☐	☐
Parking may be covered, uncovered, or in a garage. Standards shall be in accordance with MMC 16.34.040 and Chapter 2.3 Parking in this book.	☐	☐	☐	☐
Open Space requirement shall be in accordance with MMC 16.34.040 and Chapter 2.3 Common Open Space, Chapter 2.4 Recreational Amenities, and Chapter 2.5 Private Open Space in this book.	☐	☐	☐	☐
Site development standards and required setbacks shall be in accordance with Table 16.08-4 in MMC 16.08.020.	☐	☐	☐	☐
For wrap or podium building types, parking structure must be mostly enclosed within, below, or behind buildings in a manner that conceals it from predominant public view and that does not interrupt the continuity of the pedestrian environment.	☐	☐	☐	☐
Building Massing				
Structures with heights greater than three (3) stories shall set back upper portions of the structure a minimum of ten (10) feet for each additional two (2) stories (MMC 16.44.100).	☐	☐	☐	☐
Buildings over three (3) stories shall have major massing breaks at least every 100 feet along any street frontage, adjacent public park, publicly accessible outdoor space, or designated open space, through the use of varying setbacks and/or building entries.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

BUILDING STANDARDS BY TYPES - MID RISE

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
Major breaks shall be a minimum of five (5) feet deep and 25 feet wide and shall extend at least two-thirds (2/3) of the height of the building. Exceptions include, for buildings with upper stories (above first floor) stepped back at least five feet; or the major break need only extend two-thirds (2/3) of the height of the portion of the front façade that is not stepped back.	☐	☐	☐	☐
Buildings shall have minor massing breaks at least every 50 feet along the street frontage. Minor breaks shall be a minimum of one (1) foot deep and four (4) feet wide and extend the full height of the building.	☐	☐	☐	☐
Where parking structures are planned, the street side shall be composed of pedestrian-active uses (such as stores, lobby) on the ground level to screen parking structures.	☐	☐	☐	☐
Residential ground floor uses in multi-family buildings, other then accessible units, shall be no more than four (4) feet above the public sidewalk grade, if setback is fifteen (15) feet or less.	☐	☐	☐	☐
At least one elevator shall be provided in each multi-family building containing 21 or more units, where some of those units have primary accesses only to the third-story or higher stories.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

BUILDING STANDARDS BY TYPES - MID RISE

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
The ground floor elevation shall consist of at least one of the following: • **A** line of awnings or canopies over ground floor storefronts or amenity space windows extending at least 75 percent of the elevation width. • **Unobstructed** transparent glass storefronts for at least 75 percent of the elevation width. • **A** different exterior cladding material than the middle/body separated from the middle/body above with either an overhang or recess of two (2) feet or more, or a horizontal belt course with a dimension of at least twelve (12) inches, consisting of a different color and material separating the base from the middle section. • **A** series of individual residential entries with recessed entryways. • **A** series of individual residential entries with porches with roofs.	☐	☐	☐	☐
The cap is at the top of the building and shall include at least one of the following: • **If** the building has a parapet wall, add a cornice feature, consisting of a different material and a depth of at least twelve (12) inches over the wall below. • **If** a building has a pitched roof, an eave overhang of at least two (2) feet. • **A** building stepback of at least three (3) feet from the main wall plane of the story below. • **A** change in exterior cladding material at the top story that is different than the story below, effectively using the top story as a wall cap.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

BUILDING STANDARDS BY TYPES - HIGH RISE

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
Building Massing for High Rise				
The minimum height of the base should be two (2) stories.	☐	☐	☐	☐
The maximum height of the base of a proposed high-rise building should be equal to the width of the right-of -way to provide sufficient enclosure for the street without overwhelming the street.	☐	☐	☐	☐
Additional height may be appropriate through the provision of step backs and architectural articulation, particularly on wider streets and deeper lots.	☐	☐	☐	☐
For sites where the adjacent context is lower-scale and not anticipated to change: • **The** height of the base or the portion of the base immediately adjacent to the neighboring lower-scale buildings should match the height of the neighboring buildings; and	☐	☐	☐	☐
• **Provide** a transition in height on the base through setbacks	☐	☐	☐	☐
Use bird-friendly best management practices in accordance with the City's guidelines. In particular, apply visual markers or use low reflectance materials on all exterior glazing within the first 65 feet of the building above grade.	☐	☐	☐	☐
Eighty (80) percent of the ground floor should be highly transparent.	☐	☐	☐	☐
The maximum tower floor plate for a high-rise residential building should be 8,000 square feet to minimize shadow and wind impacts.	☐	☐	☐	☐
The tower, including the balconies, should be stepback a minimum of ten (10) feet from the base.	☐	☐	☐	☐
Up to one-third (1/3) of a tower frontage along a street or a public space may extend straight down to the ground.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

BUILDING STANDARDS BY TYPES - HIGH RISE				
Design Standards	**Applicant**		**City Use Only**	
	Complete	**N/A**	**Complete**	**N/A**
Orienting and shaping the tower to improve building energy performance, natural ventilation, and daylighting.	☐	☐	☐	☐
Open Space (Rooftop)				
Any rooftop uses shall require a full plan review, permits and inspections for occupants and structural safety based on how the building roof is to be used.	☐	☐	☐	☐
The rooftop garden shall be located on the third or higher story.	☐	☐	☐	☐
The rooftop garden shall be accessible to all residents of dwelling units on the parcel, but not to commercial tenants of a residential mixed-use development.	☐	☐	☐	☐
Minimum dimensions of rooftop garden is fifteen (15) feet.	☐	☐	☐	☐
Permanent fixtures associated with the usable open space, such as trellises, shade structures, furniture, and furnishings such as planters, lighting and heaters, may exceed the height limit by up to twelve (12) feet.	☐	☐	☐	☐
At least 15 percent but no more than 25 percent of the rooftop shall be landscaped with raised beds for gardening, stormwater planters, or other landscaping. All required landscaped areas should be equipped with automatic irrigation systems and be properly drained.	☐	☐	☐	☐
Rooftop equipment shall be screened by a parapet or enclosure.	☐	☐	☐	☐
Where rooftops are visible from off-site, they should be treated to minimize aesthetic impacts.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

ARCHITECTURAL STYLES

ARCHITECTURAL STYLES - MISSION SPANISH COLONIAL				
Design Standards	**Applicant**		**City Use Only**	
	Complete	**N/A**	**Complete**	**N/A**
Form and Massing				
Asymmetrical façade/elevations.	☐	☐	☐	☐
3 or more roof planes.	☐	☐	☐	☐
At least 50 percent of the units shall have balconies or window treatments (such as shutters or awnings).	☐	☐	☐	☐
Entrances are recessed at least twelve (12) inches.	☐	☐	☐	☐
Additional details for projects four (4) stories and taller, mixed use, or for a project with more than fifteen (15) buildings (required two details) • **Include** two add-on projections such as verandas, arcades, balconies and exterior stairs. • **The** ends of building massings shall be stepped down to create a more pedestrian scale. • **One** focal point, such as courtyard, tower, or fountain • **Wingwall** or columns on the ground level	☐	☐	☐	☐
Roof				
Low pitched (4:12 maximum) cross- or side-gable roofs. The pitch shall remain constant except for a veranda or arcade.	☐	☐	☐	☐
Red, fired, clay tile roofs. Common tile shapes include both Spanish (S-shaped) and Mission (half-cylinder) types.	☐	☐	☐	☐
The gable has little or no overhang on the rake.	☐	☐	☐	☐
Thirty (30) percent of the primary facade length shall have a six (6) to twelve (12) inches eave overhang and 20 percent shall have a 24 inches overhang with exposed rafter tails.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

ARCHITECTURAL STYLES - MISSION SPANISH COLONIAL

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
Hipped roofs shall only be used in combination with gables or on a tower element.	☐	☐	☐	☐
Shed roofs are only used in conjunction with verandas.	☐	☐	☐	☐
When a flat roof is used it shall be screened by a parapet that is an extension of the wall plane or by a modified Mansard roof.	☐	☐	☐	☐
Materials and Colors				
Roof tiles shall use terracotta, brown earth tones, or rustic red color palette.	☐	☐	☐	☐
White, cream, or tan stucco wall with smooth or lightly textured finish (i.e. hand troweled or smaller particles).	☐	☐	☐	☐
Re-sawn wood shall be used as secondary wall material for the following and similar elements: **1)** Posts and exposed beams **2)** Railing, spindles and grill work **3)** Shutters, window frames and doors	☐	☐	☐	☐
If windows have shutters, the shutter's color shall match the accent color that is use for doors or decorative trim.	☐	☐	☐	☐
At least one wrought iron elements (such as railings, hardwares, and gates) shall be used.	☐	☐	☐	☐
Doors and Windows				
Accent windows shall be less than 20 percent of the total windows.	☐	☐	☐	☐
The primary facade shall include at least one arched elements.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

ARCHITECTURAL STYLES - MISSION SPANISH COLONIAL

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
At least 50 percent of the windows shall be casement windows.	☐	☐	☐	☐
All entrance door surrounds shall be banded with ceramic tile, molded plaster or painted accents.	☐	☐	☐	☐
All the casement windows and double hung windows shall have wooden frame.	☐	☐	☐	☐
At least two types/shapes of windows shall be used.	☐	☐	☐	☐
A minimum three (3) inches wide flat casting shall be used on all non-recessed casement windows.	☐	☐	☐	☐
Eighty (80) percent of the primary windows shall have window muntins.	☐	☐	☐	☐
Decorative Details				
All residential projects shall provide at least four of the following. Residential projects four (4) stories and taller, mixed use projects, or projects more than fifteen (15) buildings shall provide at least six of the following:				
• **Entry/Front** porch or patio	☐	☐	☐	☐
• **Decorative** tiles	☐	☐	☐	☐
• **Clay** tile vents	☐	☐	☐	☐
• **Wrought** iron balcony railings or support brackets	☐	☐	☐	☐
• **Dark** metal light fixture and hardwares	☐	☐	☐	☐
• **Paired** wood (or wood simulated) garage doors with iron hardware	☐	☐	☐	☐
• **Stone** or brick accented elements	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

ARCHITECTURAL STYLES - MISSION SPANISH COLONIAL				
Design Standards	**Applicant**		**City Use Only**	
	Complete	**N/A**	**Complete**	**N/A**
• **Verandas,** pergolas or arcades	☐	☐	☐	☐
• **Wrought** iron balcony railings or support brackets	☐	☐	☐	☐
• **Exterior** stairs	☐	☐	☐	☐
• **Fabric** awnings with metal spear supports	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

ARCHITECTURAL STYLES - CRAFTSMAN

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
Form and Massing				
Asymmetrical façade/elevations.	☐	☐	☐	☐
Three (3) or more roof planes on the primary facade.	☐	☐	☐	☐
Front-facing gable roofs.	☐	☐	☐	☐
At least 30 percent of the street-facing units shall have balconies or porches.	☐	☐	☐	☐
Primary walls shall have two to three materials/colors, with no more than ninety percent (90 percent) of the total wall surface in one material / color.	☐	☐	☐	☐
Roof				
Low- to moderate-pitched gable or hipped roofs (typically from 6:12 to 8:12).	☐	☐	☐	☐
Overhanging eaves (minimum 24 inches along primary elevation) with exposed rafter tails or beams.	☐	☐	☐	☐
Brackets or knee braces at gabled ends.	☐	☐	☐	☐
Use of wood or asphalt shingle (or fiber cement imitation or imitation synthetic asphalt shingles).	☐	☐	☐	☐
Materials and Colors				
Brick, stone and concrete blocks are the most common materials used in the base.	☐	☐	☐	☐
Primary walls shall show no more than two materials along any vertical section of the building, with no more than ninety percent (90 percent) of the total wall surface in one material.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

ARCHITECTURAL STYLES - CRAFTSMAN

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
Primary wall materials shall include dark color wood shingles, clapboard siding, or fiber cement siding and natural materials such as arroyo stone or bricks.	☐	☐	☐	☐
Use of dark, neutral, earth-toned color palette, such as browns and greens.	☐	☐	☐	☐
Lighter paint palettes may also be appropriate, particularly for details (columns, rafter tails).	☐	☐	☐	☐
The primary facade shall have at least three paint colors: one for the cladding, one for trim, and one or two for accents such as windows and decorative details.	☐	☐	☐	☐
Doors and Windows				
At least 50 percent of the windows shall be casement windows.	☐	☐	☐	☐
Eighty (80) percent of the primary windows shall have grilles.	☐	☐	☐	☐
At least two types/shapes of windows shall be used.	☐	☐	☐	☐
Utilize flat wood trims (typically 4½ inches or 5½ inches wide) around the primary windows and entry doors.	☐	☐	☐	☐
Window and door trim color shall contrast with color of walls.	☐	☐	☐	☐
Entry doors and garage doors have glass panels.	☐	☐	☐	☐
Decorative Details				
All residential projects shall provide at least four of the following. Residential projects four (4) stories and taller, mixed use projects, or projects more than fifteen (15) buildings shall provide at least six of the following.				
• **Stone** pier and battered wood support	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

ARCHITECTURAL STYLES - CRAFTSMAN

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
• **Exposed** rafter tails and knee-brace brackets	☐	☐	☐	☐
• **Dormers** shall located on the front façade	☐	☐	☐	☐
• **Second-story** balcony	☐	☐	☐	☐
• **Decorative** attic/gable vent	☐	☐	☐	☐
• **Light** fixtures shall box-shaped, with metal frame and geometric pattern.	☐	☐	☐	☐
• **Chimneys** are visible at the exterior and arranged on a side elevation	☐	☐	☐	☐
• **Stained** glass windows or transom windows	☐	☐	☐	☐
• **Covered** front porches with tapered pillars	☐	☐	☐	☐
• **Ground** level windows have muntins	☐	☐	☐	☐
• **Decorative** joinery	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

ARCHITECTURAL STYLES - AMERICAN MERCANTILE

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
Form and Massing				
Simple, rectangular form.	☐	☐	☐	☐
Rhythmic placement of piers, columns, ground-floor storefronts, and openings on upper levels.	☐	☐	☐	☐
Transparent windows and doorways shall be no less than 80 percent of the street frontage at the ground level.	☐	☐	☐	☐
Multi-story facades are divided into base, body, and top with the ground floor taller than the upper floors.	☐	☐	☐	☐
Engaged columns or lintels over openings.	☐	☐	☐	☐
Bases are articulated by changes in material or changes in wall plane.	☐	☐	☐	☐
Minimal projections or recessions on wall plane.	☐	☐	☐	☐
Roof				
Flat roof.	☐	☐	☐	☐
A projecting cornice or a receding, stepped parapet.	☐	☐	☐	☐
Cornice and details mimic and reference historical detailing.	☐	☐	☐	☐
Roofs may be accessible and be used as balconies or terraces.	☐	☐	☐	☐
Street-facing gable roof with roof pitches at least 5:12 unless concealed behind a parapet.	☐	☐	☐	☐
Materials and Colors				

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

ARCHITECTURAL STYLES - AMERICAN MERCANTILE				
Design Standards	**Applicant**		**City Use Only**	
	Complete	**N/A**	**Complete**	**N/A**
The primary walls, shall composed of brick, comprise the main body of the building's tripartite facade structure. The masonry work can be very plain or highly decorative.	☐	☐	☐	☐
Decorative moldings, cornices, or an applied ornament of stone or cast concrete may be used to express the vertical division between the base, the body, and the top.	☐	☐	☐	☐
No more than three colors shall be used on any given facade.	☐	☐	☐	☐
Stucco and clapboard shall be avoided.	☐	☐	☐	☐
Doors and Windows				
Ground floor windows and doors shall be large and expansive, typically with a transom.	☐	☐	☐	☐
Upper floor windows shall be double-hung (two lites), vertically, and grouped with a rhythm relating to the major storefront openings below.	☐	☐	☐	☐
Entrance shall be visually distinct by higher bays, recessed entries with a minimum of three (3) feet, or different color/materials.	☐	☐	☐	☐
Upper floor windows typically have window lintel and sill.	☐	☐	☐	☐
Transom windows above the doors and windows on the ground level.	☐	☐	☐	☐
Fifty (50) percent Windows shall have muntins.	☐	☐	☐	☐
Decorative Details				

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

ARCHITECTURAL STYLES - AMERICAN MERCANTILE

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
All residential projects shall provide at least four of the following. Residential projects four (4) stories and taller, mixed use projects, or projects more than fifteen (15) buildings shall provide at least six of the following.				
• **Awnings,** canopies, and second floor balconies may extend into the public right-of-way. Such attachments provide shelter to passing pedestrians, emphasize the ground floor uses, and add interest to the box-like massing inherent to the style.	☐	☐	☐	☐
• **Pedimented** windows	☐	☐	☐	☐
• **Wide** window trim with a keystone	☐	☐	☐	☐
• **Double** bracketed cornice	☐	☐	☐	☐
• **Gable** roof	☐	☐	☐	☐
• **Roof** finial	☐	☐	☐	☐
• **Transom** above door and windows on the ground level	☐	☐	☐	☐
• **Metal** stair and balcony railing	☐	☐	☐	☐
• **Canopy** or awning	☐	☐	☐	☐
• **Recessed** entries	☐	☐	☐	☐
• **Cast-iron** columns	☐	☐	☐	☐
• **Shopfront** millwork	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

ARCHITECTURAL STYLES - TUSCAN				
Design Standards	**Applicant**		**City Use Only**	
	Complete	**N/A**	**Complete**	**N/A**
Form and Massing				
Asymmetrical arrangement of windows and design elements along primary elevation.	☐	☐	☐	☐
Porches, porticoes and/or Juliet balconies.	☐	☐	☐	☐
Recessed entries (at least three (3) feet).	☐	☐	☐	☐
Roof				
Flat or low pitched hip or gable roof (maximum 6:12 slope).	☐	☐	☐	☐
Red-toned clay tiles.	☐	☐	☐	☐
Multiple roof levels (at least three (3)).	☐	☐	☐	☐
Large overhanging eaves (minimum twelve (12) inches) along primary elevation.	☐	☐	☐	☐
Shaped timber tiles at eaves.	☐	☐	☐	☐
Materials and Colors				
Incorporate rough-hewn stone as accent feature.	☐	☐	☐	☐
Flat stucco walls in light earth tones.	☐	☐	☐	☐
Earthy tone color palette.	☐	☐	☐	☐
Brown or beige window frames.	☐	☐	☐	☐
Doors and Windows				

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

ARCHITECTURAL STYLES - TUSCAN

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
Single or double-hung windows shall be more horizontal in proportion with six-over-six muntin patterns and 5½ inches wide trim.	☐	☐	☐	☐
Casement windows shall paired with either four-pane patterns for narrow windows and eight-pane patterns for wider windows.	☐	☐	☐	☐
Vertically oriented rectangular or arched windows arranged in asymmetrical patterns.	☐	☐	☐	☐
Casement or double-hung sash with flat or arched lintels.	☐	☐	☐	☐
Windows shall be recessed three (3) to twelve (12) inches from outer wall on primary facade.	☐	☐	☐	☐
Decorative Details				
All residential projects shall provide at least four of the following. Residential projects four (4) stories and taller, mixed use projects, or projects more than fifteen (15) buildings shall provide at least six of the following.				
• **Shallow** Juliet balconies	☐	☐	☐	☐
• **Rafter** extensions and brackets	☐	☐	☐	☐
• **Stone** or stucco window /door trim	☐	☐	☐	☐
• **Rectangular** or arched wooden door	☐	☐	☐	☐
• **Arcade** or porch at entry	☐	☐	☐	☐
• **Decorative** ironwork (window grilles, railings, light fixtures, decorative planters).	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

ARCHITECTURAL STYLES - TUSCAN

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
• **Arched** windows.	☐	☐	☐	☐
• **Paired** decorative wood shutters. Shutters shall be equal to half the width of the window. Shutter styles can either be paneled or louvered.	☐	☐	☐	☐
• **Use** of brick, stone or wood columns.	☐	☐	☐	☐
• **Stucco** or stone chimneys or tower.	☐	☐	☐	☐
• **Dark** color wood trellis.	☐	☐	☐	☐
• **Arched** openings and doorways at the ground level.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

ARCHITECTURAL STYLES - MODERN				
Design Standards	**Applicant**		**City Use Only**	
	Complete	**N/A**	**Complete**	**N/A**
Form and Massing				
An irregular, asymmetrical facade.	☐	☐	☐	☐
Strong emphasis on geometry.	☐	☐	☐	☐
Rectangular shape structure.	☐	☐	☐	☐
Horizontal massing.	☐	☐	☐	☐
Lack of ornament or moldings.	☐	☐	☐	☐
Straight and continuous lines.	☐	☐	☐	☐
Multi-faceted appearance.	☐	☐	☐	☐
Repeating lines and elements.	☐	☐	☐	☐
Roof				
Flat or low-pitched shed roofs (4:12 slope max).	☐	☐	☐	☐
Slope roofs shall have a minimum two-foot deep overhang at the lower end.	☐	☐	☐	☐
Tile roof shall be prohibited.	☐	☐	☐	☐
Mid- and high-rise may have decks or roof gardens.	☐	☐	☐	☐
Materials and Colors				
Use of raw and natural materials like wood, concrete, metal, and glass .	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

ARCHITECTURAL STYLES - MODERN

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
Traditional materials (such as stucco, wood, brick and stone) may be used as an accent.	☐	☐	☐	☐
Minimum two (2) materials on the building facade.	☐	☐	☐	☐
Use of bold color blocks to emphasize geometric forms and break down massing elements.	☐	☐	☐	☐
Building facade shall incorporate at least one of the following as an accent: decorative shutters, popouts, trellis or arbor structures, or balconies.	☐	☐	☐	☐
Doors and Windows				
Large glass doors and/or window openings.	☐	☐	☐	☐
Window wrapping around a corner of the building.	☐	☐	☐	☐
Narrow aluminum window frames with square sticking.	☐	☐	☐	☐
Valence grids sometimes are applied on windows.	☐	☐	☐	☐
Decorative Details				
All residential projects shall provide at least four of the following. Residential projects four (4) stories and taller, mixed use projects, or projects more than fifteen (15) buildings shall provide at least six of the following.				
• **Metal** balcony railings	☐	☐	☐	☐
• **Picture** windows	☐	☐	☐	☐
• **Clerestory** windows	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

ARCHITECTURAL STYLES - MODERN

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
• **Floor-to-ceiling** glass door	☐	☐	☐	☐
• **Usable** outdoor roof decks	☐	☐	☐	☐
• **Trellis** shade structures	☐	☐	☐	☐
• **Bright** colors to provide contrasting elements	☐	☐	☐	☐
• **Metal** awning	☐	☐	☐	☐
• **Bold** Branding	☐	☐	☐	☐
• **Floor-to-ceiling** glass windows on the ground level	☐	☐	☐	☐
• **Broad** roof overhang with exposed wood or steel frame	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

ARCHITECTURAL STYLES - FARMHOUSE

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
Form and Massing				
Clean and straight exterior lines, geometric form.	☐	☐	☐	☐
Asymmetrical massing with a gable at the front of the house.	☐	☐	☐	☐
Repeating shapes and lines.	☐	☐	☐	☐
Gable roof creating a triangular wall on the ends.	☐	☐	☐	☐
Incorporate farm and ranch forms inspired by barns, silos, sheds, tank houses and granary towers.	☐	☐	☐	☐
Multiple gable and shed roof planes.	☐	☐	☐	☐
Geometric forms, industrial materials, limited palette, and repetition.	☐	☐	☐	☐
Covered porches and awnings to break up volumes between lower and upper floors.	☐	☐	☐	☐
Three (3) or more wall planes with a minimum twelve (12) inches difference.	☐	☐	☐	☐
Roof				
High-pitched gabled roof or shed roof (minimum 6:12 slope).	☐	☐	☐	☐
Intersecting gable roofs.	☐	☐	☐	☐
Dark asphalt shingle, metal roofs or synthetic slate shingles.	☐	☐	☐	☐
Triangular rooflines emphasizing the height of the unit.	☐	☐	☐	☐
Large overhangs (minimum two (2) feet in length) above the patio and garage.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

ARCHITECTURAL STYLES - FARMHOUSE

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
Materials and Colors				
Unadorned materials: metal, wood, masonry.	☐	☐	☐	☐
Utilize board and batten siding, corrugated panels to give texture and variation to exterior walls.	☐	☐	☐	☐
Neutral or muted colors shall be predominant.	☐	☐	☐	☐
Monochrome accents of doors, windows or architectural features.	☐	☐	☐	☐
Combine contemporary design with rustic materials.	☐	☐	☐	☐
Stucco is prohibited.	☐	☐	☐	☐
Doors and Windows				
At least 60 percent windows shall be tall and narrow double hung windows with a proportion of two (2) or 2½ times taller than wide.	☐	☐	☐	☐
Groupings of two or three double hung units are occasionally used.	☐	☐	☐	☐
Accent windows shall be no more than 20 percent.	☐	☐	☐	☐
Typically have 4½ inches to 5½ inches flat board trim on the sides and head.	☐	☐	☐	☐
Sixty (60) percent windows shall have grilles.	☐	☐	☐	☐
Minimal molding around window and door openings.	☐	☐	☐	☐
Double hung or casement windows with muntins.	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

ARCHITECTURAL STYLES - FARMHOUSE

Design Standards	Applicant		City Use Only	
	Complete	N/A	Complete	N/A
Contrast color of window sash with color of the body of the building.	☐	☐	☐	☐
Decorative Details				
All residential projects shall provide at least four of the following. Residential projects four (4) stories and taller, mixed use projects, or projects more than fifteen (15) buildings shall provide at least six of the following.				
• **Wide** front porch with simple columns	☐	☐	☐	☐
• **Covered** patio	☐	☐	☐	☐
• **Shed** or gabled dormers	☐	☐	☐	☐
• **Carriage-style** garage doors	☐	☐	☐	☐
• **Dark** shutters and window sashes	☐	☐	☐	☐
• **Shed** dormers	☐	☐	☐	☐
• **Simple** gable brackets, vents and trim	☐	☐	☐	☐
• **Iron-inspired** barn-style lighting	☐	☐	☐	☐
• **Metal** awnings without sides	☐	☐	☐	☐
• **Gooseneck** light fixtures at the entrance	☐	☐	☐	☐
• **Large** doors and windows to maximize natural light	☐	☐	☐	☐
• **Grilles** on the ground level windows and doors	☐	☐	☐	☐

ADDITIONAL APPLICANT COMMENTS (OPTIONAL)	ADDITIONAL CITY COMMENTS (OPTIONAL)

AIRPORT LAND USE COMMISSION MEETING
MINUTES
June 8, 2023

DRAFT

6-12-23

COMMISSIONERS PRESENT: Russell Betts, John Lyon, Steve Manos, Vernon Poole, Richard Stewart, Michael Lewis (alternate for Steven Stewart), Maartin Rossouw (alternate for Michael Geller)

COMMISSIONERS ABSENT:

2.0 PUBLIC HEARING: CONTINUED ITEMS

None

3.0 PUBLIC HEARING: NEW CASES

3.1 Staff report recommended: **CONSISTENT**

Staff recommended at hearing: **CONSISTENT**

ALUC Commission Action: **CONSISTENT (Vote 7-0)**

Motion: Russell Betts
Second: Richard Stewart

ZAP1570MA23 – Hillwood (Representative: Albert A. Webb & Associates)– City of Perris Case Nos. GPA22-0532 (General Plan Amendment), ZC22-05327 (Change of Zone), DPR22-00030 (Development Plan Review), TPM22-05328 (Tentative Parcel Map). A proposal to construct a 412,348 square foot manufacturing building with mezzanines on 20 acres, located northerly of Ethanac Road, westerly of Sherman Road, and easterly of Trumble Road. The applicant also proposes to amend the General Plan Land use designation and change the sites zoning from Commercial to Light Industrial. The applicant also proposes merging eight existing parcels into one. (Airport Compatibility Zone D of the March Air Reserve Base/Inland Port Airport Influence Area). Staff Planner: Jackie Vega at (951) 955-0982, or e-mail at javega@rivco.org

3.2 Staff report recommended: **CONSISTENT**

Staff recommended at hearing: **CONSISTENT**

ALUC Commission Action: **CONSISTENT (Vote 7-0)**

Motion: Richard Stewart
Second: Maartin Rossouw

ZAP1569MA23 – Seven Multi-Site Solutions (Representative: EoS Fitness) – City of Riverside Case No. PR-2023-001492 (Minor Conditional Use Permit). A proposal to establish a fitness center in an existing vacant 37,651 square foot tenant space, within an existing multi-tenant commercial shopping center on 9.35 acres, located at 341 E. Alessandro Boulevard, westerly of Mission Grove Parkway, and northerly of Mission Village Drive (Airport Compatibility Zone C2 of the March Air Reserve Base/Inland Port Airport Influence Area). Staff Planner: Jackie Vega at (951) 955-0982, or e-mail at javega@rivco.org

VIDEO:
A video recording of the entire proceedings is available on the ALUC website at www.rcaluc.org. If you have any questions please contact Barbara Santos, ALUC Commission Secretary, at (951) 955-5132 or E-mail at basantos@rivco.org

3.3 Staff report recommended: **CONSISTENT**

Staff recommended at hearing: **CONSISTENT**

ALUC Commission Action: **CONSISTENT (Vote 7-0)**

Motion: Michael Lewis
Second: Richard Stewart

ZAP1125FV23 – Wallace Design Group (Representative: West Coast Self Storage) – County of Riverside Case No. PP20682R01 (Plot Plan Revision). A proposal to construct four self-storage buildings totaling 129,816 square feet and a 1,135 square foot office building on 5.18, located easterly of Leon Road and westerly of Winchester Road. The applicant also proposes to remove previously proposed car wash and RV storage. (ZAP1066FV16 was previously found consistent by the Commission on this site) (Airport Compatibility Zones C of the French Valley Airport Influence Area). Staff Planner: Jackie Vega at (951) 955-0982, or e-mail at javega@rivco.org

3.4 Staff report recommended: **CONSISTENT**

Staff recommended at hearing: **CONSISTENT**

ALUC Commission Action: **CONSISTENT (Vote 6-0; Recuse: Manos)**

Motion: Michael Lewis
Second: Richard Stewart

ZAP1029PV23 – IDI Logistics (Representative: T&B Planning) – City of Perris Case Nos. PLN22-05265 (Major Modification Review), TPM38518 (Tentative Parcel Map). A proposal to construct three industrial warehouse buildings totaling 3,343,584 square feet on three parcels on 166.36 total acres, located southerly of Mapes Street, westerly of Goetz Road, and easterly of A Street. The applicant also proposes to divide the parcel into three commercial parcels. (Airport Compatibility Zone D and E of the Perris Valley Airport Influence Area and Zone E of the March Air Reserve/Inland Port Airport Influence Area). Staff Planner: Jackie Vega at (951) 955-0982, or e-mail at javega@rivco.org

4.0 PUBLIC HEARING: MISCELLANEOUS ITEMS

None

5.0 ADMINISTRATIVE ITEMS

5.1 Director's Approvals - Information Only

5.2 Update March Air Reserve Base Compatibility Use Study (CUS)

Simon Housman, Project Director March CUS, informed the Commission that they are moving out of the final draft phase and into the adoption process phase, and waiting for the final version of the report from Matrix expected sometime soon.

6.0 APPROVAL OF MINUTES

Commissioner Lewis motioned to approve the May 11, 2023 minutes. Seconded by Maartin Rossouw. Abstain: Vice Chair Betts. (Vote 6-0)

VIDEO:

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7.0 **ORAL COMMUNICATION ON ANY MATTER NOT ON THE AGENDA**

Commissioner Richard Stewart questioned in reference to the width of open space in accordance to our rules/guidance. Paul Rull, ALUC Director replied that the minimum width is 75 feet and the length is a minimum of 300 feet.

8.0 **COMMISSIONER'S COMMENTS**

None

9.0 **ADJOURNMENT**

Steve Manos, Chair adjourned the meeting at 10:05 a.m.

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VIDEO:

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