

Background Data: Blythe Airport and Environs

INTRODUCTION

Blythe Airport provides general aviation access to the Colorado River region of southeastern California and western Arizona. The airport has had limited commercial airline service in the past and potentially could again in the future. As of 2003, total annual aircraft operations equal about 25,000. For long-range compatibility planning purposes, this number is assumed to potentially reach 58,000, including some airline operations.

Owned by Riverside County and leased to the City of Blythe, the airport covers more than 3,900 mostly undeveloped acres. It features two intersecting runways. The primary runway, currently 6,562 feet long, is proposed in the 2001 *Airport Master Plan* to be extended to 10,012 feet.

Current and proposed airport features are described and illustrated in Exhibits BL-1 and BL-2. Current and future airport activity data is summarized in Exhibit BL-3. Associated current and long-range noise contours are included in Exhibits BL-4 and 5. A third set of noise contours is presented in Exhibit BL-6. These contours—originally depicted in the 2001 *Airport Master Plan*—reflect a theoretical “ultimate” level of airport activity, including a large volume of large jet transport aircraft operations. The “ultimate” contours are shown here for informational purposes—they were not explicitly considered in creation of the Blythe Airport compatibility zones. Exhibit BL-7 depicts the long-range (Exhibit BL-5) contours, together with flight track locations, risk data, and other factors that were used to determine the compatibility zone boundaries.

Much of the airport environs consist of unpopulated desert. The center of Blythe lies some six miles east, but some urbanization extends along Interstate 10 to within about half of that distance. The city’s general plan shows future residential development reaching to within a mile of the east end of the east/west runway. Another population center, the unincorporated community of Nicholls Warm Springs, lies less than a mile southwest of the airport. Primary aircraft flight tracks pass near or sometimes over this community.

Information about the airport environs is summarized in Exhibit BL-8. Planned land uses for the area are illustrated in Exhibit BL-9. Exhibit BL-10 assesses the relationship between the county and city general plans for the area and the criteria indicated in the *Compatibility Plan*.

GENERAL INFORMATION

- ▶ *Airport Ownership:* County of Riverside
 - › Leased to City of Blythe
- ▶ *Year Opened:* 1942
- ▶ *Property Size*
 - › Fee title: 3,904 acres
 - › Avigation easements: 17± acres
- ▶ *Airport Classification:* General Aviation
- ▶ *Airport Elevation:* 397 feet MSL

AIRPORT PLANNING DOCUMENTS

- ▶ *Airport Master Plan*
 - › Adopted November 2001
- ▶ *Airport Layout Plan Drawing*
 - › Adopted November 2001

RUNWAY/TAXIWAY DESIGN

Runway 8-26

- ▶ *Critical Aircraft:* Small business jet
- ▶ *Airport Reference Code:* B-II
- ▶ *Dimensions:* 6,562 ft. long, 150 ft. wide
- ▶ *Pavement Strength (main landing gear configuration)*
 - › 80,000 lbs (single wheel)
 - › 160,000 lbs (dual wheel)
 - › 300,000 lbs (dual-tandem wheel)
- ▶ *Average Gradient:* 0.03%
- ▶ *Runway Lighting*
 - › Medium-intensity edge lights (MIRL)
- ▶ *Primary Taxiways:* Full-length parallel on south

Runway 17-35

- ▶ *Critical Aircraft:* Small business jet
- ▶ *Airport Reference Code:* B-II
- ▶ *Dimensions:* 5,820 ft. long, 100 ft. wide
- ▶ *Pavement Strength (main landing gear configuration)*
 - › 52,000 lbs (single wheel)
 - › 76,000 lbs (dual wheel)
 - › 135,000 lbs (dual-tandem wheel)
- ▶ *Average Gradient:* 0.08%
- ▶ *Runway Lighting*
 - › Medium-intensity edge lights (MIRL)
- ▶ *Primary Taxiways:* Partial eastern parallel, south end of runway

TRAFFIC PATTERNS AND APPROACH PROCEDURES

- ▶ *Airplane Traffic Patterns*
 - › All runways: Left traffic
 - › Pattern altitude: 800 ft. AGL
- ▶ *Instrument Approach Procedures (best minimums)*
 - › Runway 26 VOR/DME or GPS:
 - › Straight-in (1 mi. visibility; 366 ft. descent height); approach course aligned 25° right of rwy centerline
 - Circling (1 mi. visibility; 443 ft. descent height)
 - › VOR / GPS-A: Circling (1 mi. vis.; 443 ft. descent ht.)
- ▶ *Standard Inst. Departure Procedures:* None
- ▶ *Visual Approach Aids*
 - › Airport: Rotating beacon
 - › Runways 17, 26, & 35: VASI (all 3.0°)
- ▶ *Operational Restrictions / Noise Abatement Procedures:*
 - › Runway 26: Use wide traffic pattern
 - › Runway 35: Use wide pattern; establish final approach 2 n.m. from touchdown
 - › Runway 17 Departures: Make climbing left turn
 - › Aircraft weighing over 12,500 lbs: Avoid residential area 1.5 n.m. southwest, below 2,000 ft.

APPROACH PROTECTION

- ▶ *Runway Protection Zones (RPZ)*
 - › Runways 8, 17, & 26: 1,700-ft. long; all on airport
 - › Runway 35: 1,700-ft. long; most on airport property; outer 200± ft. within avigation easement
- ▶ *Approach Obstacles*
 - › Runway 17: Fence 354 ft. from runway end
 - › Runway 26: Power plant (1 mile from runway end) produces visual and thermal plume

BUILDING AREA

- ▶ *Location:* Southeast quadrant of airport
- ▶ *Aircraft Parking Capacity*
 - › Hangars: 11 individual units; 1 large conventional
 - › Tiedowns: 16
- ▶ *Other Major Facilities*
 - › Aviation-related: Airline terminal; National Weather Service facility
 - › Other: Various federal and county facilities
- ▶ *Services*
 - › Fuel: Jet A, 100LL (during regular business hours)
 - › Other: Flight instruction; aircraft rental; air cargo; air ambulance

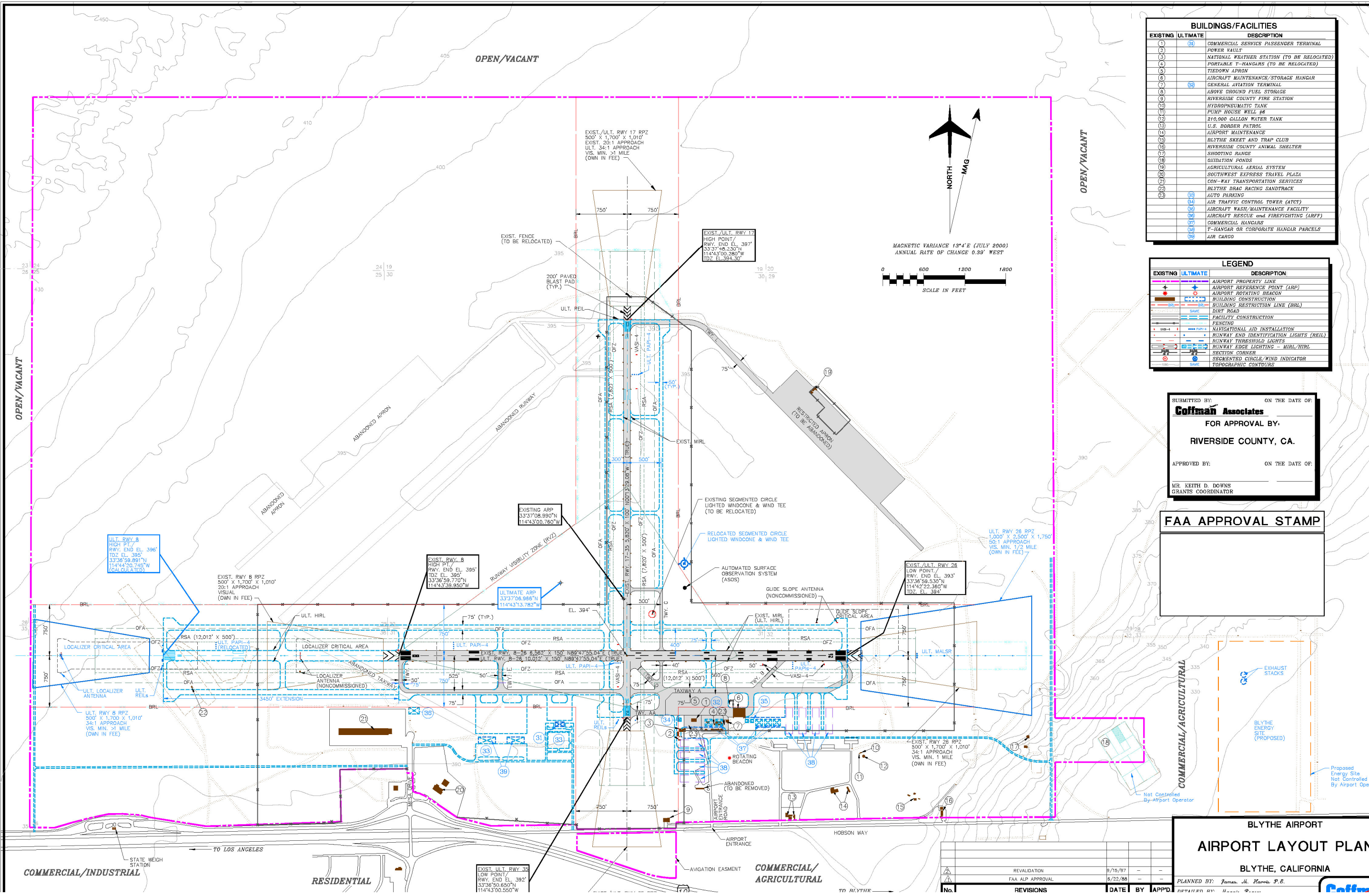
PLANNED FACILITY IMPROVEMENTS

- ▶ *Airfield*
 - › Extend Runway 8-26 and parallel taxiway 3,450 ft. west to ultimate length of 10,012 ft.
 - › Extend Runway 17-35 parallel taxiway to full length
 - › No instrument approaches improvements planned
- ▶ *Building Area*
 - › Provide lease areas for private hangar development
- ▶ *Property*
 - › No fee acquisition planned

Exhibit BL-1

Airport Features Summary

Blythe Airport



BUILDINGS/FACILITIES		
EXISTING	ULTIMATE	DESCRIPTION
1	31	COMMERCIAL SERVICE PASSENGER TERMINAL
2		POWER VAULT
3		NATIONAL WEATHER STATION (TO BE RELOCATED)
4		PORTABLE T-HANGARS (TO BE RELOCATED)
5		TIEDOWN APRON
6		AIRCRAFT MAINTENANCE/STORAGE HANGAR
7	32	GENERAL AVIATION TERMINAL
8		ABOVE GROUND FUEL STORAGE
9		RIVERSIDE COUNTY FIRE STATION
10		HYDRO-PNEUMATIC TANK
11		PUMP HOUSE WELL #6
12		210,000 GALLON WATER TANK
13		U.S. BORDER PATROL
14		AIRCRAFT MAINTENANCE
15		BLYTEH SKEET AND TRAP CLUB
16		RIVERSIDE COUNTY ANIMAL SHELTER
17		SHOOTING RANGE
18		OXIDATION PONDS
19		AGRICULTURAL AERIAL SYSTEM
20		SOUTHWEST EXPRESS TRAVEL PLAZA
21		CON-WAY TRANSPORTATION SERVICES
22		BLYTEH DRAC RACING SANDTRACK
23		AUTO PARKING
33		AIR TRAFFIC CONTROL TOWER (ATCT)
34		AIRCRAFT WASH/MAINTENANCE FACILITY
35		AIRCRAFT RESCUE and FIREFIGHTING (ARFF)
36		COMMERCIAL HANGARS
37		T-HANGAR OR CORPORATE HANGAR PARCELS
38		AIR CARO

LEGEND		
EXISTING	ULTIMATE	DESCRIPTION
---	---	AIRPORT PROPERTY LINE
+	+	AIRPORT REFERENCE POINT (ARP)
+	+	AIRPORT ROTATING BEACON
---	---	BUILDING CONSTRUCTION
---	---	BUILDING RESTRICTION LINE (BRL)
---	---	DIRT ROAD
---	---	FACILITY CONSTRUCTION
---	---	FENCING
---	---	NAVIGATIONAL AID INSTALLATION
---	---	RUNWAY END IDENTIFICATION LIGHTS (REIL)
---	---	RUNWAY THRESHOLD LIGHTS
---	---	RUNWAY EDGE LIGHTING - MIRL/HIRL
---	---	SECTION CORNER
---	---	SEGMENTED CIRCLE WIND INDICATOR
---	---	TOPOGRAPHIC CONTOURS

SUBMITTED BY: **Goffman Associates** ON THE DATE OF: _____
 FOR APPROVAL BY: _____
 RIVERSIDE COUNTY, CA.
 APPROVED BY: _____ ON THE DATE OF: _____
 MR. KEITH D. DOWNS
 GRANTS COORDINATOR

FAA APPROVAL STAMP

BLYTHE AIRPORT
AIRPORT LAYOUT PLAN
 BLYTHE, CALIFORNIA

NO.	REVISIONS	DATE	BY	APPR.
1	REVALIDATION	9/15/97		
2	FAA ALP APPROVAL	6/22/86		

PLANNED BY: James M. Flaminio, P.E.
 DRAWN BY: _____

BASED AIRCRAFT			TIME OF DAY DISTRIBUTION		
<i>Aircraft Type</i>	<i>Current^a 1999 data</i>	<i>Future^b 2020</i>		<i>Current^a</i>	<i>Future^b & Ultimate</i>
Single-Engine	11	19	<i>Piston-Engine, Local</i>		
Twin-Engine Piston	4	8	Day	88%	no
Turboprop	0	1	Evening	10%	change
Turbojet	0	1	Night	2%	
Helicopters	0	0	<i>All Aircraft, Itinerant</i>		
<i>Total</i>	15	29	Day	85%	no
			Evening	10%	change
			Night	5%	

AIRCRAFT OPERATIONS				RUNWAY USE DISTRIBUTION		
	<i>Current^a 1999 data</i>	<i>Future^b 2020</i>	<i>Ultimate^c</i>		<i>Current^a</i>	<i>Future^b & Ultimate</i>
<i>Total</i>				<i>Piston-Engine – Day/Evening/Night</i>		
Annual	24,650	58,100 ^d	230,000	Takeoffs & Landings		
Average Day	68	159	630	Runway 8	5%	no
<i>Distribution by Aircraft Type</i>				Runway 26	50%	change
Single-Engine	85%	82%	83%	Runway 17	30%	
Twin-Engine Piston	11%	11%	9%	Runway 35	15%	
Twin-Engine, Turboprop	2%	3%	4%	<i>Turboprops – Day/Evening/Night</i>		
Business Jet	2%	3%	2%	Takeoffs & Landings		
Transport Jet ^e	0%	0%	1%	Runway 8	5%	no
Helicopter	1%	1%	1%	Runway 26	75%	change
<i>Distribution by Type of Operation</i>				Runway 17	10%	
Local	50%	38%	no data	Runway 35	10%	
(incl. touch-and-goes)			available	<i>Business Jets – Day/Evening/Night</i>		
Itinerant	50%	62%		Takeoffs & Landings		
				Runway 8	5%	no
				Runway 26	85%	change
				Runway 17	5%	
				Runway 35	5%	

FLIGHT TRACK USAGE
No data available

Notes

- ^a Source: 2001 Airport Master Plan estimates
- ^b Source: 2001 Airport Master Plan forecast
- ^c Source: 2001 Airport Master Plan runway capacity forecast
- ^d Source: 2001 Airport Master Plan forecast plus 2,200 airline operations
- ^e Includes B-727-huskit, A-300, and B-747-400

Exhibit BL-3

Airport Activity Data Summary

Blythe Airport

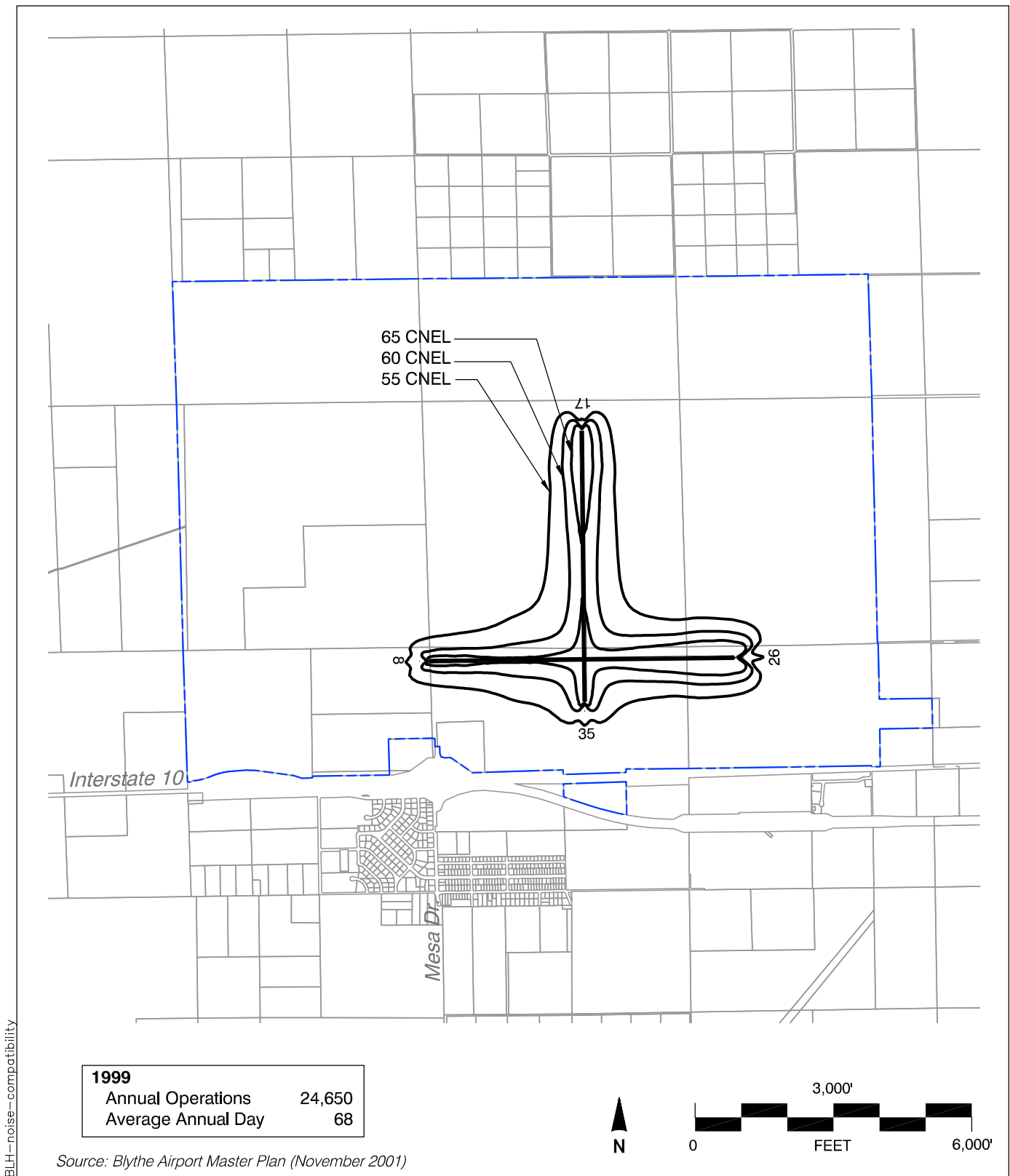
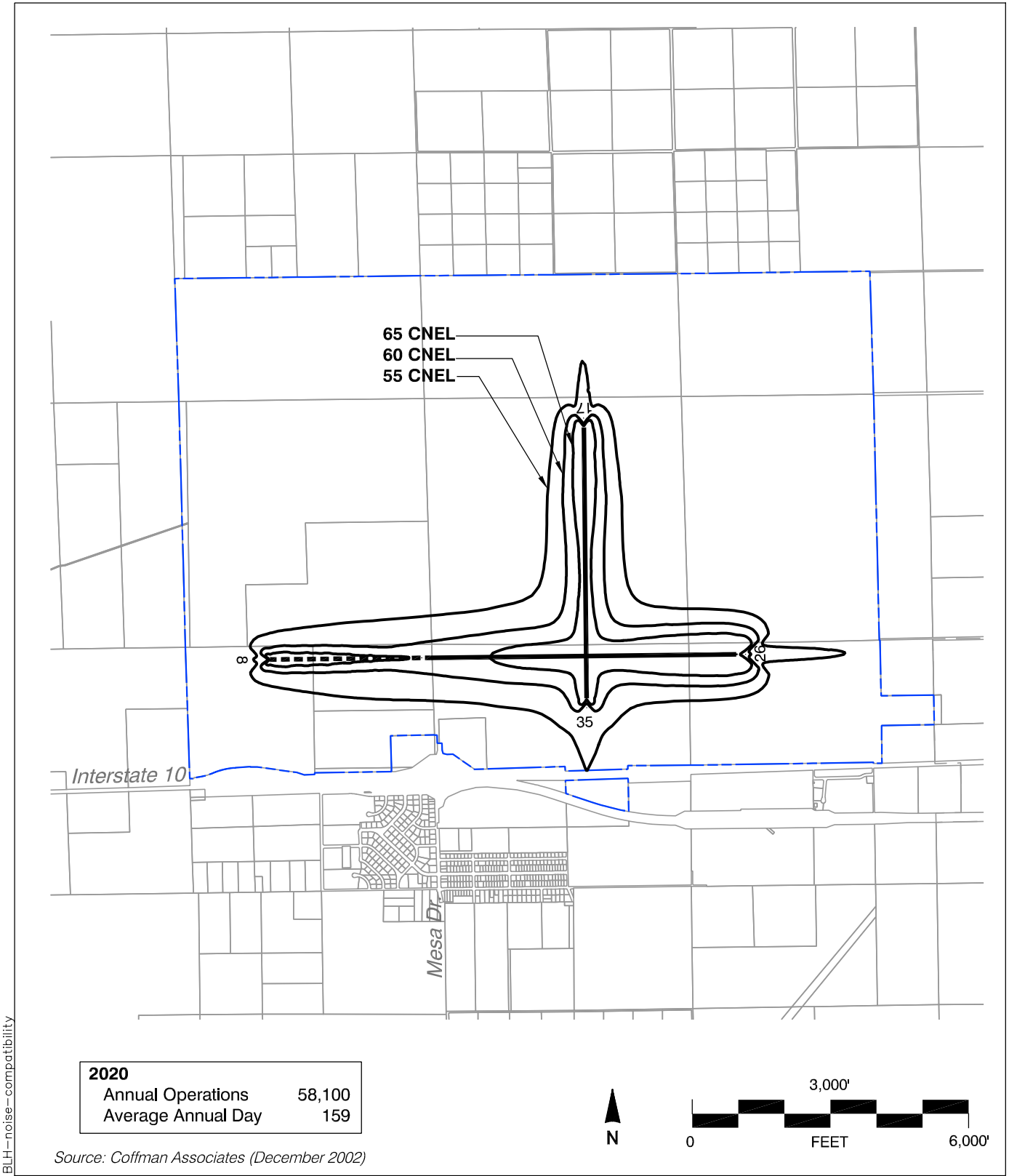


Exhibit BL-4

Existing Noise Impacts

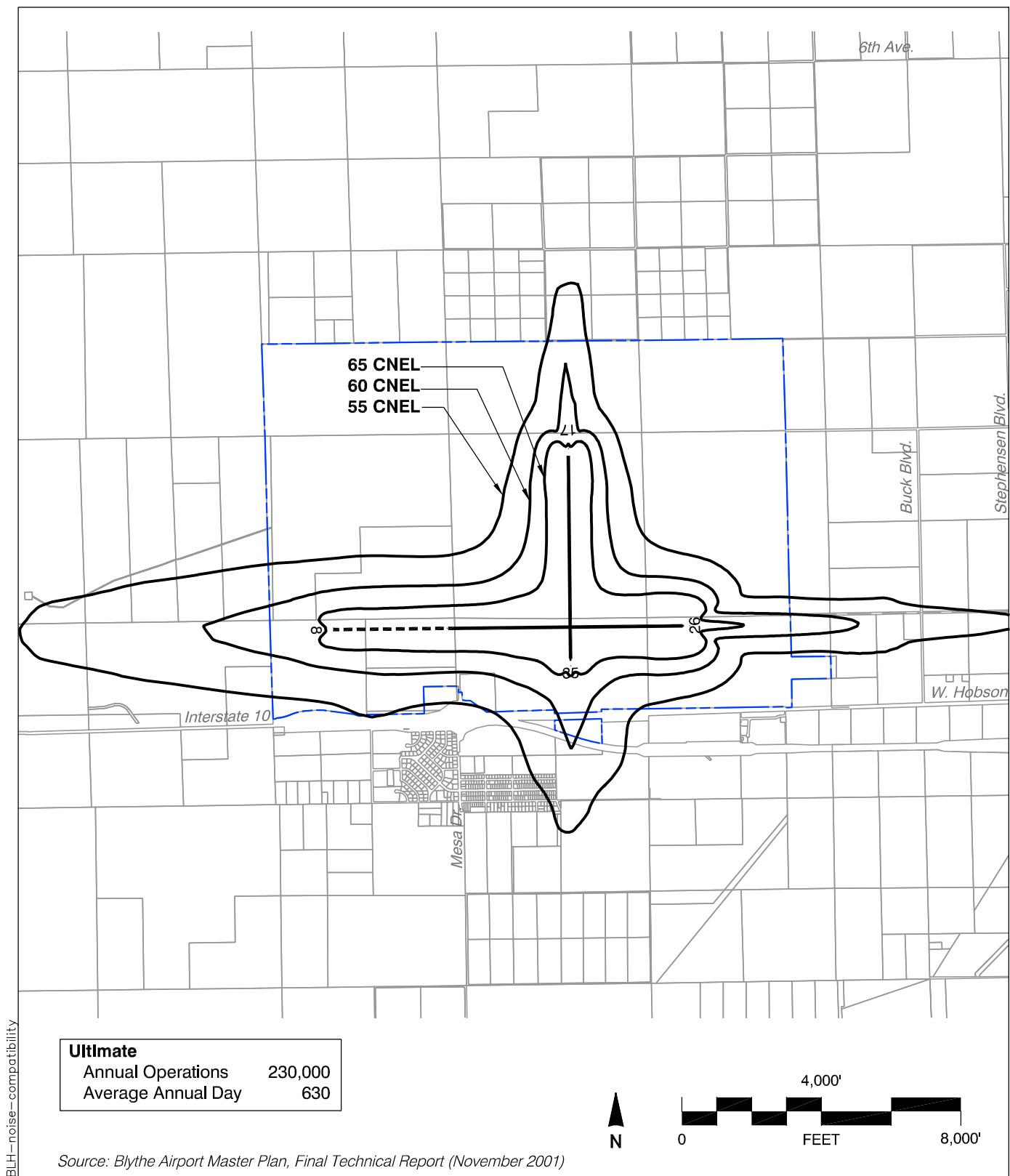
Blythe Airport



BLH-noise-compatibility

Exhibit BL-5

Future Noise Impacts Blythe Airport

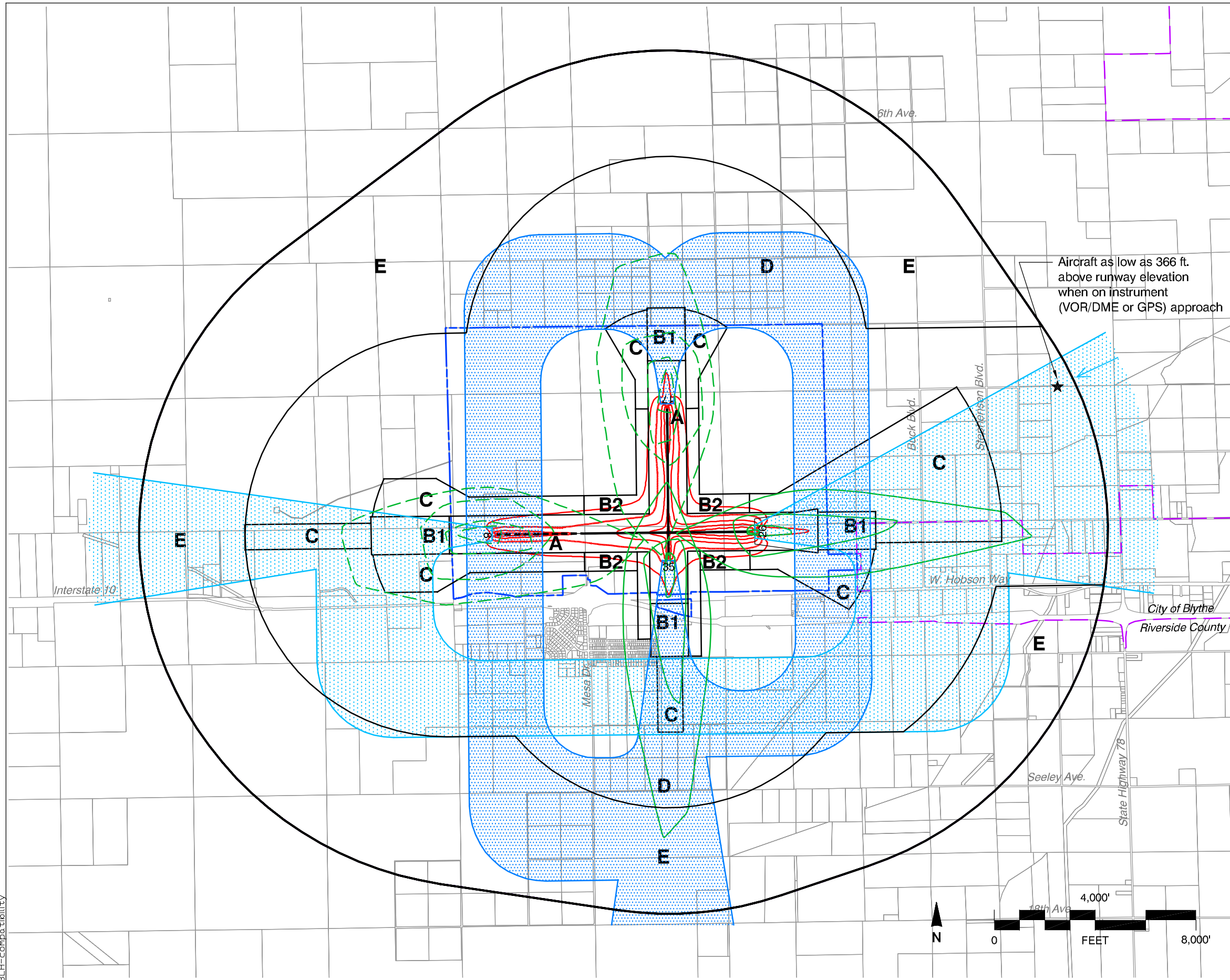


BLH—noise—compatibility

Exhibit BL-6

Ultimate Noise Impacts

Blythe Airport



Legend

Compatibility Zones

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

Noise and Overflight Compatibility Factors

- 70 dB CNEL
- 65 dB CNEL
- 60 dB CNEL
- 55 dB CNEL

▨ General Traffic Pattern Envelope (approximately 80% of aircraft overflights estimated to occur within these limits)

Safety and Airspace Compatibility Factors

- Aircraft Departure Accident Risk Intensity Contours* (Shown only for Takeoffs to the West and North)
- Aircraft Approach Accident Risk Intensity Contours* (Shown only for Landings from the East and South)
- FAR Part 77 Conical Surface Limits (same as influence area)

No Terrain Penetration of FAR Part 77 Surfaces

Boundary Lines

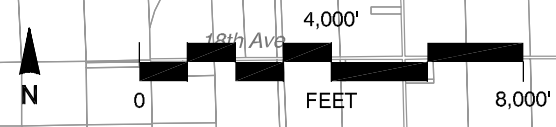
- Airport Property Line
- City Limits

* Aircraft accident risk intensity contours are derived from nationwide accident location data in California Division of Aeronautics database. The contours show relative intensities (highest concentrations) of near-airport accidents in 20% increments. The contour shapes represent a wide range of general aviation airports and have not been modified to reflect the flight tracks for this airport.

Riverside County
Airport Land Use Commission
Riverside County
Airport Land Use Compatibility Plan
East County Airports Background Data
 (October 2004)

Exhibit BL-7

Compatibility Factors Map
Blythe Airport



BLH-compatibility

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AIRPORT SITE

- ▶ *Location*
 - › Eastern Riverside County
 - › 6 miles west of Blythe city center
- ▶ *Nearby Terrain*
 - › Relatively flat terrain nearby

AIRPORT ENVIRONS LAND USE JURISDICTIONS

- ▶ *County of Riverside*
 - › Entire airport within unincorporated area
- ▶ *City of Blythe*
 - › Current city limits border east airport property

STATUS OF COMMUNITY PLANS

- ▶ *Riverside County*
 - › General Plan, a portion of Riverside County Integrated Project, adopted by Board of Supervisors Oct. 2003
- ▶ *City of Blythe*
 - › General Plan adopted 1989
 - › Adoption of updated plan anticipated in late 2005

EXISTING AIRPORT AREA LAND USES

- ▶ *General Character*
 - › Interstate 10 located south of airport property
 - › Primarily surrounded by agricultural uses and open space to the north, east, and west; residential development south of airport
 - › Power plant located east of the airport
- ▶ *Runway Approaches*
 - › West (Runway 8): Agriculture and open desert lands; Blythe Drag Racing Sandtrack (approx. 0.6 mile from runway end)
 - › East (Runway 26): Agriculture, open desert lands; power plant (1 mile from runway end)
 - › North (Runway 17): Agriculture and open desert lands
 - › South (Runway 35): Residential uses (0.7 mile from runway end); open desert lands beyond
- ▶ *Traffic Patterns*
 - › Mostly agriculture and open desert lands except as noted above

PLANNED AIRPORT AREA LAND USES

- ▶ *Riverside County*
 - › Agriculture; no planned development currently identified for nearby areas
- ▶ *City of Blythe*
 - › Agriculture and industrial uses planned for areas east of airport property

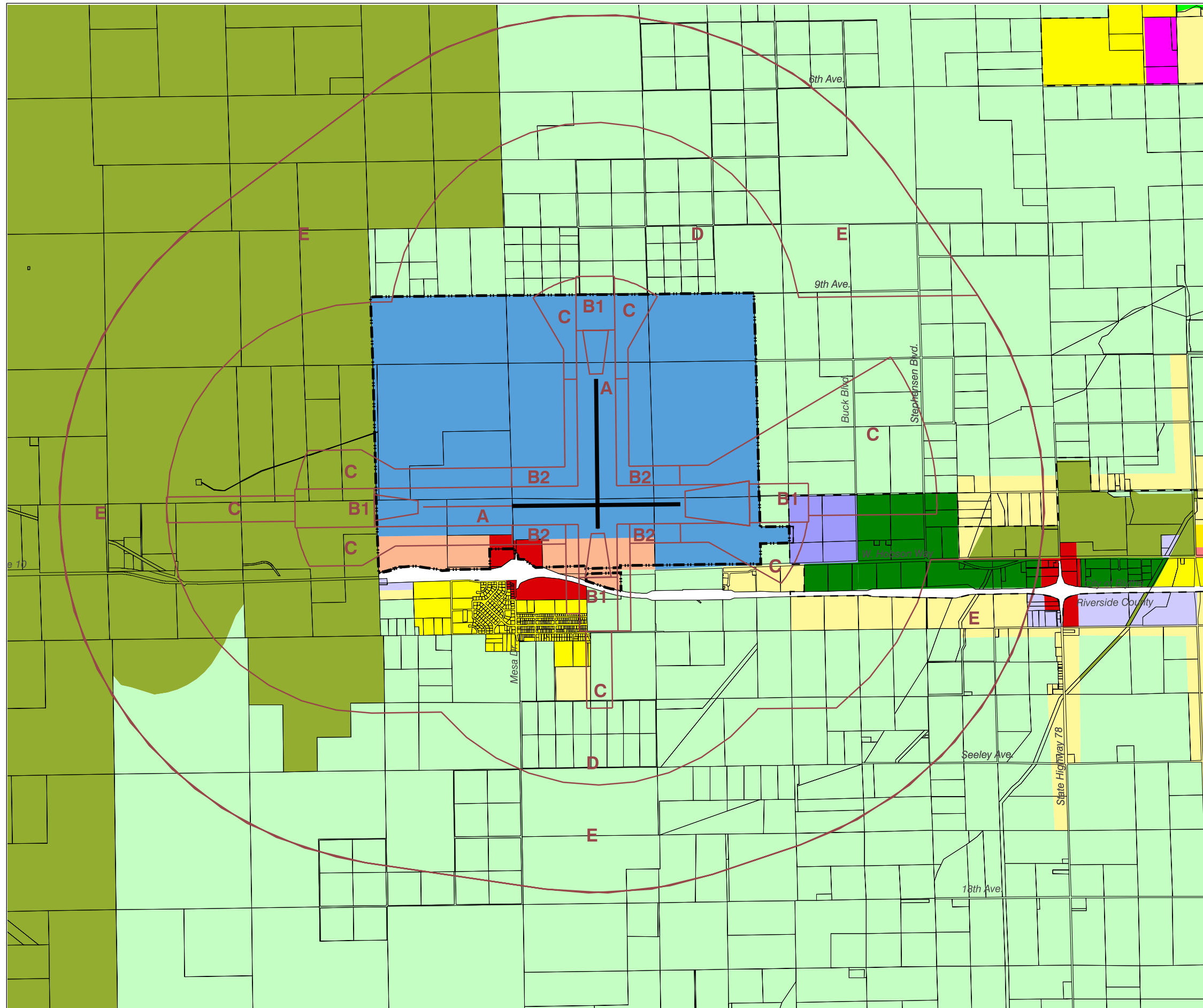
ESTABLISHED AIRPORT COMPATIBILITY MEASURES

- ▶ *Riverside County General Plan*
 - › Prohibit new residential uses, except single-family dwellings on legal residential lots of record, within airports' 60 dB CNEL contour as defined by ALUC (Policy N 7.4)
 - › Safety compatibility zones and criteria from previous compatibility plan incorporated into General Plan
 - › Review all proposed projects and require consistency with any applicable compatibility plan (LU 14.2)
 - › Submit proposed actions and projects to ALUC as required by state law (Policy LU 1.9); other actions may be submitted on voluntary and advisory basis (LU 14.8)
- ▶ *City of Blythe General Plan*
 - › No reference to airport land use compatibility issues
- ▶ *City of Blythe Zoning Codes*
 - › No airport-related height limit zoning

Exhibit BL-8

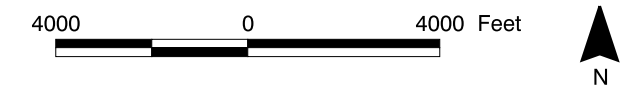
Airport Environs Information

Blythe Airport



- Legend**
- City Limits
 - Airport Property Line
 - Runway
 - Compatibility Zones
 - Very-High-Density Residential (>20 du/ac)
 - High-Density Residential (14.1-20 du/ac)
 - Medium-High-Density Residential (8.1-14.0 du/ac)
 - Medium-Density Residential (5.1-8.0 du/ac)
 - Low-Density Residential (2.1-5.0 du/ac)
 - Very-Low-Density Residential (0.4-2.0 du/ac)
 - Mobile Home Park
 - High-Intensity Commercial/Office
 - Low-Intensity Commercial /Office
 - Office/Business Park
 - Heavy Industrial
 - Light Industrial/Warehousing
 - Mixed Use
 - Airport
 - School
 - Other Public/Institutional
 - Parks & Recreation
 - Rural Residential
 - Agriculture
 - Urban Reserve
 - Open Space/Conservation
 - Federal Lands
 - State Lands
 - Indian Lands
 - Unclassified

Note:
 This map is combined and simplified from the maps in the following sources.
 Riverside County General Plan (October 2003)
 City of Blythe General Plan (1989 Draft)



**Riverside County
 Airport Land Use Commission**

**Riverside County
 Airport Land Use Compatibility Plan
 East County Airports Background Data
 (October 2004)**

Exhibit BL-9

**General Plan Land Use Designations
 Blythe Municipal Airport Environs**

**COUNTY OF RIVERSIDE:
GENERAL PLAN (2003) AND PALO VERDE AREA PLAN**

Residential Land Use

- ▶ *Compatibility Zone A*
 - › No inconsistencies noted
- ▶ *Compatibility Zone B1*
 - › Medium-Density Residential designation (2.1 to 5.0 dwelling units/acre) south of airport [R1] exceeds *Zone B1* compatibility criteria
- ▶ *Compatibility Zone C*
 - › Estate-Density, Very-Low Density, and Low-Density Residential (0.4 to 2.0 dwelling units/acre) designations (south and east of airport) and Medium-Density Residential (2.1 to 5.0 dwelling units/acre) designation (south of airport) exceeds *Zone C* compatibility criteria [R2]
- ▶ *Compatibility Zone D*
 - › Estate-Density, Very-Low Density, and Low-Density Residential (0.4 to 2.0 dwelling units/acre) designations and Medium-Density Residential (2.1 to 5.0 dwelling units/acre) designation south, southwest and east of the airport potentially conflict with the high-and-low options for *Zone D* [R3]
- ▶ *Compatibility Zone E*
 - › No inconsistencies noted

Non-Residential Land Use

- ▶ *Compatibility Zone B1*
 - › Potential Conflict: *Zone B1* intensity limits (25 people/acre) apply to areas designated as Low-Intensity Commercial/Office and Office/Business Park south of airport [R4]
- ▶ *Compatibility Zone B2*
 - › Potential Conflict: *Zone B2* intensity limits (100 people/acre) apply to areas designated as Low-Intensity Commercial/Office and Office/Business Park south of airport [R5]
- ▶ *Compatibility Zone C*
 - › Potential Conflict: *Zone C* intensity limits (75 people/acre) apply to areas designated as Low-Intensity Commercial/Office and Office/Business Park south of the airport [R6]
- ▶ *Compatibility Zone D*
 - › Potential Conflict: *Zone D* intensity limits (100 people/acre) apply to areas designated as Light Industrial/Warehousing, Low-Intensity Commercial/Office, and Office/Business Park south of airport [R7]

Other Policies

- ▶ *General Plan*
 - › Acknowledgement of ALUC policies—no conflict
 - › Established ALUC 60 dB CNEL noise contour policy for new residential development—no conflict
- ▶ *Zoning Codes*
 - › No height limit zoning established

Note: This is an initial land use consistency review prepared for the purpose of identifying areas where a conflict exists or potentially exists with ALUC compatibility zone criteria. This review is based upon available general plan documents and does not take into account existing land use. When a conflict between the general plan and compatibility criteria exists, it is not deemed inconsistent when the general plan is merely representing existing development. A more comprehensive analysis is necessary at the time a general plan land modification is presented to the ALUC for review.

Exhibit BL-10

General Plan Consistency Review (Preliminary)

Blythe Airport Environs

**CITY OF BLYTHE:
GENERAL PLAN (1989-DRAFT), AND ZONING CODES**

Non-Residential Land Use

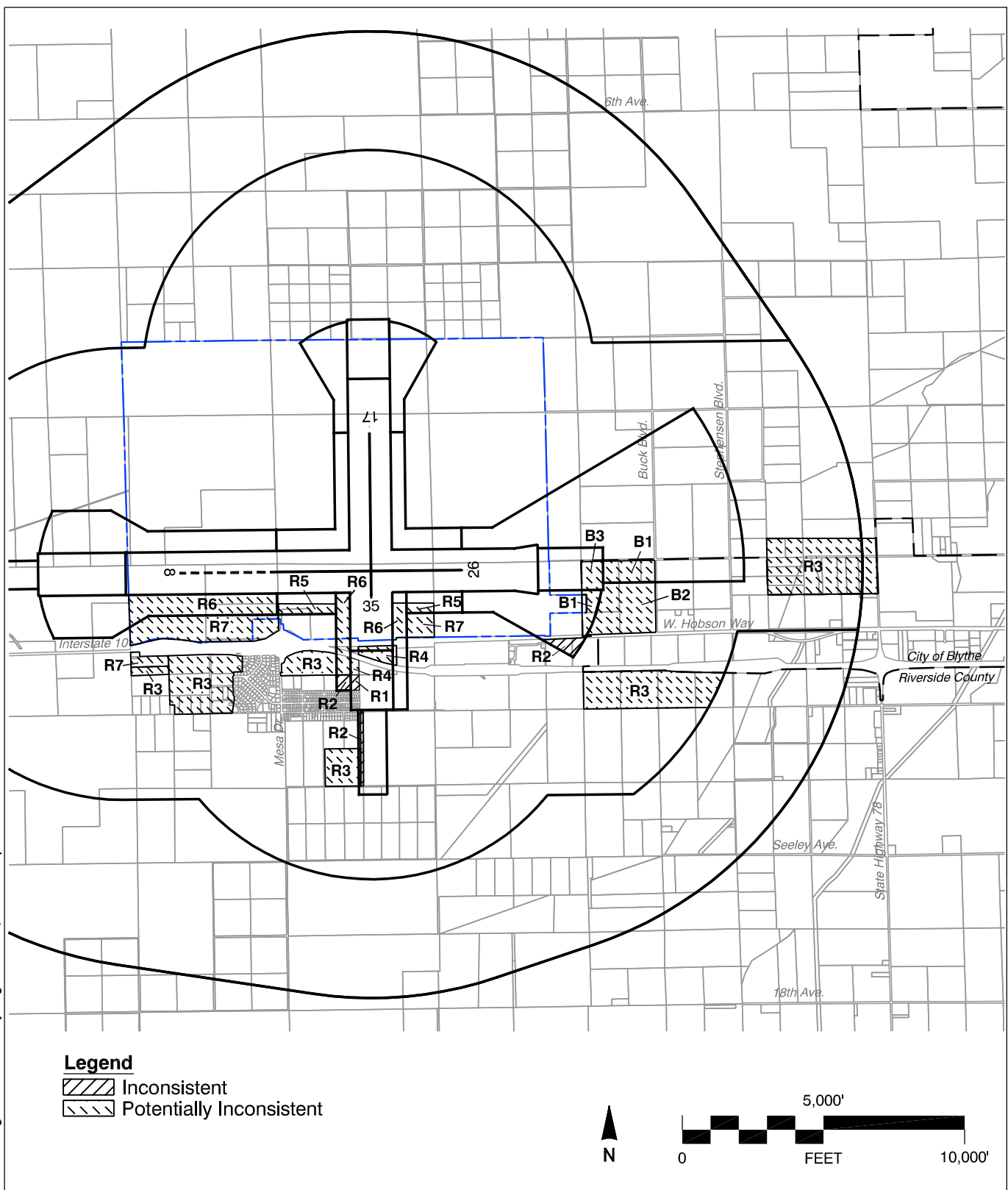
- ▶ *Compatibility Zone B1*
 - › Potential Conflict: *Zone B1* intensity limits (25 people/acre) apply to area designated as Heavy Industrial east of airport [B2]
- ▶ *Compatibility Zone C*
 - › Potential Conflict: *Zone C* intensity limits (75 people/acre) apply to area designated as Heavy Industrial east of airport [B1]
- ▶ *Compatibility Zone D*
 - › Potential Conflict: *Zone D* intensity limits (100 people/acre) apply to area designated as Heavy Industrial east of airport [B2]

Other Policies

- ▶ *General Plan*
 - › No acknowledgment of ALUC coordination
 - › Noise contours for new residential development not established
- ▶ *Zoning Codes*
 - › Height limit zoning not established

Note: This is an initial land use consistency review prepared for the purpose of identifying areas where a conflict exists or potentially exists with ALUC compatibility zone criteria. This review is based upon available general plan documents and does not take into account existing land use. When a conflict between the general plan and compatibility criteria exists, it is not deemed inconsistent when the general plan is merely representing existing development. A more comprehensive analysis is necessary at the time a general plan land modification is presented to the ALUC for review.

Exhibit BL-10, continued



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Exhibit BL-10, continued