
Background Data: Banning Municipal Airport and Environs

INTRODUCTION

Banning Municipal Airport sits at a 2,200-foot elevation in the midst of the San Gorgonio Pass of central Riverside County. The pass separates the 10,000-foot-high ranges of the San Bernardino Mountains to the north and the San Jacinto Mountains to the south as well as the low lands of the Los Angeles Basin to the west and the Coachella Valley to the east. This location makes the airport a highly important component of the regional airport system. Additionally, the airport is home to some 75 aircraft belonging to businesses and residents of Banning, Beaumont, and other nearby communities.

The airport consists of a single east/west runway nearly 5,000 feet in length. Aircraft operate under visual procedures—no instrument approach procedures have been created. Exhibit BN-1 describes other major features of the airport. The airport layout plan (Exhibit BN-2) was last updated in 1990 and does not show the modification to the runway's eastern end which resulted in a minor reduction of the length. No major airfield improvements are indicated in the *Airport Master Plan* adopted by the city in 1989.

The volume of aircraft operations at Banning Municipal Airport is low relative to the number of based aircraft. The surrounding terrain and often strong winds limit flight training activity. The city's *Master Plan*, though, anticipates that activity could eventually grow some seven-fold and this assumption is reflected in the compatibility planning for the airport (Exhibit BN-3).

Nearby land uses are largely compatible with the airport operations both at present and in the future. Aircraft noise impacts (Exhibits BN-4 and BN-5) mostly overlap noise from Interstate 10 and the Union Pacific Railroad line which parallel the runway to the north. Exhibit BN-6 shows the factors upon which the Compatibility Map for the airport (included in Volume 1) is based. Features of the airport environs are described in Exhibit BN-7. Existing land uses directly to the west consist of a mixture of light industrial, residential, and vacant land. Planned uses are industrial as shown in Exhibit BN-8. To the east, beginning just beyond the runway end, lies a portion of the Morongo Indian Reservation. The Riverside County Airport Land Use Commission has no authority over potential development of this land, but no plans for development are known. A preliminary review of the compatibility status between the City of Banning and Riverside County general plans and the compatibility plan for Banning Municipal Airport is included in Exhibit BN-9.

GENERAL INFORMATION

- ▶ *Airport Ownership:* City of Banning
- ▶ *Year Opened:* 1945
- ▶ *Property Size*
 - › Fee title: 185± acres
 - › Avigation easements: Acreage uncertain
- ▶ *Airport Classification:* General Aviation
- ▶ *Airport Elevation:* 2,219 feet MSL

AIRPORT PLANNING DOCUMENTS

- ▶ *Airport Master Plan*
 - › Adopted by City Council, c. 1989
- ▶ *Airport Layout Plan Drawing*
 - › Last updated December 1990

RUNWAY/TAXIWAY DESIGN

Runway 8-26

- ▶ *Critical Aircraft:* Medium twin, small business jet
- ▶ *Airport Reference Code:* B-II
- ▶ *Dimensions:* 4,960 ft. long, 150 ft. wide
 - › Runway 26 end relocated 232 ft. from pavement end
- ▶ *Pavement Strength (main landing gear configuration)*
 - › 12,500 lbs (single-wheel)
- ▶ *Average Gradient:* 2.4%
- ▶ *Runway Lighting*
 - › Medium-intensity edge lights
- ▶ *Primary Taxiways:* Full-length parallel on south

TRAFFIC PATTERNS AND APPROACH PROCEDURES

- ▶ *Airplane Traffic Patterns*
 - › Runway 26: Right traffic
 - › Pattern altitude: 1,000 ft. AGL
- ▶ *Instrument Approach Procedures*
 - › None
- ▶ *Visual Approach Aids*
 - › Airport: Rotating beacon
 - › Runway 26: Precision Approach Path Indicator (3.5°)
- ▶ *Operational Restrictions / Noise Abatement Procedures*
 - › No straight-in landings
 - › Runway 26 departures: no intersection departures; no turns below 2900 feet MSL

APPROACH PROTECTION

- ▶ *Runway Protection Zones (RPZ)*
 - › Runway 8: 1,000-ft. long; all on airport property
 - › Runway 26: 1,000-ft. long; none on airport property [FAA waiver letter dated 1/27/78]
- ▶ *Approach Obstacles*
 - › None

BUILDING AREA

- ▶ *Location:* North and south sides of Runway 8 approach end
- ▶ *Aircraft Parking Capacity*
 - › Hangar spaces: 65±
 - › Tiedowns: 30±
- ▶ *Other Major Facilities*
 - › Administration bldg.
- ▶ *Services*
 - › Fuel: 100LL (by attendant, 8 am to 5 pm)
 - › Other: Aircraft maintenance

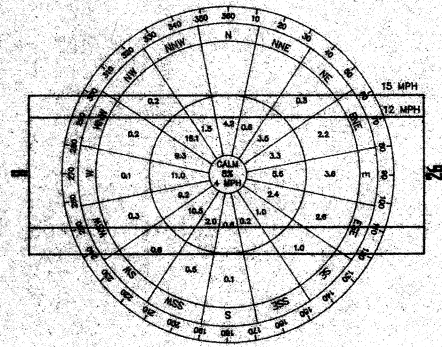
PLANNED FACILITY IMPROVEMENTS

- ▶ *Airfield*
 - › Construct partial parallel taxiway on north side
- ▶ *Building Area*
 - › Construct additional hangars
- ▶ *Property*
 - › Acquire 94± acres of land south of airport for building area expansion

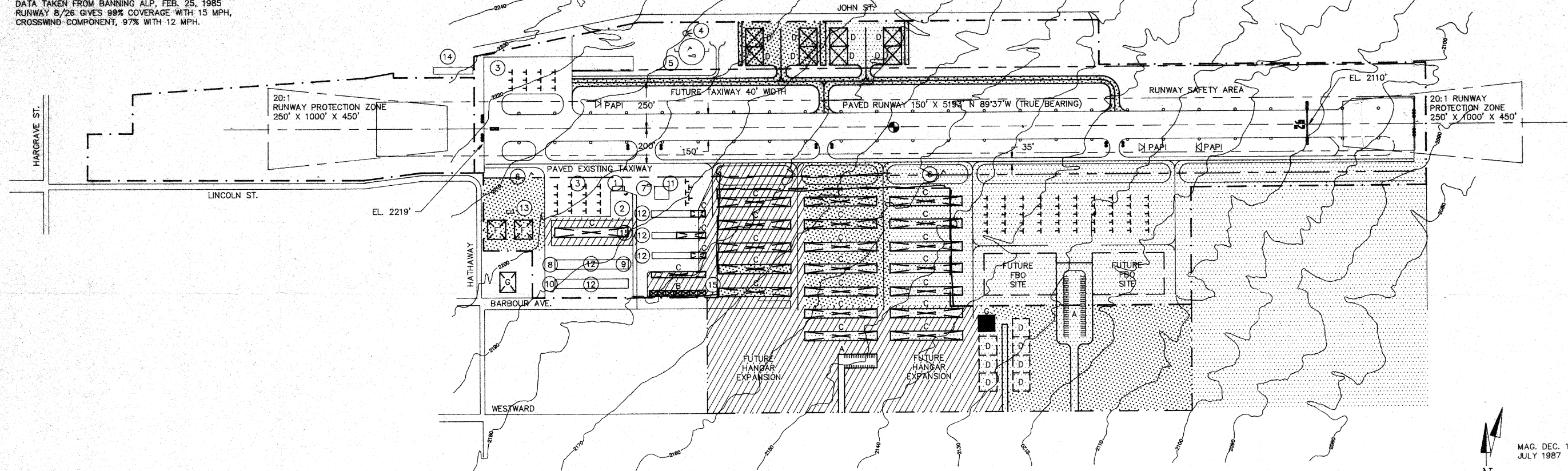
Exhibit BN-1

Airport Features Summary
Banning Municipal Airport

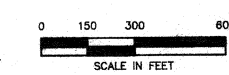
WIND ROSE



DATA TAKEN FROM BANNING ALP, FEB. 25, 1985
 RUNWAY 8/26 GIVES 99% COVERAGE WITH 15 MPH,
 CROSSWIND COMPONENT, 97% WITH 12 MPH.



MAG. DEC. 13' 45"E
 JULY 1987



AIRPORT DATA

RUNWAY DATA

LEGEND

BUILDINGS/FACILITIES

THE PREPARATION OF THIS DOCUMENT WAS FINANCED IN PART BY A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 505 OF THE AIRPORT AND AIRWAYS IMPROVEMENT ACT OF 1982.

RUNWAY 8/26	EXISTING	FUTURE	RUNWAY 8/26	EXISTING	FUTURE
AIRPORT TYPE	GENERAL UTILITY	SAME	RUNWAY CATEGORY	GENERAL UTILITY	SAME
ELEVATION	2219' MSL	SAME	ELEVATION	2219' MSL	SAME
MEAN MAX TEMP. (JULY)	96.6°F	SAME	EFFECTIVE GRADIENT	2.40%	SAME
ARP - AIRPORT LAT.	33°55'21"	SAME	RUNWAY LENGTH	5193'	SAME
REFERENCE POINT LONG.	116°50'59"	SAME	DISPLACED THRESHOLD (26)	595'	SAME
TERMINAL NAVAIDS	PAPI 8 & 26	SAME	RUNWAY WIDTH	150'	SAME
APPROACHES	20:1 VISUAL	SAME	PAVEMENT GROSS LOAD	12,500#SWL	SAME
AIRPORT DESIGN GROUP	ADC II	SAME	SUBGRADE CLASS	FA	SAME
% WIND COVERAGE	97% - 12 MPH, 99% - 15 MPH		RUNWAY LIGHTS	MIRL	SAME
DESIGN AIRCRAFT	KING AIR	SAME	TAXIWAY LIGHTS	NONE	MITL
SURFACE TYPE	PAVED	SAME	MARKING	BASIC	SAME
FAR PART 77 CATEGORY	VISUAL/VISUAL	SAME	% WIND COVERAGE	97% - 12 MPH, 99% - 15 MPH	
			NAVIGATIONAL AIDS	NONE	SAME
			VISUAL AIDS	NONE	SAME
			RUNWAY SAFETY AREA		
			LENGTH BEYOND R/W END	600'	SAME
			WIDTH	300'	SAME

FACILITIES	LEGEND
BUILDINGS	[Symbol]
AIRPORT PROPERTY	[Symbol]
FUTURE FACILITIES	[Symbol]
FUTURE BUILDINGS	[Symbol]
FUTURE PROPERTY LINE	[Symbol]
BUILD. RESTRICTION LINE	[Symbol]
PHASE - I	[Symbol]
PHASE - II	[Symbol]
PHASE - III	[Symbol]
RUNWAY LIGHTS	[Symbol]
THRESHOLD & EXIT LIGHTS	[Symbol]
PAPI	[Symbol]
ARP	[Symbol]

NOTES: DATA FROM CITY MAPS AND AIRPORT LAYOUT PLAN FEB. 25, 1985. FENCES FOLLOW EXISTING PROPERTY LINE. FUTURE FENCING WILL FOLLOW FUTURE PROPERTY LINE

BUILDINGS/FACILITIES	EXISTING	FUTURE
TERMINAL/ADMINISTRATION BUILDING	(1)	
AUTO PARKING	(2)	A
TIEDOWNS	(3)	
ROTATING BEACON	(4)	
WIND T	(5)	
WIND SOCK	(6)	
FUEL ISLAND	(7)	
EARL SEAY & CO.	(8)	
AVIATION SPECIALTIES	(9)	
DRUETT AIRCRAFT MAINT.	(10)	
NAVIONEERS	(11)	
SINGLE HANGAR UNIT		B
T-HANGARS	(12)	C
CORPORATE HANGARS		D
STERLING LANDERS MACH. SHOP	(13)	
OFF AIRPORT T-HANGARS	(14)	
DIRT/GRASS	(15)	
AVIATION SPECIALTIES		E
FBO/HANGAR		F
FIRE STATION		G

CITY OF BANNING
 APPROVAL DATE: _____
 SEE APPROVAL LETTER: _____
 SIGNATURE: _____

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NO.	REVISIONS	BY:	DATE

AIRPORT LAYOUT PLAN
BANNING MUNICIPAL AIRPORT
 BANNING, CA

DESIGNED BY: J. HAWLEY, AEE
 DRAWN BY: R. JOHANNESSEN
 DATE: DECEMBER 28, 1980

DRAWING 1 OF 2

BASED AIRCRAFT			TIME OF DAY DISTRIBUTION ^e		
<i>Aircraft Type</i>	Current ^a <i>2002 data</i>	Future ^b <i>Ultimate</i>		Current	Future
Single-Engine	70	193	<i>All Aircraft</i>		
Twin-Engine, Piston	0	23	Day	95%	no change
Twin-Engine, Turboprop	3	5	Evening	3%	
Turbojet	0	0	Night	2%	
Helicopters	2	4			
Total	75	225			
AIRCRAFT OPERATIONS			RUNWAY USE DISTRIBUTION ^e		
	Current	Future		Current	Future
<i>Total</i>			<i>All Airplanes – Day & Evening</i>		
Annual	12,000 ^c	70,000 ^d	Takeoffs & Landings		
Average Day	33	192	Runway 8	10%	no change
			Runway 26	90%	
			<i>All Airplanes – Night</i>		
			Takeoffs & Landings		
			Runway 8	0%	no change
			Runway 26	100%	
			<i>Helicopters</i>		
			Takeoffs & Landings (Helipad)		
			Runway 8 direction	10%	no change
			Runway 26 direction	90%	
Distribution by Aircraft Type ^e			FLIGHT TRACK USAGE ^e		
Single-Engine	77%	81%	Current & Future		
Twin-Engine Piston	5%	10%	▶ Takeoffs, Runway 8		
Twin-Engine, Turboprop	1%	4%	› 30% straight out		
Business Jet	0%	1%	› 70% left turn		
Helicopter	17%	4%	▶ Takeoffs, Runway 26		
			› 65% straight out		
			› 35% right turn		
			▶ Landings, both runways		
			› 100% traffic pattern (no straight in)		
			▶ Helicopters follow freeway alignment; helipad is north of approach end of Runway 8		
Distribution by Type of Operation ^a					
Local (incl. touch-and-goes)	30%	no change			
Itinerant	70%				

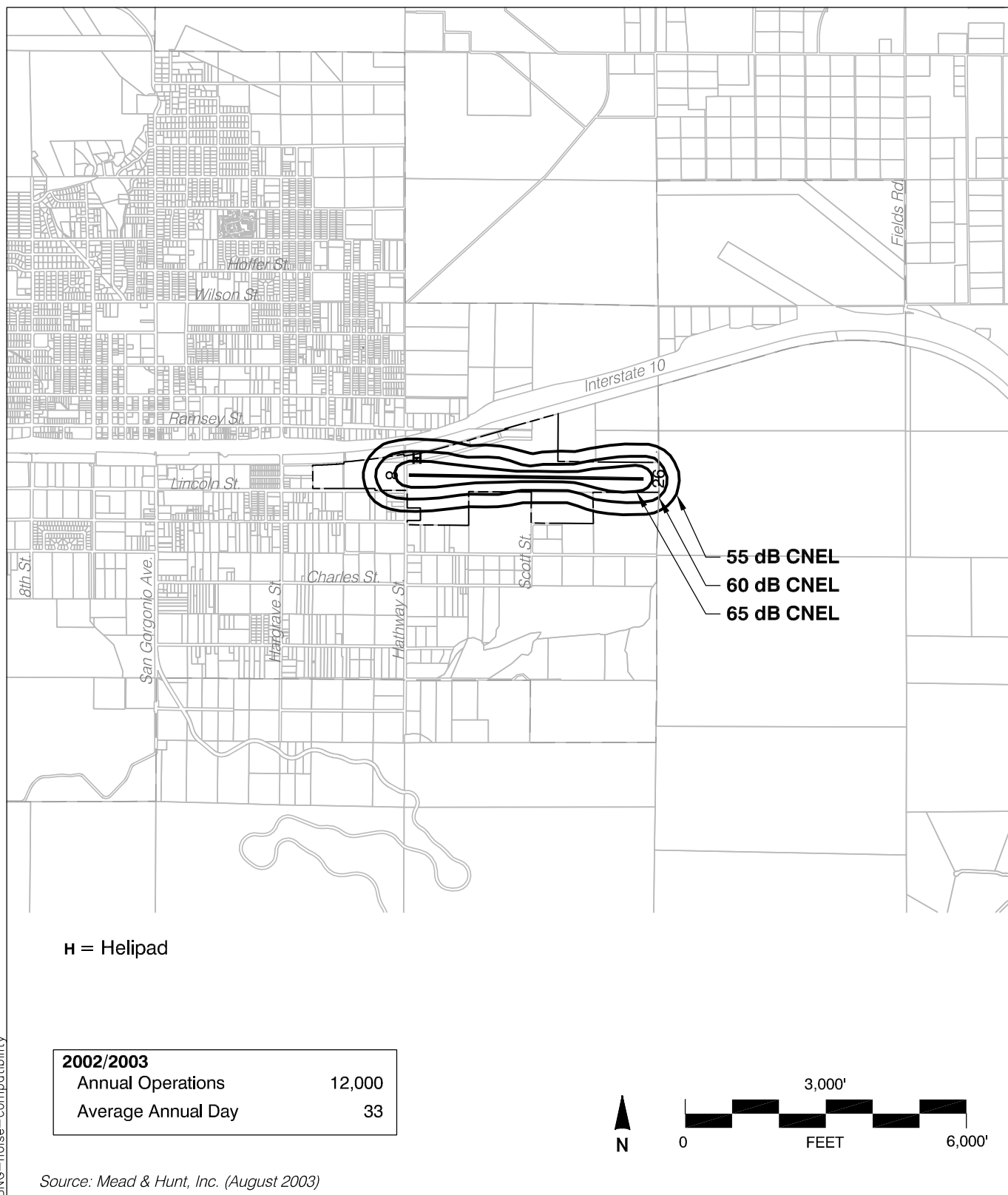
Notes

- ^a Source: FAA Airport Master Record (Form 5010)
- ^b Source: *Banning Municipal Airport Master Plan Report* (1989); original projection was for 2008, but is assumed here to be for an indefinite time frame at least 20 years in the future
- ^c Source: California Division of Aeronautics aircraft operations counter program plus estimated helicopter operations
- ^d Source: *Airport Master Plan* projection of airplane operations plus estimated 3,000 future helicopter operations; time frame is assumed to be beyond 20 years
- ^e Source: Estimated by Mead & Hunt from information provided by airport staff

Exhibit BN-3

Airport Activity Data Summary

Banning Municipal Airport

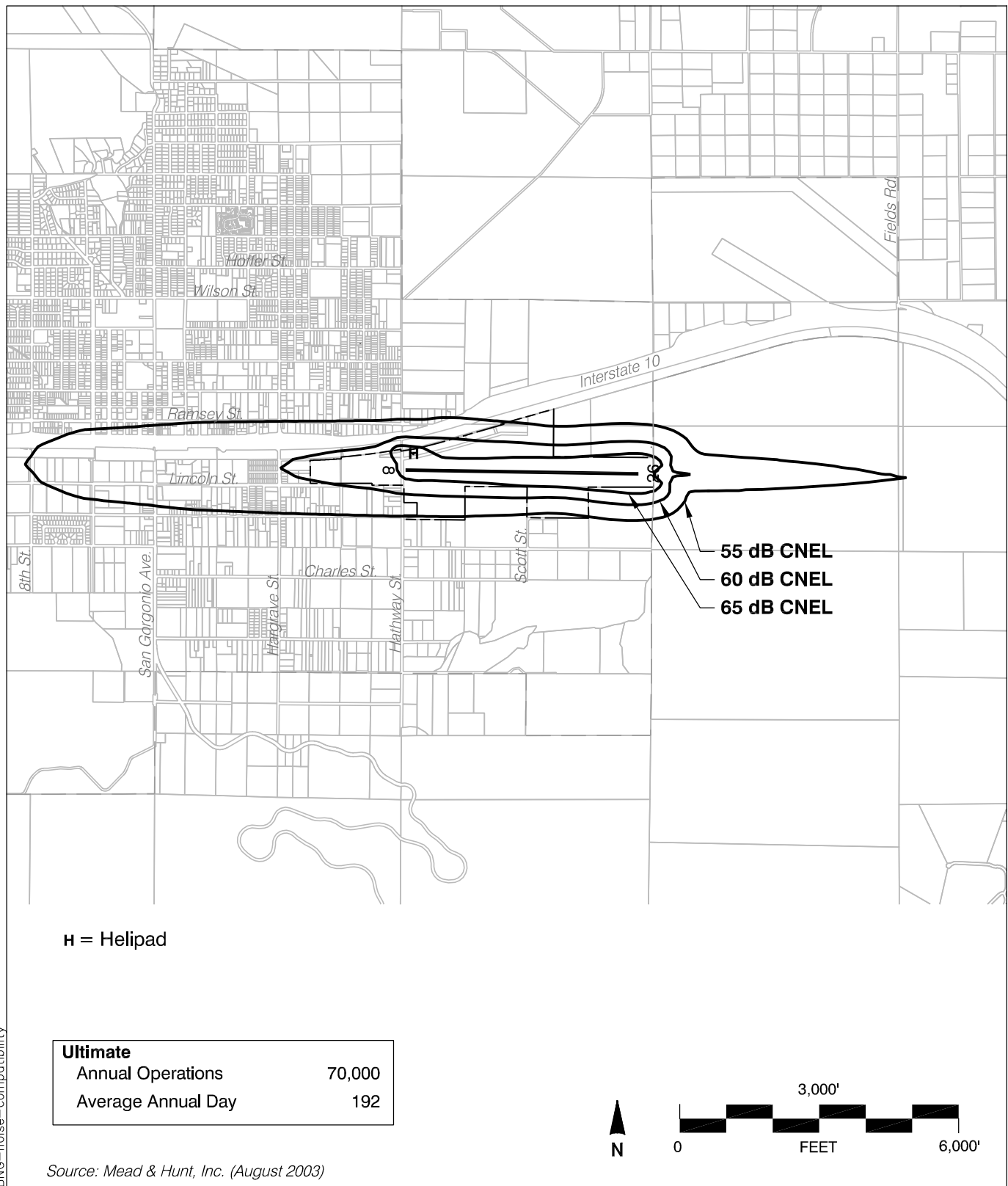


BNG-noise-compatibility

Exhibit BN-4

Existing Noise Impacts

Banning Municipal Airport



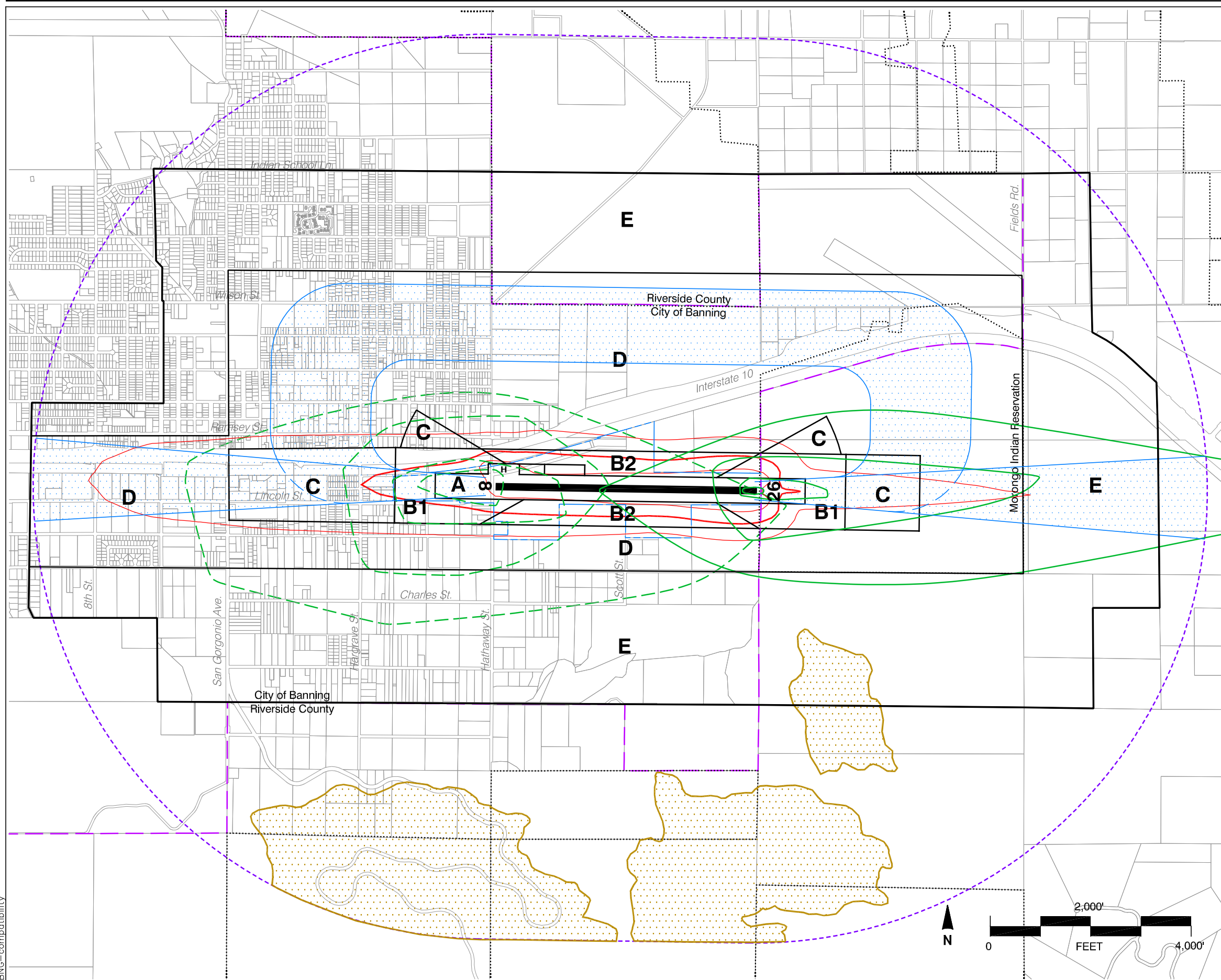
BNG-noise-compatibility

Source: Mead & Hunt, Inc. (August 2003)

Exhibit BN-5

Future Noise Impacts Banning Municipal Airport

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Legend

Compatibility Zones

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

Noise and Overflight Compatibility Factors

- 65 dB CNEL } Future Average
- 60 dB CNEL } Annual Day
- 55 dB CNEL }

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

Helipad

Safety and Airspace Compatibility Factors

Aircraft Departure Accident Risk Intensity Contours *
(Shown Only for Takeoffs to the West)

Aircraft Approach Accident Risk Intensity Contours *
(Shown Only for Landings from the East)

FAR Part 77 Conical Surface Limits

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 BN-6

Compatibility Factors
Banning Municipal Airport

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AIRPORT SITE

- ▶ *Location*
 - › North-central Riverside County
 - › 1¼ mile east of Banning city center
- ▶ *Nearby Terrain*
 - › Situated in San Gorgonio Pass at 2,200± ft. elevation
 - › Base of San Jacinto Mountains 1 mile south; Mt. San Jacinto peak (elevation 10,804 ft.) 12 miles southeast
 - › Base of San Bernardino Mountains 2+ miles north, Mt. San Gorgonio peak (elevation 11,499 ft.) 12 miles north

AIRPORT ENVIRONS LAND USE JURISDICTIONS

- ▶ *County of Riverside*
 - › Lands under unincorporated county jurisdiction within ¼ mile southeast and ¾ mile southwest of runway
- ▶ *City of Banning*
 - › Entire airport property within city limits
 - › Urbanized area of city lies west and northwest
- ▶ *Morongo Indian Reservation*
 - › Reservation lands immediately east of runway (including Runway 26 RPZ) and within 0.6 miles north and 1 mile south
 - › Indian lands not subject to ALUC authority

STATUS OF COMMUNITY PLANS

- ▶ *Riverside County*
 - › General Plan, a portion of Riverside County Integrated Project, adopted by Board of Supervisors Oct. 2003
- ▶ *City of Banning*
 - › General Plan adopted May 1986
- ▶ *Morongo Indian Reservation*
 - › No known land use plans

EXISTING AIRPORT AREA LAND USES

- ▶ *General Character*
 - › Mixed use area on eastern edge of city
 - › Union Pacific Railroad line and Interstate 10 border north side of airport
- ▶ *Runway Approaches*
 - › West (Runway 8): Mixture of industrial and scattered residential uses; high school south of final approach course, 1¼ mile from runway end
 - › East (Runway 26): Undeveloped desert lands
- ▶ *Traffic Pattern*
 - › North: Freeway/railroad corridor and undeveloped land except to northwest

PLANNED AIRPORT AREA LAND USES

- ▶ *Riverside County*
 - › Southwest and Southeast: No currently identified development planned for nearby areas
- ▶ *City of Banning*
 - › West: Industrial uses along approach; mostly very low density residential south of Barbour Street
 - › North: New industrial area north of freeway; infill residential and mixed use to northwest
 - › South: Airport-related industry, including automobile drag strip adjoining airport; very-low-density residential south of Charles Street
- ▶ *Morongo Indian Reservation*
 - › No known development plans for lands adjoining east end of airport

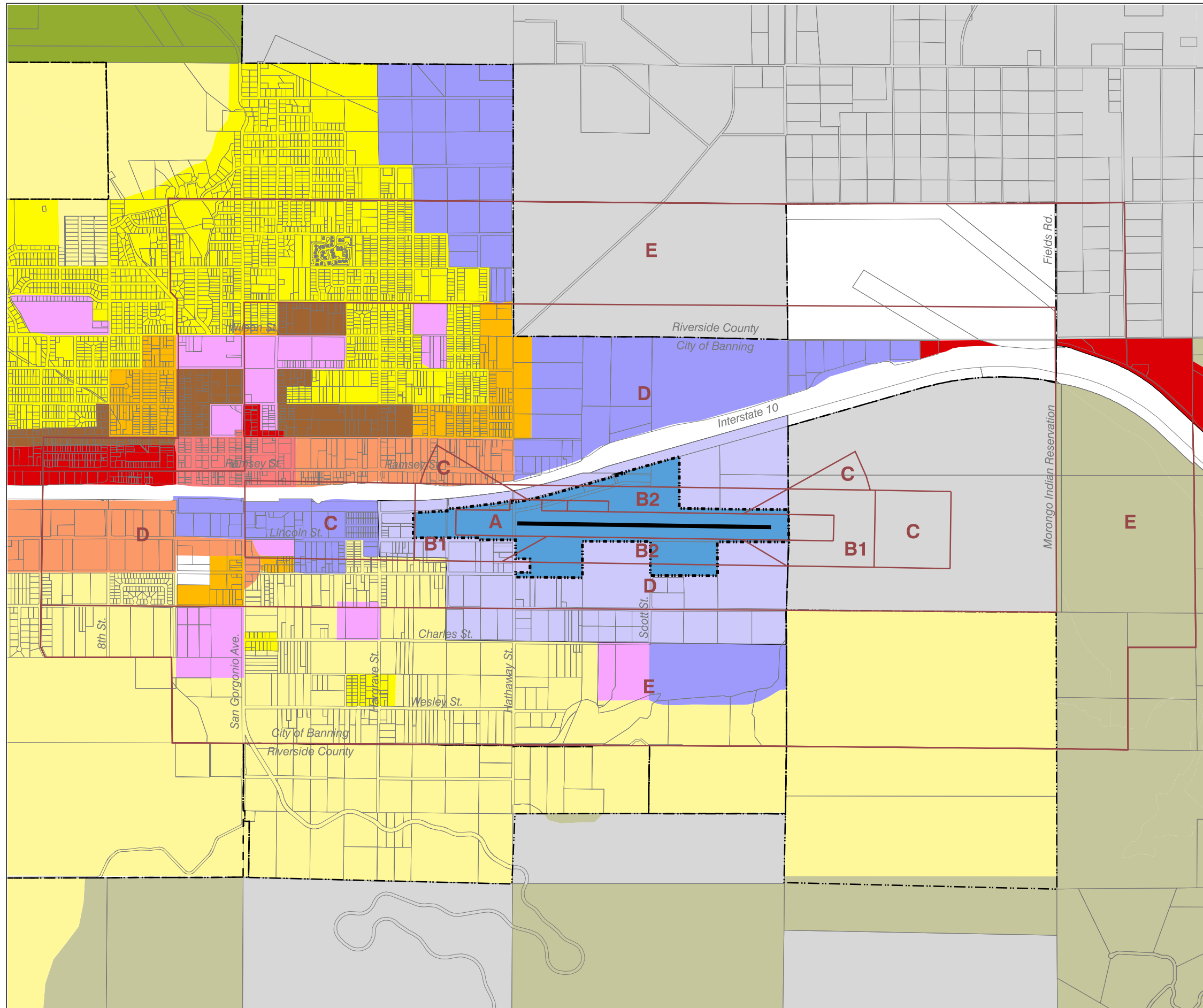
ESTABLISHED AIRPORT COMPATIBILITY MEASURES

- ▶ *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 Banning General Plan*
 - › New single-family residential land uses deemed normally acceptable up to 60 dB CNEL and conditionally acceptable up to 70 dB CNEL
 - › Certification that interior noise level will not exceed 45 dB CNEL required for residential development where outdoor noise exceeds 65 dB CNEL
- ▶ *City of Banning Zoning Codes*
 - › Mostly 35-foot height limit in city; higher allowed in industrial zones and with conditional use permit
 - › Height limits established to protect airport airspace (specific language is outdated)

Exhibit BN-7

Airport Environs Information

Banning Municipal Airport



- Legend**
- City Limits
 - City Sphere of Influence
 - 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
 - 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 Banning General Plan (May 1986)



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

Exhibit BN-8

General Plan Land Use Designations
Banning Municipal Airport Environs

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

Residential Land Use

- ▶ *Compatibility Zones A, B1, C, and D*
 - › No unincorporated land east of airport, except Morongo Indian Reservation
 - › Indian land not subject to ALUC authority
- ▶ *Compatibility Zone B2*
 - › No unincorporated land
- ▶ *Compatibility Zone E*
 - › No unincorporated land north and east of airport, except Morongo Indian Reservation
 - › Indian land not subject to ALUC authority

MORONGO INDIAN RESERVATION

- ▶ *Compatibility Zones A, B1, C, D, and E*
 - › Potential inconsistencies in land use development east of airport [M1]

Non-Residential Land Use

- ▶ *Compatibility Zone E*
 - › Potential Conflict: no references to airspace protection height limitations in the Pass Area Plan

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 BN-9

General plan Consistency Review (Preliminary)
Banning Municipal Airport Environs

**CITY OF BANNING:
GENERAL PLAN (1986), AND ZONING CODES**

Residential Land Use

- ▶ *Compatibility Zone C*
 - › Residential designations with densities ranging from 0.4 to 2.0 dwelling units/acre are inconsistent with *Zone C* compatibility criteria; existing development south of Lincoln Street is nonconforming

Other Policies

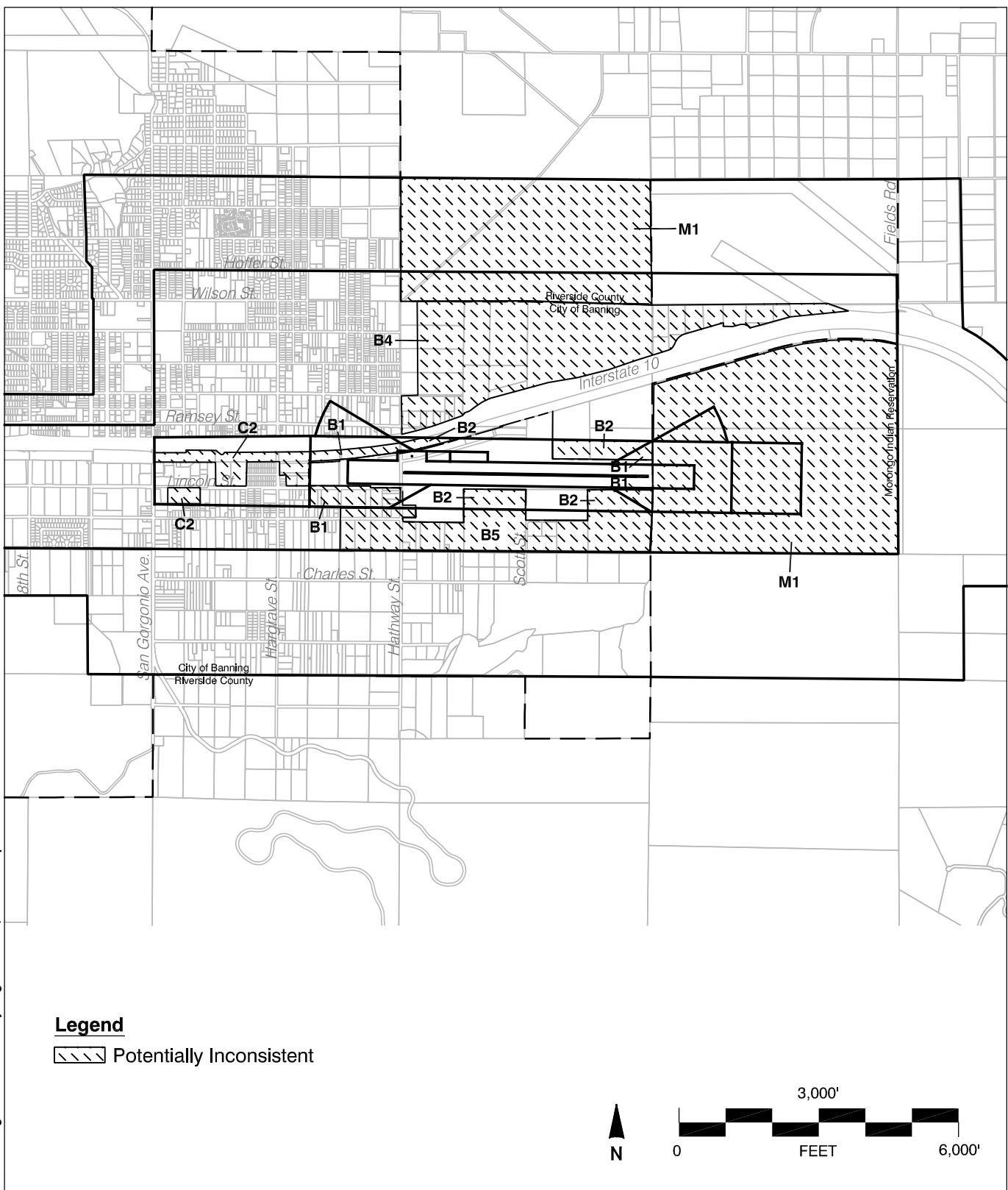
- ▶ *General Plan*
 - › No acknowledgment of ALUC coordination
 - › Noise Element policy conditionally allowing new residential development up to 70 dB CNEL conflicts with Compatibility Plan limit of 60 dB CNEL even if interior 45 dB CNEL criterion is met; policy does not state what set of noise contours are to be used in application of this criterion
- ▶ *Zoning Codes*
 - › Height limit zoning established to protect airport airspace (specific language is outdated)

Non-Residential Land Use

- ▶ *Compatibility Zone A*
 - › *Zone A* (west) entirely on airport property
- ▶ *Compatibility Zone B1*
 - › Potential Conflict: *Zone B1* intensity limits (25 people/acre) apply to area designated as Light Industrial/Warehousing northern and southern edges of airport [B1]
- ▶ *Compatibility Zone B2*
 - › Potential Conflict: *Zone B2* intensity limits (100 people/acre) apply to area designated as Light Industrial/Warehousing north and south of airport [B2]
 - › Plans for an automobile drag-strip south of runway is a potential conflict with *Zone B2* compatibility criteria (100 people/acre) depending upon the location and intensity of the development
- ▶ *Compatibility Zone C*
 - › Potential Conflict: *Zone C* intensity limits (75 people/acre) apply to areas designated as Light Industrial/Warehousing, Heavy Industrial and Other Public/Institutional west of airport [B3]
- ▶ *Compatibility Zone D*
 - › Potential Conflict: *Zone D* intensity limits (100 people/acre) apply to areas designated as Heavy Industrial and Low-Intensity Commercial/Office north of airport [B4]
 - › Potential Conflict: *Zone D* intensity limits (100 people/acre) apply to area designated as Light Industrial/Warehousing and south of airport [B5]

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 BN-9, continued



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Exhibit BN-9, continued