

SECTION 9

ENVIRONMENTAL EVALUATION



SECTION 9 ENVIRONMENTAL EVALUATION

INTRODUCTION

This environmental constraints evaluation covers the 20-year planning period of the Master Plan and focuses on projects expected to be implemented within the first ten years of the Master Plan. This evaluation is based on the forecasts and recommended improvements described in earlier sections of this report. It consists of an overview of potential environmental constraints for the purposes of satisfying the requirements of the National Environmental Policy Act (NEPA). It will also facilitate environmental processing pursuant to the California Environmental Quality Act ("CEQA", Cal. Public Resources Code 21000 et seq.) which can be performed concurrently with the NEPA process.

EXISTING CONDITIONS

Fullerton Municipal Airport is a general aviation airport located in Northern Orange County. The airport is near the intersection of Interstate 5 and Highway 91 and is approximately three miles from Knott's Berry Farm and six miles from Disneyland. It is bounded on all sides by City streets. More specifically, Commonwealth Avenue forms the southern boundary, West Artesia Avenue forms the northern boundary, Dale Street forms the western boundary and Pritchard Street forms the eastern boundary. The field encompasses approximately 86 acres of land and includes one runway, several taxiways and large areas of paved aprons.

The airport fulfills a public need and is subject to long-term agreements with the federal government to ensure that it is operated as a public airport facility. In 1971, the Fullerton City Council adopted a resolution limiting the weight of the aircraft that is used at the facility to 12,500 pounds. Fullerton Municipal Airport serves primarily single and twin-engine propeller aircraft and helicopters. There is no commercial passenger service at the airport.

IMPROVEMENT PLANS

The proposed improvements consist of the following phased development:



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Phase 1A Improvements (2003 to 2005)

- Apply to FAA for modification of Standards for Runway Safety Areas, Runway Object Free Areas and Runway Obstacle Free Zones.
- Reconstruct pavement at northwest ramp
- Construct 2 washracks on south side
- Construct 38 hangars in northwest corner and area between Air Combat and Ray's Flying Club
- Relocate wind speed instrument near northeast ramp

Phase 1B Improvements (2006-2008)

- Rehabilitate pavement at northeast ramp
- Construct 14 hangars to replace the 2 north-south rows of wooden T-hangers
- Acquire avigation easements for runway protection zone (RPZ) areas
- Replace VASI on Runway 24 with PLASI

Phase 2 Improvements (2009-2013)

- Develop corporate site in northeast area
- Construct 14 hangars in Ray's Flying Club area
- Rehabilitate north side access road and provide turn-around area
- Construct 22 hangars to replace the 2 east-west rows of wooden hangars and replace aircraft maintenance area

Phase 3 Improvements (2014-2023)

- No Master Plan projects identified for Phase 3

OPERATIONS

The Fullerton Municipal Airport is a general aviation facility which serves north Orange County and the southeastern part of Los Angeles County. The increase in the number of aircraft based at the Fullerton Airport is expected to follow the nationwide percentage growth in general aviation aircraft projected by the FAA. Aircraft operations are projected to increase from 89,453 in 2003 to 99,300 by the year 2023. The 2023 projected mix of aircraft is expected to remain relatively unchanged from 2002 comprising: 85 percent single engine piston, 10 percent multi-engine piston, 2 percent turbine powered and 3 percent helicopter. Since the mix of aircraft types is not expected to change significantly, the general character of the airport is not expected to change significantly. It will remain a general aviation facility.



TOPICS FOR ENVIRONMENTAL ANALYSIS

The topics for the environmental constraints analysis are based on federal guidelines contained in FAA Order 5050.4A, "Airport Environmental Handbook" (FAA, 1985) and include a total of 20 specific impact categories. In addition, several topics which are usually required under CEQA have been addressed here for a more comprehensive environmental constraints analysis. Some of the following topical discussions rely on information in the City of Fullerton General Plan, adopted in 1994 with revisions through July 2000 and the EIR prepared for it, adopted June 1994.

- Noise
- Compatible Land Use
- Social Impacts including Environmental Justice
- Air Quality
- Water Quality
- Wetlands
- Floodplains
- Wild and Scenic Rivers
- Coastal Barriers
- Farmlands
- Light Emissions
- Coastal Zone Management Program
- Historic, Architectural, Archeological and Cultural Resources
- DOT Act, Section 4(f)
- Energy Supply and Natural Resources
- Biotic Communities
- Endangered and Threatened Species of Flora and Fauna
- Solid Waste Impacts
- Construction Impacts
- Induced Socioeconomic Impacts

Noise

Measurement of Aircraft Noise. Several methods have been devised to relate measurable sound, measured in A-weighted decibels (dBA), to community response. The State of California has adopted the Community Noise Equivalent Level (CNEL) as the methodology for describing aircraft noise exposure (California Noise Standards, California Administrative Code, Title 21). CNEL is an energy-averaging metric that produces an average noise level for all aircraft operations during a 24-hour period. To account for the increased annoyance of aircraft noise during the evening and nighttime hours, the CNEL applies a weighting of three times to aircraft noise events occurring between 7:00 p.m. and 10:00 p.m. and a weighting of ten times to aircraft noise events between 10:00 p.m. and 7:00 a.m. CNEL noise levels are typically depicted as contours, lines connecting all points of a similar level.

The noise contour analysis developed for Fullerton Municipal Airport used the Integrated Noise Model (INM) Version 6.0 software developed by the FAA Office of Environment and Energy, Noise Division (AEE-100). The FAA Integrated Noise Model is widely used by the civilian aviation community for evaluating aircraft noise impacts in the vicinity of airports. It is typically used for FAR Part 150 noise compatibility planning and for Environmental Assessments and Environmental Impact Statements prepared under the National Environmental Policy Act (NEPA), and Environmental Impact Reports prepared under the California Environmental Quality Act (CEQA).



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Existing Aircraft Noise Contours. CNEL noise contours were prepared for Fullerton Municipal Airport based on the flight tracks flown and the number of aircraft takeoffs and landings in 2002. The noise contours account for activity by fixed-wing aircraft and helicopters, including estimated operations when the air traffic control tower is closed. The number of operations in 2002 were greater than in 2001 or 2003 (see Table 3-11), and is the greatest number of yearly operations since 1995.

Table 9-1 gives the percent of operations by runway and flight track that were used in the INM modeling. These data were developed from the consensus of interviews of airport management, air traffic control personnel, and fixed base operator personnel. Although Runway 6 (operations to the east) is the preferred runway for noise abatement, winds favor Runway 24 (operations to the west). Note that the data in Table 9-1 refer to percentage of operations on a given runway, rather than percentage of time the runway is operated in a given direction. In the early- to late-morning hours, Runway 6 is normally being used. Typical flight tracks are illustrated in Figure 9-1.

In Table 9-2, the number of average daily departures or arrivals is shown for local and itinerant operations, categorized by aircraft type. The INM model uses a limited number of aircraft types to represent all aircraft in a given category. For fixed-wing piston aircraft, the percentage distribution of based aircraft is used to estimate the number of operations by aircraft category. Estimated operations occurring after the air traffic control tower is closed are included. These operations are estimated from sound recordings made during hours of tower closure (9:00 p.m. to 7:00 a.m.) for the purpose of identifying aircraft takeoffs and landings during those hours.

Average daily arrivals and departures by time of day are listed in Table 9-3. The INM model uses these data to apply weighting factors to evening and nighttime operations as discussed above.

The 2002 noise contours are shown in Figure 9-2. Contours are shown for 60, 65 and 70 dBA CNEL noise levels.

Future Aircraft Noise Contours. Aircraft noise contours for 2023 were developed from the corresponding data in Tables 9-1 through 9-3. Operations data for 2023 are based on the forecasts of local and itinerant operations and aircraft fleet mix. The 2023 noise contours are shown in Figure 9-3. The 2023 CNEL contours are slightly smaller than the 2002 contours due to the lower number of operations projected for 2023.

Aircraft Noise and Land Use Compatibility Evaluation. Land uses deemed noise sensitive typically include schools, hospitals, rest homes, long-term care facilities and residential uses. Examples of limitations on land uses, provided by the Airport Land Use Commission (ALUC), due to noise are set forth in Table 9-4. There are portions of two residential properties currently located within the 70 and higher CNEL range of the 2002 and 2023 noise contours and an additional 11 residential properties partially or wholly located in the 65 to 70 CNEL range of the 2002 and 2023 noise contours.



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**Table 9-1
Percent of Operations by Arrival and Departure Flight Track
Fullerton Municipal Airport**

Flight Track	Percent of Operations on Flight Track		
	Local Operations	Itinerant Operations	Total Operations
Fixed-Wing			
Percent of Operations by Runway			
Runway 6	20%	30%	25.8%
Runway 24	80%	70%	74.2%
Percent of Total Operations	42%	58%	100.0%
Runway 6			
Arrivals			
Pattern (Left Pattern)	100%	90%	24.1%
From Seal Beach VOR	0%	10%	1.7%
Total Runway 6 Arrivals	100%	100%	25.8%
Departures			
Pattern (Left Pattern)	100%	40%	15.4%
Right Along RR Tracks	0%	60%	10.4%
Total Runway 6 Departures	100%	100%	25.8%
Runway 24			
Arrivals			
Pattern (Right Pattern)	100%	40%	49.8%
Straight	0%	60%	24.4%
Total Runway 24 Arrivals	100%	100%	74.2%
Departures			
Pattern (Right Pattern)	100%	70%	62.0%
Left to Seal Beach VOR	0%	20%	8.1%
Straight	0%	10%	4.1%
Total Runway 24 Departures	100%	100%	74.2%
Helicopter			
Arrivals			
Magnolia	--	40%	40.0%
RR Tracks from East	--	30%	30.0%
Dale	--	25%	25.0%
RR Tracks from West	--	5%	5.0%
Total	--	100%	100.0%
Departures			
Dale	--	65%	65.0%
Magnolia	--	25%	25.0%
RR Tracks to East	--	5%	5.0%
RR Tracks to West	--	5%	5.0%
Total	--	100%	100.0%

Source: Analysis by P&D Aviation.



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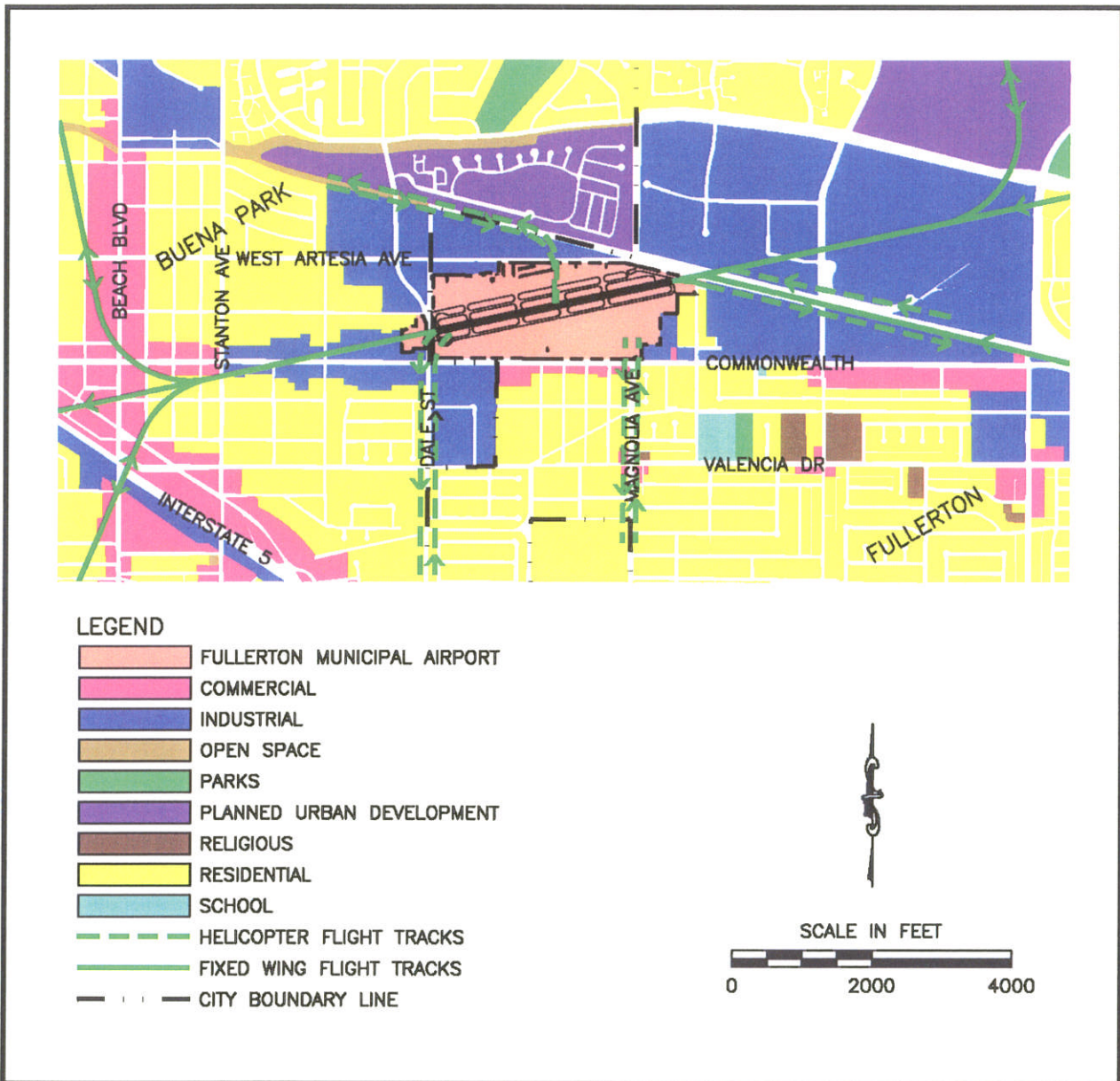


Figure 9-1
Aircraft Flight Tracks at Fullerton Municipal Airport



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**Table 9-2
Average Daily Local and Itinerant Arrivals and Departures
Fullerton Municipal Airport**

Aircraft	2002		2023	
	Percent [a]	Operations	Percent [a]	Operations
Annual Airport Operations				
Tower Operations (7 a.m. - 9 p.m.)				
Local Operations	43.1%	44,613	41.0%	40,700
Itinerant Operations	56.9%	58,868	59.0%	58,600
Total Annual Tower Operations	100.0%	103,481	100.0%	99,300
Estim. Oper. When Tower Is Closed				
Itinerant Oper. 9 p.m. - 10 p.m.				
Fixed-Wing		1,900		1,900
Helicopter		0		0
Total		1,900		1,900
Itinerant Oper. 10 p.m. - 7 a.m.				
Fixed-Wing		1,100		1,100
Helicopter		300		300
Total		1,400		1,400
Total Oper. When Tower Is Closed		3,300		3,300
Total Estimated Airport Operations				
Local Operations	41.8%	44,613	39.7%	40,700
Itinerant Operations	58.2%	62,168	60.3%	61,900
Total Airport Operations		106,781		102,600
Average Daily Departures or Arrivals				
Average Daily Departures or Arrivals		146.28		140.55
Average Daily Local Departures or Arrivals				
SE Piston				
GASEPF (Fixed Pitch)	90%	55.00	90%	50.18
GASEPV (Variable Pitch)	10%	6.11	10%	5.58
Total SE Piston / Total Local	100%	61.11	100%	55.75
Average Daily Itinerant Departures or Arrivals				
SE Piston				
GASEPF (Fixed Pitch)	52.4%	36.17	52.4%	36.02
GASEPV (Variable Pitch)	34.9%	24.11	34.9%	24.01
Total SE	87.3%	60.28	87.3%	60.03
ME Piston				
BEC58P (Twin)	10.8%	7.47	10.8%	7.43
Total ME	10.8%	7.47	10.8%	7.43
Turboprop				
CNA441	1.9%	1.31	1.9%	1.30
Total Turboprop	1.9%	1.31	1.9%	1.30
Business Jet				
CNA500 (Citation I)		0.05		0.05
Total Business Jet		0.05		0.05
Helicopter				
B206		15.31		15.24
UH-1		0.74		0.74
Total Helicopter		16.06		15.98
Total Itinerant	100.0%	85.16	100.0%	84.79

[a] Percents for Average Daily Itinerant Departures or Arrivals are for fixed-wing piston operations only.
Source: Analysis by P&D Aviation.



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**Table 9-3
Average Daily Arrivals and Departures by Time of Day
Fullerton Municipal Airport**

Aircraft Type	Average Daily Arrivals or Departures							
	2002				2023			
	Total	Day	Eve.	Night	Total	Day	Eve.	Night
SE Piston								
GASEPF (Fixed Pitch)	91.17	78.44	11.94	0.79	86.19	73.97	11.43	0.79
GASEPV (Variable Pitch)	30.22	24.79	4.91	0.53	29.59	24.23	4.83	0.53
Total SE	121.40	103.23	16.85	1.32	115.78	98.20	16.27	1.32
ME Piston								
BEC58P (Twin)	7.47	5.97	1.33	0.16	7.43	5.95	1.32	0.16
Total ME	7.47	5.97	1.33	0.16	7.43	5.95	1.32	0.16
Turboprop								
CNA441	1.31	1.05	0.23	0.03	1.30	1.04	0.23	0.03
Total Turboprop	1.31	1.05	0.23	0.03	1.30	1.04	0.23	0.03
Business Jet								
CNA500 (Citation I)	0.05	0.04	0.01	0.00	0.05	0.04	0.01	0.00
Total Business Jet	0.05	0.04	0.01	0.00	0.05	0.04	0.01	0.00
Helicopter								
B206	15.31	12.25	2.71	0.36	15.24	12.19	2.69	0.36
UH-1	0.74	0.71	0.04	0.00	0.74	0.70	0.04	0.00
Total Helicopter	16.06	12.96	2.74	0.36	15.98	12.90	2.73	0.36
Airport Total	146.28	123.24	21.17	1.86	140.55	118.12	20.56	1.86
Percent		84%	14%	1%		84%	15%	1%

Source: Analysis by P&D Aviation.



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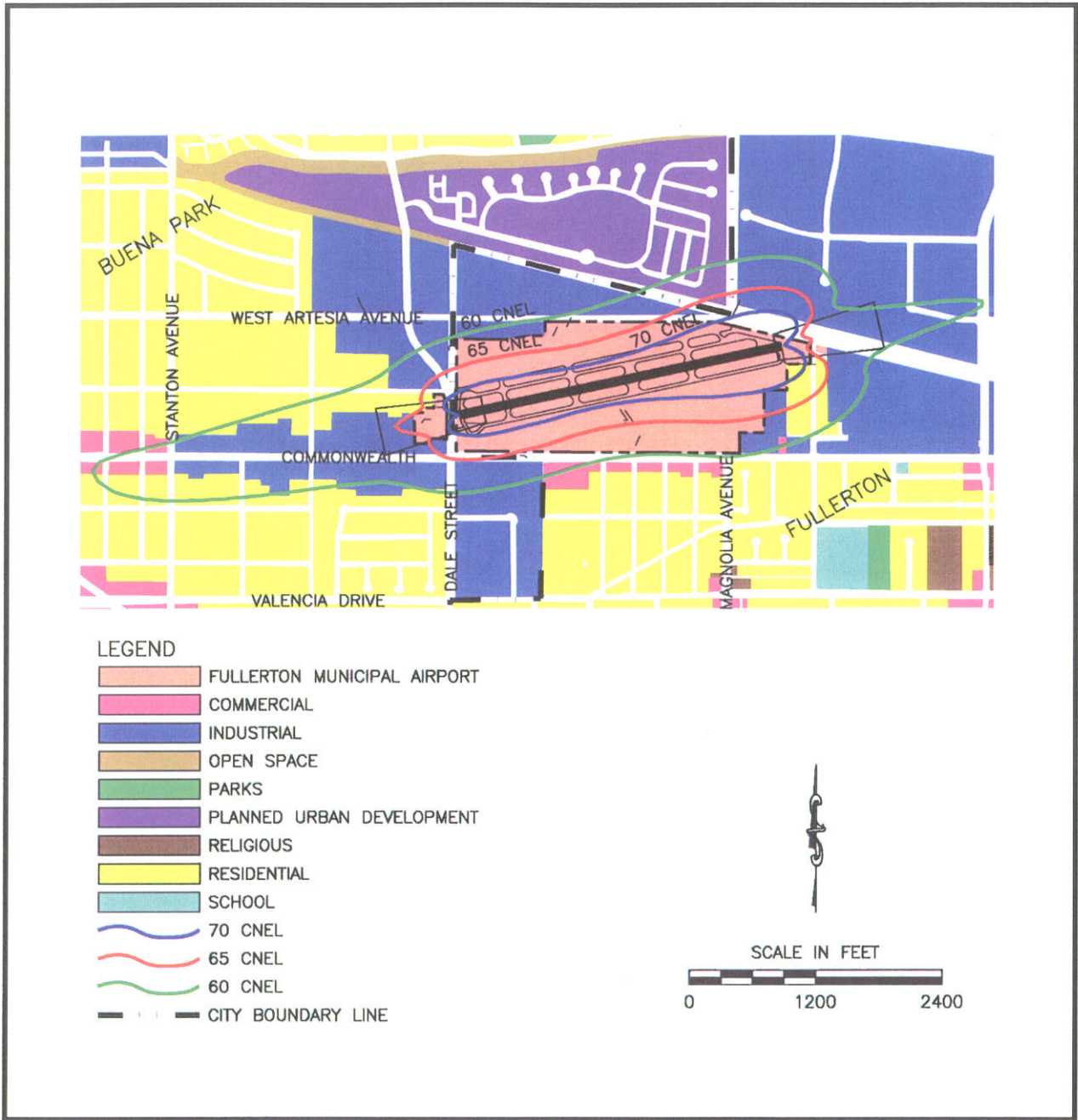
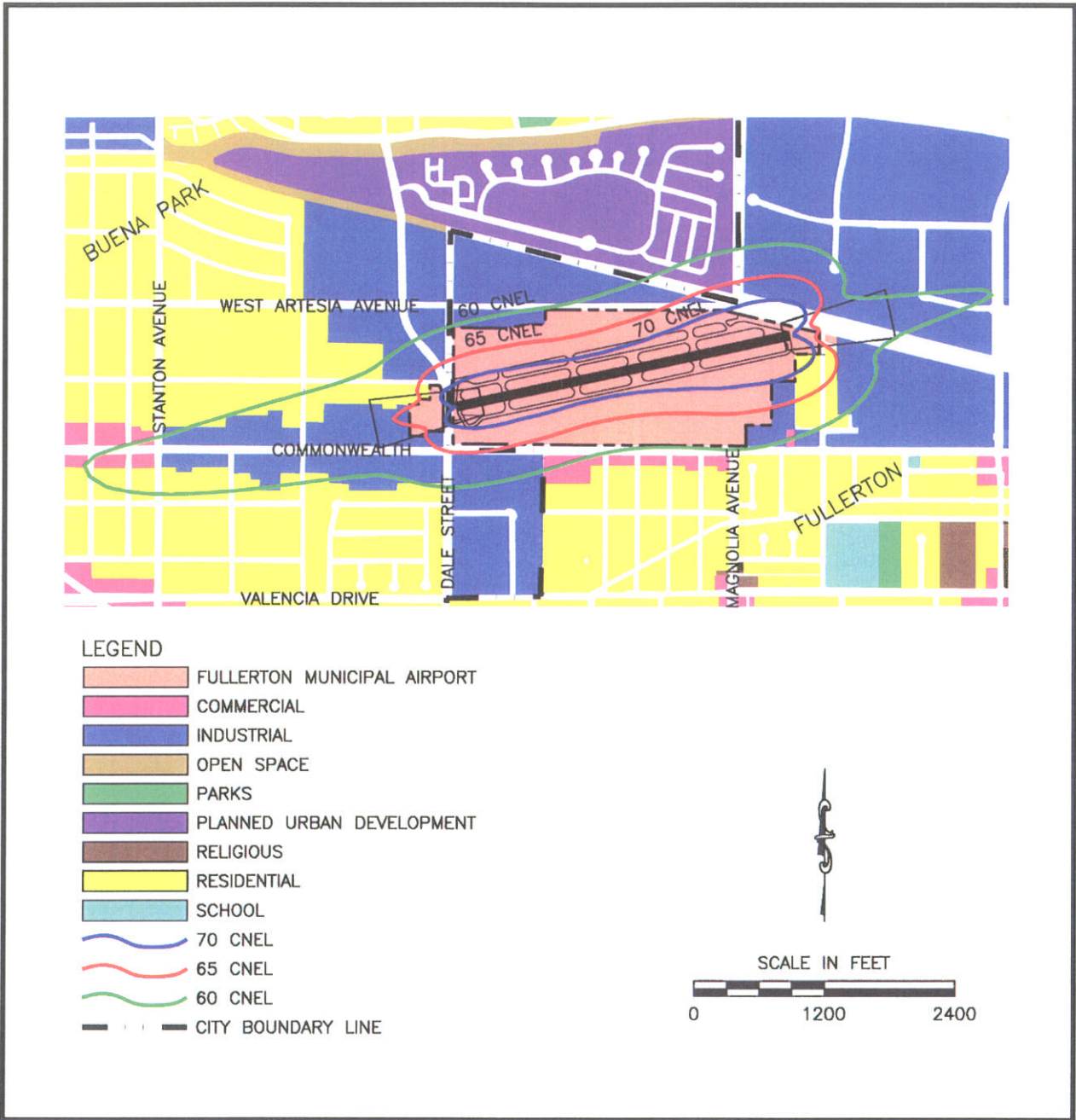


Figure 9-2
Fullerton Municipal Airport 2002 CNEL Noise Contours



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**Figure 9-3
Fullerton Municipal Airport 2023 CNEL Noise Contours**



**Table 9-4
Airport Land Use Commission for Orange County
Airport Environs Land Use Plan
Limitations on Land Use Due to Noise
(Applicable to Aircraft Noise Sources)**

Land Use Category	Community Noise Equivalent Level dB					
	55	60	65	70	75	80
Residential (all types): Single and Multi-Family Residences						
Community Facilities: Churches, Libraries, Schools, Preschools, Day-Care Centers, Hospitals, Nursing/Convalescent Homes, and Other noise sensitive uses						
Commercial: Retail, Office						
Industrial						



NORMALLY CONSISTENT

Conventional construction methods used. No special reduction requirements.



CONDITIONALLY CONSISTENT

Must use sound attenuation as required by the California Noise Insulation Standards, Title 25, California Code of regulations. Residential use sound attenuation required to ensure that the interior CNEL does not exceed 45 dB. Commercial and industrial structures shall be sound attenuated to meet Noise Impact Zone "1" criteria.



NORMALLY INCONSISTENT

All residential units are inconsistent unless they are sound attenuated to ensure that the interior CNEL does not exceed 45 dB, and that all units are indoor oriented so as to preclude noise impingement on outdoor living areas.



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The Airport Environs Land Use Plan for Fullerton Municipal Airport prepared by the Airport Land Use Commission (ALUC), December 2002, states “Section 21670(a)(2) of the Public Utilities Code indicates that a commission’s authority is applicable only within areas around public airports to the extent that these areas are not already devoted to incompatible uses.”

The California Airport Land Use Planning Handbook (Handbook) published by the Division of Aeronautics of the Department of Transportation advises that while existing development which is incompatible becomes a nonconforming use with respect to ALUC criteria, any redevelopment of those areas would be subject to ALUC policies. In addition, increased airport operations resulting in additional residential areas being impacted by future noise levels would be subject to ALUC policies.

Compatible Land Use

According to the Land Use Element of the City’s General Plan, the airport is located in an area designated for Government Facilities (GF). This designation applies to all properties other than public rights-of-way, which are planned for a use or activity that is intended to benefit the general public. The GF designation provides for facilities to satisfy community needs for adequate educational facilities, open space, recreational facilities and municipal service facilities.

According to Government Code 65860, City zoning ordinances shall be consistent with the adopted General Plan. The existing zoning for the airport is Public Land (P-L), which is consistent with General Plan designation. Therefore, Master Plan improvements would be considered compatible with the existing land use.

Based on the accident history at the Fullerton Municipal Airport, FAA standards, and historical land uses, three Hazard Zones have been established: (1) Runway Protection Zone-Land Use, (2) Runway Protection Zone-Part 77, and (3) Accident Potential Zone II.

Runway Protection Zone – Land Use (RPZ-Land Use). The RPZ-Land Use is an area at ground level measuring 1,000 feet in length with an inner width of 250 feet and an outer width of 450 feet (see Figure 9-4). The measurement of the RPZ-Land Use begins 200 feet from the end of the displaced threshold (beginning of the landing portion of the runway) of each runway. The RPZ-Land Use provides unobstructed passage of aircraft through the above airspace enhancing the protection of people and property on the ground.

The severe potential for loss of life and property due to accidents prohibits most land uses in this area. Also, the close proximity to aircraft operations limits land uses which would endanger such operations. ALUC criteria prohibit new buildings intended for human habitation and all land uses except airport-related uses and open spaces inside the RPZ-Land Use. Furthermore, because of the proximity to aeronautical operations, uses in this area must not attract birds nor emit excessive glare or light, nor produce or cause steam, smoke, dust, or electronic interference so as to interfere with, or endanger, aeronautical operations.



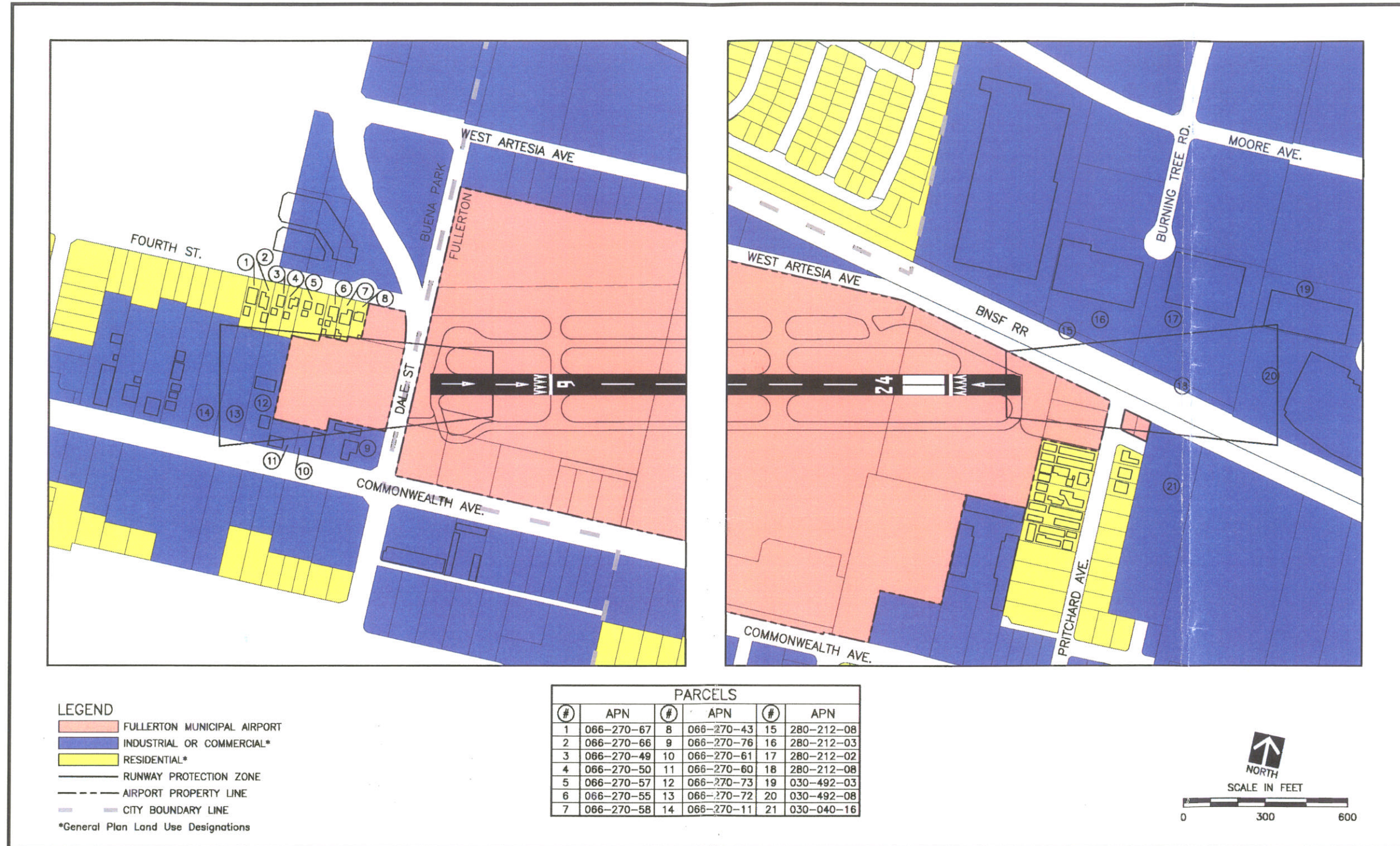


Figure 9-4
 Runway Protection Zones-Land Use
 at Fullerton Municipal Airport



A free-standing building is typically considered as one structure despite the existence of fire walls that may separate tenants or users. A structure located partially in the RPZ is deemed to be in the RPZ. No homes are currently located within the RPZ-Land Use. Six industrial parcels in Fullerton and eight industrial parcels in Buena Park fall into the RPZ-Land Use (see Figure 9-4 and Table 9-5). These uses predate and do not conform to the ALUC standards.

Once a property owner has obtained a valid building permit, performed substantial work, and incurred substantial liabilities in good faith reliance upon the building permit, the property owner has obtained a right to develop a specific property. A property which has previously obtained this right to develop is deemed an existing use. The land use restrictions of the RPZ-Land Use do not apply to existing uses, to the extent the use remains constant. Expansion, conversion, redevelopment, or reconstruction of an existing use or infill development may require compliance with the land use restrictions of the RPZ-Land Use.

Runway Protection Zone – Part 77 (RPZ-Part 77). The RPZ-Part 77 is an area at each end of the runway that provides for the unobstructed passage of aircraft through the airspace above it (see Figure 9-5). The measurement of the RPZ-Part 77 begins 200 feet from the end of the useable runway pavement. The RPZ-Part 77 ensures the safety of air navigation and efficient utilization of navigable airspace by establishing limitations on heights of structures in these areas. The RPZ-Part 77 area is part of the larger Part 77 Airspace Plan (see Sheets 4 and 5 in Appendix C).

Federal Aviation Regulations Part 77 provides standards for limiting heights of structures around airports. Section 7 describes Part 77 regulations as they pertain to Fullerton Municipal Airport and identifies objects that penetrate the Part 77 imaginary surfaces. Figure 9-5 and Table 9-6 identify parcels in each RPZ-Part 77.

Avigation Easements for Runway Protection Zone (RPZ) Areas. The FAA recommends that sufficient property interest be acquired for RPZ property not owned by the airport. The fee purchase of this existing private RPZ property is not considered practical.

Avigation easements are recommended by the FAA for property where noise impacts are substantial or where limitations on the height of structures and trees are essential to protection of runway approaches. These easements convey certain enumerated property rights from the property owner, as described in Section 5.

The RPZ properties would be eligible for FAA grants or funds equal to 90 to 95 percent of the purchase price of the easement. An allowance for 10 percent has been included in the local funding estimate for Phase IB, scheduled for 2006-2008, to acquire avigation easements for RPZ property not under City of Fullerton easement or ownership or City of Buena Park ownership. Within the RPZ, where aircraft are expected to be relatively low to the ground, avigation easements may be required as a condition of approval.



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**Table 9-5
Parcels Located Within Fullerton Municipal Airport
Runway Protection Zone – Land Use (RPZ-Land Use)**

Figure 9-4 Reference Number	Location	Parcel Address
1	RWY 6 RPZ - LAND USE	8372 FOURTH ST BUENA PARK CA90621
2	RWY 6 RPZ - LAND USE	8382 FOURTH ST BUENA PARK CA90621
3	RWY 6 RPZ - LAND USE	8392 FOURTH ST BUENA PARK CA90621
4	RWY 6 RPZ - LAND USE	8402 FOURTH ST BUENA PARK CA90621
5	RWY 6 RPZ - LAND USE	8412 FOURTH ST BUENA PARK CA90621
6	RWY 6 RPZ - LAND USE	8422 FOURTH ST BUENA PARK CA90621
7	RWY 6 RPZ - LAND USE	8432 FOURTH ST BUENA PARK CA90621
8	RWY 6 RPZ - LAND USE	8442 FOURTH ST BUENA PARK CA90621
9	RWY 6 RPZ - LAND USE	8461 WCOMMONWEALTH AVEBUENA PARK CA90621
10	RWY 6 RPZ - LAND USE	8431 WCOMMONWEALTH AVEBUENA PARK CA90621
11	RWY 6 RPZ - LAND USE	8401 WCOMMONWEALTH AVEBUENA PARK CA90621
12	RWY 6 RPZ - LAND USE	8361 WCOMMONWEALTH AVEBUENA PARK CA90621
13	RWY 6 RPZ - LAND USE	8351 WCOMMONWEALTH AVEBUENA PARK CA90621
14	RWY 6 RPZ - LAND USE	8341 WCOMMONWEALTH AVEBUENA PARK CA90621
15	RWY 24 RPZ - LAND USE	NO SITUS AVAILABLE
16	RWY 24 RPZ - LAND USE	501 BURNING TREE RD FULLERTON CA92833
17	RWY 24 RPZ - LAND USE	500 BURNING TREE RD FULLERTON CA92833
18	RWY 24 RPZ - LAND USE	NO SITUS AVAILABLE CA
19	RWY 24 RPZ - LAND USE	501 AIRPARK DR FULLERTON CA92833
20	RWY 24 RPZ - LAND USE	2330 RAYMER AVE FULLERTON CA92833
21	RWY 24 RPZ - LAND USE	2401 WCOMMONWEALTH AVE FULLERTON CA92833



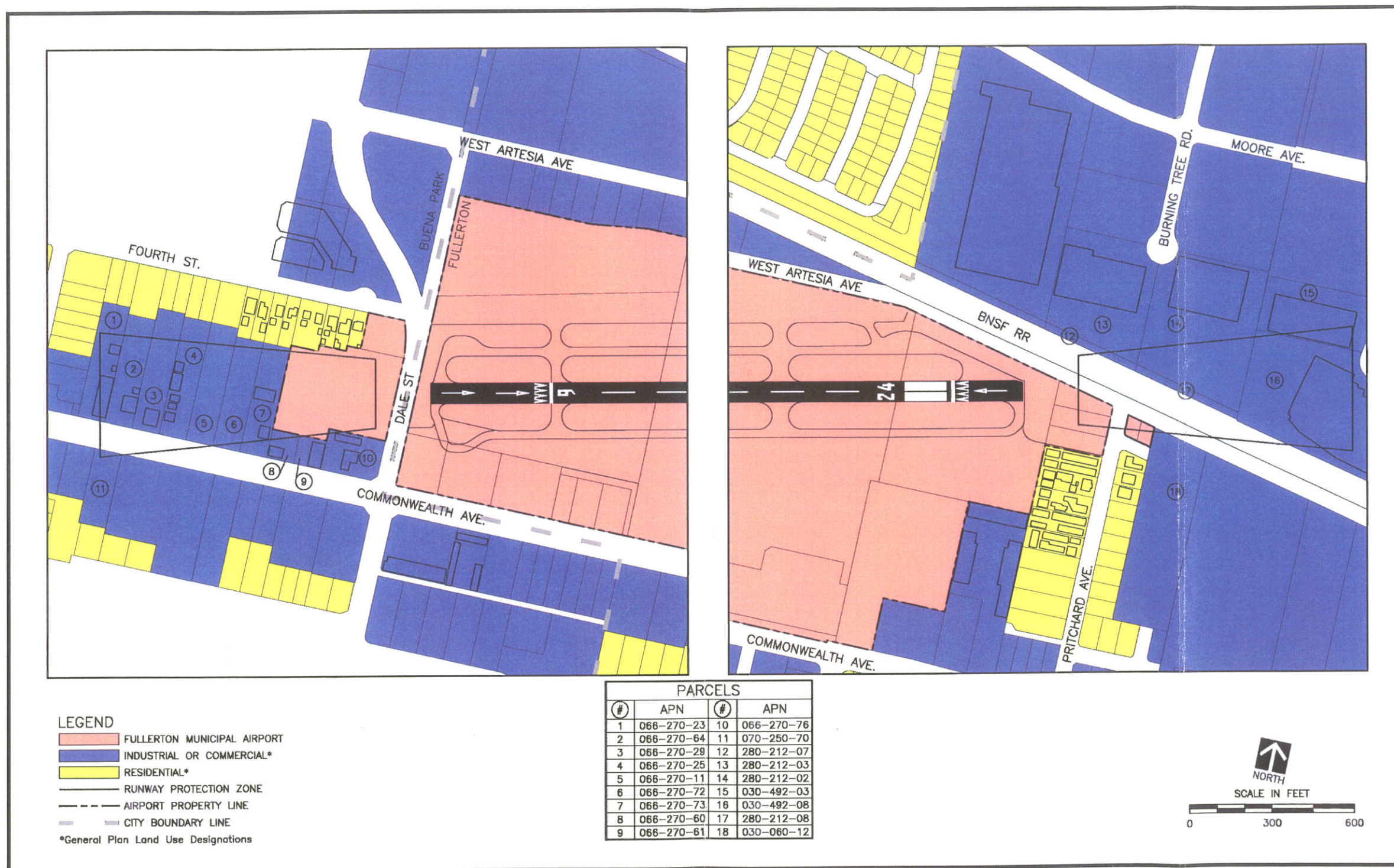


Figure 9-5
 Runway Protection Zones-Part 77
 at Fullerton Municipal Airport



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**Table 9-6
Parcels Located Within Fullerton Municipal Airport
Runway Protection Zone – Part 77 (RPZ-Part 77)**

Figure 9-5 Reference Number	Location	Parcel Address
1	RWY 6 RPZ-PART 77	8271 WCOMMONWEALTH AVEBUENA PARK CA90621
2	RWY 6 RPZ-PART 77	8281 WCOMMONWEALTH AVEBUENA PARK CA90621
3	RWY 6 RPZ-PART 77	8301 WCOMMONWEALTH AVEBUENA PARK CA90621
4	RWY 6 RPZ-PART 77	8321 WCOMMONWEALTH AVEBUENA PARK CA90621
5	RWY 6 RPZ-PART 77	8341 WCOMMONWEALTH AVEBUENA PARK CA90621
6	RWY 6 RPZ-PART 77	8351 WCOMMONWEALTH AVEBUENA PARK CA90621
7	RWY 6 RPZ-PART 77	8361 WCOMMONWEALTH AVEBUENA PARK CA90621
8	RWY 6 RPZ-PART 77	8401 WCOMMONWEALTH AVEBUENA PARK CA90621
9	RWY 6 RPZ-PART 77	8431 WCOMMONWEALTH AVEBUENA PARK CA90621
10	RWY 6 RPZ-PART 77	8461 WCOMMONWEALTH AVEBUENA PARK CA90621
11	RWY 6 RPZ-PART 77	8302 WCOMMONWEALTH AVEBUENA PARK CA90621
12	RWY 24 RPZ-PART 77	NO SITUS AVAILABLE
13	RWY 24 RPZ-PART 77	501 BURNING TREE RD FULLERTON CA92833
14	RWY 24 RPZ-PART 77	500 BURNING TREE RD FULLERTON CA92833
15	RWY 24 RPZ-PART 77	501 AIRPARK DR FULLERTON CA92833
16	RWY 24 RPZ-PART 77	2330 RAYMER AVE FULLERTON CA92833
17	RWY 24 RPZ-PART 77	NO SITUS AVAILABLE CA
18	RWY 24 RPZ-PART 77	2401 WCOMMONWEALTH AVEFULLERTON CA92833



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Accident Potential Zone II “APZ II”. The APZ II extends 500 feet from the runway in all directions (see Figure 9-6). The potential for loss of life and property due to aircraft accidents is sufficient to require density and intensity restrictions in this zone. New uses where lot coverage does not exceed seventy-five (75) percent or occupancy does not exceed 200 persons for long periods in an open assembly area or in a structure are permitted. Most forms of open space, industrial, commercial, and airport-related uses are acceptable, whereas new residential and public facilities (schools, churches, etc.) are not acceptable. Furthermore, because of the proximity to aeronautical operations, uses in this area must not attract birds nor emit excessive glare or light, nor produce or cause steam, smoke, dust, or electronic interference so as to interfere with, or endanger, aeronautical operations.

A free-standing building is typically considered as one structure despite the existence of fire walls that may separate tenants or users. A structure located partially in the APZ II is deemed to be in the APZ II.

There are eight residential parcels along Pritchard Avenue in the City of Fullerton and four residential parcels along Fourth Avenue in the City of Buena Park currently located within the APZ II. These uses predate and do not conform to the ALUC standards. Additionally, seventeen industrial or commercial parcels are located in the APZ II (see Figure 9-6 and Table 9-7). Development pursuant to the Master Plan and in accordance with the Airport Environment Land Use Plan would not result in any new homes being located within the APZ II.

Once a property owner has obtained a valid building permit, performed substantial work, and incurred substantial liabilities in good faith reliance upon the building permit, the property owner has obtained a right to develop a specific property. A property which has previously obtained this right to develop is deemed an existing use. The land use restrictions of the APZ II do not apply to existing uses, to the extent the use remains constant. Expansion, conversion, redevelopment, or reconstruction of an existing use or infill development may require compliance with the land use restrictions of the APZ II.

Conformance with FAA Design Standards. With the Airport Master Plan improvements in place, the airport will not conform to the following FAA design standards:

- The width of the FAR Part 77 Primary Surface and inner width of the Approach Surfaces is 250 feet rather than the standard 500 feet. The 250-foot wide surfaces have historically been applied at Fullerton and are recommended to remain.
- The length of the Runway Safety Area, Runway Object Free Area and Runway Obstacle Free Zone beyond the ends of the runway are too short to meet the ARC B-I standards.

The City of Fullerton will apply to the FAA to continue airport operation with non-standard Runway Safety Areas (RSAs), Runway Object Free Areas (ROFAs), and Runway Obstacle Free Zones (OFZs) at the ends of Runways 6 and 24 (See Sheet 2 in Appendix C). The request for modification of standards will be submitted as prescribed in FAA Order 5300.1E.



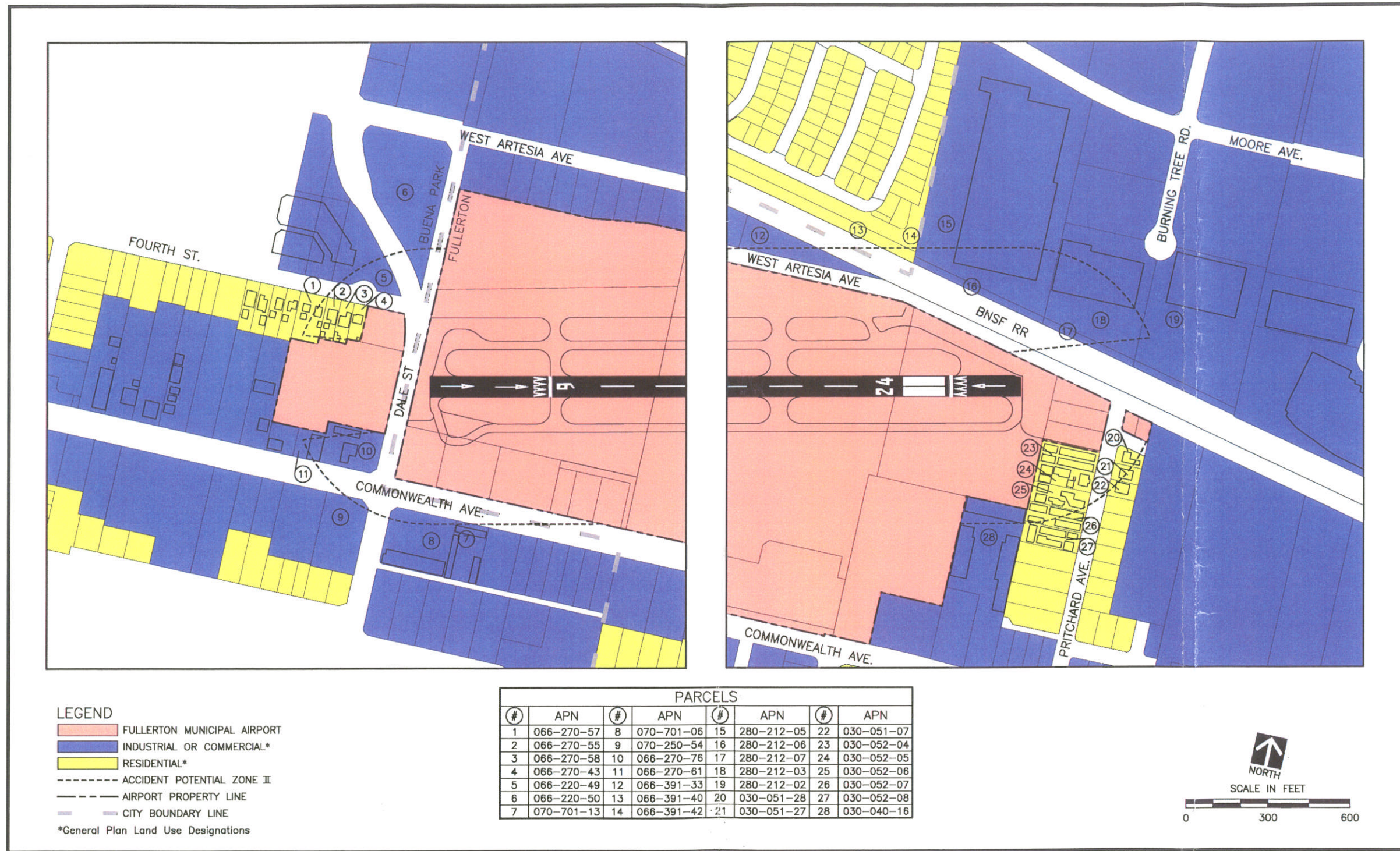


Figure 9-6
 Accident Potential Zone II
 at Fullerton Municipal Airport



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**Table 9-7
Parcels Located Within Fullerton Municipal Airport
Accident Potential Zone II (APZ II)**

Figure 9-6 Reference Number	Location	Parcel Address
1	APZ II	8412 FOURTH ST BUENA PARK CA90621
2	APZ II	8422 FOURTH ST BUENA PARK CA90621
3	APZ II	8432 FOURTH ST BUENA PARK CA90621
4	APZ II	8442 FOURTH ST BUENA PARK CA90621
5	APZ II	84024TH ST BUENA PARK CA90621
6	APZ II	84224TH ST BUENA PARK CA90621
7	APZ II	8550WCOMMONWEALTH AVEBUENA PARK CA90621
8	APZ II	8530WCOMMONWEALTH AVEBUENA PARK CA90621
9	APZ II	8460WCOMMONWEALTH AVEBUENA PARK CA90621
10	APZ II	8461WCOMMONWEALTH AVEBUENA PARK CA90621
11	APZ II	8431WCOMMONWEALTH AVEBUENA PARK CA90621
12	APZ II	3801ARTESIA AVE FULLERTON CA92833
13	APZ II	NO SITUS AVAILABLE CA
14	APZ II	NO SITUS AVAILABLE
15	APZ II	2750MOORE AVE FULLERTON CA92833
16	APZ II	NO SITUS AVAILABLE
17	APZ II	NO SITUS AVAILABLE
18	APZ II	501BURNING TREE RD FULLERTON CA92833
19	APZ II	500BURNING TREE RD FULLERTON CA92833
20	APZ II	148NPRITCHARD AVE FULLERTON CA92833
21	APZ II	144NPRITCHARD AVE FULLERTON CA92833
22	APZ II	142NPRITCHARD AVE FULLERTON CA92833
23	APZ II	145NPRITCHARD AVE FULLERTON CA92833
24	APZ II	141NPRITCHARD AVE FULLERTON CA92833
25	APZ II	137NPRITCHARD AVE FULLERTON CA92833
26	APZ II	133NPRITCHARD AVE FULLERTON CA92833
27	APZ II	129NPRITCHARD AVE FULLERTON CA92833
28	APZ II	3517WCOMMONWEALTH AVEFULLERTON CA92833



Standard safety areas cannot be provided while maintaining sufficient runway length for general aviation operations. In lieu of shortening the runway, the following actions will be taken:

- Install Distance Remaining Signs for each runway end as described in Section 7.
- Provide notification of non-standard RSAs in the Airport/Facility Directory as described in Section 7.

Social Impacts including Environmental Justice

The principal social impacts considered are those associated with relocation or other community disruption, such as dividing an established community or altering surface transportation patterns. The improvements recommended in the ALP and Master Plan will not involve the relocation of residences or businesses, alter transportation patterns, divide or disrupt established communities, disrupt planned development or create an appreciable change in employment. Therefore, the Master Plan improvements will not significantly impact an established community.

Air Quality

FAA Order 5050.4A indicates that as a general guideline a level of 180,000 annual aircraft operations at a general aviation airport is the threshold requiring air quality analysis. The long-term forecast projects a total of 99,300 annual aircraft operations in the year 2023, which is less than the threshold. Therefore, it is concluded that air quality impacts will not be substantial. In addition, it is anticipated that the increase in airport operations will not result in any violation of State or regional air quality standards.

Water Quality

Stormwater runoff from the project site and the surrounding area currently drains to the local public storm drain system then is deposited into the regional drainage channels and out to the Pacific Ocean. The relatively flat project site is located in a highly urbanized area and is mostly covered by impervious surfaces. Since the Master Plan improvements will not significantly alter the amount of impervious surfaces on the project site, the potential for erosion resulting in changes to surface water quality will not significantly increase relative to existing conditions.

Increased demand and use of petroleum-based fuels will accompany the increase in aircraft. Standard guidelines for the containment and use of fuels are employed at airports, as regulated by the FAA, which have contingency plans for spills and containment of accidentally released hazardous substances. The new wash racks will have oil-water separators in compliance with local regulations.



Wetlands

The project site is within a highly urbanized area and has been previously disturbed. There are no legally defined wetlands on the project site. Therefore, Master Plan improvements will not significantly impact wetlands.

Floodplains

The City's General Plan does not designate the project site or vicinity as being within a 100-year flood hazard area or floodplain. Therefore, no significant impacts related to flood hazards will occur.

Wild and Scenic Rivers

There are no wild or scenic rivers in the project area. Therefore, no significant impacts related to wild or scenic rivers will occur.

Coastal Barriers

The Fullerton Airport is located approximately 13 miles inland. Therefore, no significant impacts related to coastal barriers will occur.

Farmlands

The site is not designated as farmland and there are no agricultural resources or operations located at the project site or in the immediate area due to the highly urbanized nature of the area. Therefore, no impacts related to prime farmland, farmland of statewide importance, unique farmland or agricultural operations will occur.

Light Emissions

Airport improvements are not expected to create unusual circumstances that would be considered sufficient to warrant a special study. Normally, impacts of light improvements at airports are not substantial. The lighting improvements include runway lighting, taxiway lighting and security lighting. Lighting improvements related to runways or taxiways are identified as categorical exclusions under FAA Order 5050.4A and do not require any formal environmental assessment.

Coastal Zone Management Program

The Fullerton Airport is located approximately 13 miles inland and outside of the coastal zone. Therefore, no significant impacts related to the Coastal Zone Management Program will occur.



Historic, Architectural, Archeological and Cultural Resources

The City of Fullerton has numerous significant historical and cultural resources within City boundaries. Many of these resources are listed on either the National Register or are designated as Local Landmarks. These resources are primarily clustered around downtown Fullerton. The City's General Plan does not indicate that any significant historic or cultural resources are located on the project site or within the project vicinity. The Fullerton Airport has served the aviation needs of the City and all of Orange County since 1928; however, The City of Fullerton General Plan does not identify structures on the airport property as historically significant.

The project site is within a highly urbanized area and has been previously disturbed. No prehistoric or historic archaeological sites or cultural resources are known to exist within the project site or vicinity. The project site has already been subject to extensive disruption and any surficial archaeological and paleontological resources, which may have existed at one time, have likely been previously disturbed. Although there is a possibility that archaeological resources exist at deep levels, the uncovering of such resources would be remote because project construction would require minimal grading and excavation at the site. Master Plan improvements will not significantly affect archaeological or paleontological resources.

Department of Transportation Act, Section 4(f)

There are no public parks, public recreation areas, wildlife, waterfowl reservations or national, state or local historic site in the immediate airport vicinity. Valencia School Park is the closest park, located approximately one mile southeast of the Airport boundary, on Valencia Drive. This is a neighborhood park adjacent to an elementary school and provides lighted playfields, a picnic area and a wading pool. This park will not be affected by the Airport Master Plan operations. Based on the future noise contour map, the project site would not be located within future noise contours. Therefore, the Master Plan improvements will not interfere with the outdoor recreational use of this resource.

Energy Supply and Natural Resources

The improvements recommended in the Master Plan have the potential to result in a demand for electrical and gas services and expansion of the urban service network. This increased demand may contribute to a cumulative regional impact on the energy supply and natural resources. Therefore, it is recommended that prior to approval of Master Plan improvements, power companies or other suppliers of energy shall be contacted to determine whether the demand can be met by existing or planned source facilities.

Under FAA Order 5050.4A, increased fuel consumption by aircraft needs to be examined if average ground movement or run-up times are increased substantially without offsetting efficiencies in operational procedures or if the action includes a change in flight patterns.



Biotic Communities

The project site is within a highly urbanized area and has been previously disturbed. No riparian habitat or other sensitive natural community is present on the site. Therefore, there is no potential for adverse impacts on riparian habitat or other sensitive natural communities.

Endangered and Threatened Species of Flora and Fauna

There are no known environmentally sensitive areas identified within the project site or vicinity. No candidate, sensitive or special status species occupy the project site. Therefore, the proposed project will not result in any substantial adverse impacts to federal or state listed or other sensitive designated species of flora and fauna.

Solid Waste Impacts

Improvements recommended in the Master Plan will not result in generation of significant amounts of solid waste. Construction activities primarily consist of reconstruction existing pavement and the construction of hangars. Demolition of approximately four hangar buildings will occur in Phases 1B and 2. This constitutes relatively minor demolition activity. Minimal construction debris will be generated and it will be recycled or transported to a landfill site for proper disposal. Implementation of the Master Plan will not produce a substantial amount of solid waste relative to existing conditions. Solid waste generated during construction and operation of the proposed project will comply with all federal, state and local statutes and regulations to reduce and recycle solid waste.

Construction Impacts

Construction impacts are either non-substantial or non-existent. Specific efforts during construction may create impacts that are subject to local, state, or Federal ordinances or regulations. For example, the Noise Element of the City's General Plan states that the only means to control construction noise and maintenance equipment is through regulation of hours of use. As discussed under noise, there are a few sensitive uses (residential uses) near the areas of construction. However, construction plans should be reviewed for sensitive receptors near the construction area and where they are present, hours of construction be controlled per the City's General Plan and Noise Ordinance.

Induced Socioeconomic Impacts

Socioeconomic impacts are either non-substantial or non-existent because all Master Plan improvements are within airport property and no relocation of residential or commercial uses will be necessary.



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Cumulative Implications

By definition under CEQA and NEPA, cumulative effects are those effects which occur when a series of small and seemingly insignificant effects occur, but when considered together, the effects are substantial. These increments can occur over a long period of time to the point where the effect is substantial (e.g. loss of critical habitat for a species). These increments can also occur over a very short period of time, where the implications of one project are overlooked by another project and the effects are identified too late in the process to mitigate or avoid.

The potential expansion of commercial passenger service at John Wayne Airport could result in general aviation aircraft relocating to Fullerton Municipal. The Master Plan recommends that the future facility requirements for the airport allow space for additional based aircraft to provide for this contingency and growth beyond 2023.

No other projects in the City have implications that when considered with the effects of the master plan implementation would be significant.

Short-term vs. Long-term Implications

There are no short-term or long-term goals that have been compromised by the proposed Master Plan. The Master Plan itself is the fulfillment of a long-term goal regarding general aviation growth in the City and surrounding area. It is actually a part of the transportation infrastructure for the City and airport network in California. No environmental goals have been identified for which the Master Plan would be in conflict.

Summary

Based on the findings contained in the environmental constraints analysis, it is recommended that an Initial Study be prepared pursuant to the California Environmental Quality Act (CEQA), which can be performed concurrently with the National Environmental Policy Act (NEPA) process. Because of the relatively minor changes recommended, the Master Plan improvements may fall under a categorical exclusion to the NEPA requirements. The necessary environmental documentation will be prepared according to FAA and City of Fullerton standards and regulations.

