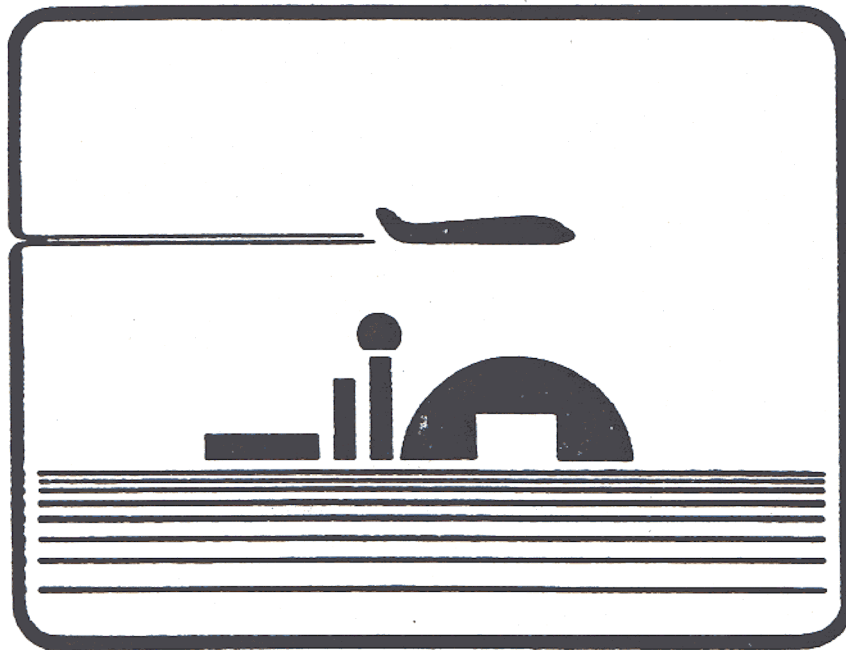


LOS ANGELES COUNTY AIRPORT LAND USE PLAN



Los Angeles County
AIRPORT LAND USE COMMISSION



Prepared by the Department of Regional Planning

Los Angeles County

AIRPORT LAND USE COMMISSION

COMPREHENSIVE LAND USE PLAN

COMMISSIONERS

Sadie B. Clark, *Chairman*
J. Paul Robinson, *AIA, Vice Chairman*
Patricia J. Russell
Rene G. Santiago
Richard C. Wulliger

Staff

James E. Hartl, *AICP, Director of Planning*
Jon Sanabria, *Deputy Director of Planning*
John Huttinger, *Acting Administrator, Advance Planning Branch*
Sorin Alexanian, *Section Head Community Studies III*
Ellen Fitzgerald, *AICP, Senior Planning Assistant*
Gar Yee, *Planning Assistant II*

Commission Secretary

Christine P. Abele

Adopted December 19, 1991

Revised December 1, 2004
printed Thu 19 Nov 92 @ 11:46 am

Table of Contents

I.	INTRODUCTION	
	Limits on ALUC Power	
II.	AIRPORTS IN LOS ANGELES COUNTY	3
III.	PLAN BOUNDARIES ...	9
	Safety	
	Noise	
	Planning Boundary Maps	
IV.	POLICIES AND PROGRAMS	12
	General Policies	
	Policies related to noise	
	Policies related to safety	
V.	STATEMENT OF LAND USE COMPATIBILITY	13
VI.	PLAN CONSISTENCY AND IMPLEMENTATION	14
	General and Specific Plans	
	Amendments to General or Specific Plans	
	AIRPORT MASTER PLANS	
	Amending the CLUP	
	Procedures for Submitting Projects to the ALUC for Review	
	GLOSSARY	15
	BIBLIOGRAPHY	18
	APPENDIX	19

I. INTRODUCTION

State Law requires the creation of Airport Land Use Commissions (ALUCs) to coordinate planning for the areas surrounding public use airports. In Los Angeles County the Regional Planning Commission has the responsibility for acting as the Airport Land Use Commission and for coordinating the airport planning of public agencies within the county. (The complete text of the Airport Land Use Commission Law is contained in the Appendix)

The purpose of the law is to protect the public health, safety and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public use airports. The ALUC is also concerned with airport activities which may adversely affect adjacent areas and nearby land use which may interfere with airport operations. Specifically, the ALUC is required to prepare and adopt a Comprehensive Land Use Plan (CLUP), review and make recommendations concerning certain projects within the ALUC planning boundaries (see page 14 for description of actions requiring referral to the ALUC), and review and make recommendations on regulations of local agencies. Though given the authority to review and make recommendations, the ALUC does not have jurisdiction over airport operations.

Several agencies have either direct control over or some impact on airport activities in Los Angeles County. The Federal Aviation Administration (FAA) exerts the greatest control over the nation's airport operations. The FAA is responsible for the control of airspace and for certifying both pilots and the airworthiness of aircraft. Most airport regulations and policies relate to FAA regulations and guidelines.

The responsibility for California's airports lies with the California Department of Transportation, Division of Aeronautics. This division is responsible for funding, licensing, and permitting programs for airports and heliports. Assistance for the development and maintenance of aviation facilities through engineering and aviation experience is provided, as well as systems planning

and environmental and community service programs.

The Los Angeles County Department of Public Works Aviation Division is responsible for administering the operation of the county owned airports. It functions as a liaison between the County and the aeronautical industry and aeronautical organizations. It oversees airport leases and is responsible for reviewing and commenting on legislation affecting airports and aviation. The Aviation Division also must review plans for proposed new airports and heliports within Los Angeles County. The 8 member Aviation Commission serves to advise the Board of Supervisors regarding the operation and development of airports within the County.

The City of Los Angeles Department of Airports Board of Airport Commissioners is responsible for keeping pace with the growth of air travel and planning for the future of the four airports it operates. (Three of these airports are within Los Angeles County). This board maintains close coordination with community groups to establish compatible solutions related to safe and efficient airport operations. Commissioners are appointed by the mayor and are approved by the City Council.

The municipalities which surround and are affected by the County's fifteen airports also have an impact on the operation of the facilities. These jurisdictions incorporate into their general or specific plans and their zoning ordinances regulations for addressing airport issues such as noise and safety. In establishing their regulations, each jurisdiction must consider the effect the airport will have on new uses as well as the impact

the use will have on the airport. Also, the jurisdictions which have airports within their boundaries, but which are not operated by the County Aviation Division (or by a company under contract to the County), or the City Department of Airports, have established airport authorities for the operation of the airports.

Limits on ALUC Power

While the goals of the Airport Land Use Commission concern planning for compatible uses around airports, it is important to understand the limits of ALUC jurisdiction. As stated earlier, ALUCs do not have jurisdiction over airport operations. The ALUC does not have the authority to zone property or apply other land use controls normally exercised by local public agencies. ALUC review does not apply to existing incompatible uses. It applies only to new development. Also, recommendations made by the ALUC are advisory to local jurisdictions, not mandatory.

Another check on ALUC power comes from the ability of the local agency to overrule the Commission. If a local agency disagrees with an ALUC recommendation, a hearing can be held where the local agency can vote to overrule the Commission decision by a two thirds vote of its governing body, if specific findings are made that the proposed action is consistent with the purposes of the Airport Land Use law.

The CLUP complements the planning responsibilities of the cities, county, and other affected agencies. The ALUC has the responsibility to set uniform policies and standards to prohibit development of incompatible uses but it is the responsibility of the cities and the County, through planning and zoning powers, to specify which compatible uses are appropriate within their jurisdictions. These land use designations will naturally be based on consideration of a wider range of factors than just compatibility with airport operations.

This Comprehensive Land Use Plan provides for the orderly expansion of Los Angeles County's public use airports, and the area surrounding them. It is also intended to provide for the adoption of land use measures that will minimize the public's exposure to excessive noise and safety hazards. In formulating this plan, the Los Angeles County Airport Land Use Commission has established provisions for safety, noise insulation, and the regulation of building height within areas adjacent to each of the public airports in the County.

Section 21675 of the Public Utilities Code states that the Commission plan (CLUP) shall include a long range master plan that reflects the growth of the airport during at least the next 20 years. An Airport Master Plan provides a long range plan for airport development. Generally, this plan would include: an inventory of existing airport facilities, forecasts of anticipated growth in activity, demand/capacity analysis of airfield, ground access, terminal, and aircraft parking facilities, facility requirements, staging of proposed development, capital costs, and economic feasibility. Ideally, the airport master plan is the starting point for the preparation of the CLUP. However, many airports have not completed these plans and therefore the Public Utilities Code has been amended to allow the CLUP to be based on an Airport Layout Plan. This plan provides detailed information on existing and planned runways, runway length and strength, navigational aids, imaginary approach surfaces and runway protection zones, and existing easements. In the preparation of the CLUP, a master plan was used for the following airports: Brackett Field, Compton Airport, General William J. Fox Airfield, Hawthorne Municipal Airport, Torrance Municipal Airport, Santa Monica Municipal Airport and Whiteman Airport. For all other airports a layout plan was utilized.

II. AIRPORTS IN LOS ANGELES COUNTY

The FAA defines three broad categories of aviation activity: general aviation, certified air carrier, and military. The CLUP applies only to the first two categories; military airports are exempt.

Los Angeles County has eleven general aviation airports, defined by FAA as an airport that enplanes less than 2500 annual passengers, is used exclusively by private and business aircraft and does not provide commercial air carrier passenger service, and four scheduled air carrier airports. U.S. Force Plant 42 is an existing military airport which is presently allowing limited commercial air carrier service through agreement with the Los Angeles Department of Airports and is included only as Palmdale Regional Airport, not a military airport.

The following list presents an overview of Los Angeles County's airports:

AGUA DULCE SKYPARK

33638 Agua Dulce Canyon Road
Saugus, California 91350

Agua Dulce Skypark is a privately owned and operated general aviation airport that was established in 1960. The facility is 200 acres in total size and has 100 based aircraft. The average daily traffic count is 35 operations. The runway is 5,000 feet long, unlighted, and can only accept aircraft under 12,500 pounds. Hours of operation are limited to 8:00 am to 6:00 pm, no night landings.

The airport is located on a site with limited expansion potential. Also, recent development pressures in the Agua Dulce area have resulted in many questions concerning the continued operation of this airport. ALUC jurisdiction ceases when the State Airport permit for a facility is revoked (Section 21668 of State Aeronautics Act).

Surrounding land use is predominately undeveloped.

No Master Plan has been completed for this airport.

BRACKETT FIELD

1615 Mc Kinley Avenue
La Verne, California 91750

Brackett Field began its existence as a dirt strip graded out of a wheat field in the mid 1930's. The field was opened as an approved airport on October 15, 1940. In the late 1940's, the facility was recommended as a primary site for development of a major private airport. In 1955, 170 acres were acquired by Los Angeles County and in 1958 Brackett Field was dedicated as a Los Angeles County airport.

Brackett Field is a general aviation airport with 276 acres of aviation property and 492 based aircraft. The facility has a traffic count of 641 operations per day which involve private and business flights. Aircraft utilizing the field range from single engine trainers to Learjets. The runway is 4,800 feet long and unlighted.

It is stated in the 1990 Airport Master Plan that the present state of development has reached a point where the capacity to accommodate existing and additional demand is impaired. The forecasts included in the plan show an estimated 620 based aircraft and 282,950 annual operations by 2010.

The surrounding land uses are industrial and recreational.

BURBANK-GLENDALE-PASADENA Airport
2627 Hollywood Way
Burbank, California 91505

Burbank Airport was established in 1930 as a private field and is now owned and operated by the Burbank-Glendale-Pasadena Airport Authority which was organized in 1977. This is a scheduled air carrier airport with a total size of 435 acres. It contains 310 based aircraft and has an average daily traffic count of 600 operations. The two lighted runways are 6,902 and 6,074 feet long and can support aircraft under 150,000 pounds.

The surrounding land uses are residential, commercial and industrial.

No Master Plan has been completed for this airport.

CATALINA AIRPORT-IN-THE-SKY
P.O. Box 2739
Avalon, California 90704

Catalina Airport, which is owned and operated by the Catalina Conservancy, opened in 1946. It is located at an elevation of 1,600 feet, approximately 10 miles from Avalon, the island's only city. It is one of Southern California's most popular recreational airports. It is a general aviation airport of 45 acres in total size with 20 based aircraft. The average daily traffic count is 110 operations, with heavier traffic in the summer months.

The majority of aircraft using the field are single engine and light twin engine planes. The asphalt paved runway is 3,250 feet long, lighted and can handle aircraft up to and including DC-3's. Hours of operation are 8:00 am to 7:00 pm during summer and 8:00 am to 5:00 pm in the winter.

The land surrounding the airport is undeveloped. The area nearest the airport with any substantial development is at Avalon.

No Airport Master Plan has been completed for this airport.

COMPTON AIRPORT
901 West Alondra Boulevard
Compton, California 90220

Compton Airport, which lies entirely within the boundaries of the City of Compton, is owned by the County of Los Angeles and operated by the Public Works Department, Aviation Division. The airport, established in 1924, is the oldest, continuously operating airport in the Los Angeles basin. It is a general aviation airport with a total size of 77 acres, 47 of which are used for the runway/taxiway system and 30 for the existing building area. It is considered to be a relatively low cost alternative airport to the larger more complex ones in the area for low performance and less well equipped aircraft. Compton is the only public use airport in the Los Angeles basin not equipped with a traffic control tower.

The facility contains 352 based aircraft and has annual operations of 90,000. Four fixed base operators offer a range of general aviation services including flight instruction, aircraft sales and repair and air charter. The lighted runway is 60 feet wide and 3,670 feet long for take-off, 2,800 feet long for landing. It can sustain an aircraft load of up to 12,500 pounds.

According to the August, 1991 Airport Master Plan there is potential for modest continued growth at the airport for based aircraft. However, the limited availability of land will probably keep the maximum to 500 based aircraft and 156,000 annual operations by 2010.

The surrounding land uses are residential, commercial and industrial.

EL MONTE AIRPORT
4233 North Santa Anita Avenue
El Monte, California 91731

El Monte Airport, which is owned and operated by Los Angeles County, was established in 1947. It is a general aviation airport of 103 acres in total size and home to 507 based aircraft. Daily operations

reach an average traffic count of 518. The lighted runway is 3,994 feet long and limited to craft weighing less than 12,500 pounds. Private and business light single and multi engine aircraft and helicopters account for the majority of activity. The surrounding land use is dominated by residential, with a few pockets of light commercial and industrial. Of the Los Angeles County owned airports, El Monte has the most developed infrastructure and is the least flexible.

No Master Plan has been completed for this airport.

GENERAL WILLIAM J. FOX AIRFIELD
4555 West Avenue G
Lancaster, California

Refer to the separate document GENERAL
WILLIAM J. FOX LAND USE
COMPATIBILITY PLAN adopted by the
ALUC on December 1, 2004

HAWTHORNE MUNICIPAL AIRPORT
4455 W. 126th Street
Hawthorne, California 90250

Hawthorne Airport was established in 1939 through a co-partnership between the City, Northrup Corporation, and the U.S. Government to construct a municipal airport adjacent to Northrup's newly acquired aircraft manufacturing facilities. The airport was maintained and operated exclusively by Northrup until February 1948 when the City assumed control and the facility became a public use airport.

This is a general aviation airport of 80 acres. Fifty three acres are used as aircraft operating area and 27 acres are for terminal use, aircraft storage or are leased areas. The average daily traffic count is 330 operations. As of December 1990, there were 232 based aircraft and 120,387 annual operations. The lighted runway is 4,956 feet long and 100 feet wide and can accommodate aircraft weighing up to 90,000 pounds. There are 2 fixed base operators at the airport offering a wide range of aeronautical services such as aircraft rentals, flight instruction, and engine and airframe repair.

According to the July, 1991 update of the Hawthorne Municipal Airport Master Plan, the storage capacity for based aircraft was reached in the 1960's and has remained relatively stable since then. The projections for 2006 are for a maximum of 526 based aircraft and 224,000 annual operations.

Surrounding land uses are residential, commercial and industrial.

Los Angeles INTERNATIONAL Airport (LAX)
#1 World Way
P.O. Box 92216
Los Angeles, California 90009-2216

LAX is owned by the City of Los Angeles and operated by the City of Los Angeles Department of Airports. The airport was established in 1928 as a 640 acre general aviation field. Commercial airline

service began in 1946 from temporary passenger facilities and in 1961 service from the first permanent passenger facilities designed to accommodate "jet-age" travel began.

Today LAX is ranked as the fourth busiest air travel center in the world. More than 45 million passengers use the airport each year. The overall size has increased to 3,500 acres, with the terminal area currently occupying 265 acres. Sixteen private planes are based at this facility and the average traffic count is 1,840 operations per day. There are four high intensity lighted runways ranging from 8,925 feet to 12,090 feet in length with the ability to accept the weight of fully-loaded widebody passenger aircraft.

The surrounding land uses are industrial, commercial and residential.

There is currently no long range Master Plan for this airport.

LONG BEACH MUNICIPAL AIRPORT

4100 Donald Douglas Drive
Long Beach, California 90808

Long Beach Airport is a scheduled air carrier airport owned and operated by the City of Long Beach. It began flight operations in 1925 as a 150 acre facility. Presently, the airport occupies 1,166 acres, 685 of which are devoted to aircraft operations, 12 to the terminal complex and 152 to aviation related leases.

There are approximately 590 based aircraft and an average daily traffic count of approximately 1100 operations. (The number of air carrier flights is restricted by City noise control policy and State Noise law). The lighted runways range in length from 5,420 feet to 10,000 feet, with the ability to host aircraft up to 300,000 pounds.

The surrounding land uses are recreational, commercial, residential and industrial.

No Master Plan has been completed for this airport.

PALMDALE REGIONAL AIRPORT

2503 East Avenue P
Palmdale, California 93550-2196

Palmdale Regional Airport is temporarily operating at United States Air Force Plant 42, a military airport. This interim arrangement has permitted the provision of limited air carrier service into the Antelope Valley prior to the completion of a permanent facility. An agreement of cooperation signed between the U.S. Air Force and the Los Angeles Department of Airports allows the commercial use of Plant 42. The agreement will permit up to 400 commercial operations per day. The Department of Airports intends to utilize this military facility until user demand begins to exceed the normal capacity, at which time the development of Palmdale Regional will begin.

The unimproved future airport site of approximately 17,750 acres is located immediately east of Plant 42. The first purchases for this land began in 1970 after a \$1,500,000 grant was allocated from HUD under the advanced acquisition of land program. This future airport is expected to be a desirable alternate regional airport to the already overcrowded LAX and Burbank Terminals.

Based on projections made for the City of Palmdale's Airport Corridor Specific Plan using 1990's 20 flights per day activity level and a 10% compounded annual rate of increase in flight activity, the 400 flights per day allowed by agreement with Air Force Plant 42 will not be reached until at least the year 2020.

Currently, this land is being used to grow rubber trees and pistachios for agricultural experimentation.

Land surrounding Plant 42 is predominately undeveloped with some industrial uses nearby.

SANTA MONICA MUNICIPAL AIRPORT

3223 Donald Douglas Loop-South
Santa Monica, California 90405

Santa Monica Airport began in 1926 when the City of Santa Monica purchased 158 acres of land adjacent to Ocean Park Boulevard for use as an airport. The airport is a general aviation airport and the oldest operating air field in Los Angeles County. The airport is approximately 225 acres in size and has approximately 550 based aircraft. The average daily traffic count is 520 operations. The lighted runway is 5,000 feet long and 150 feet wide and can tolerate aircraft up to 105,000 pounds.

This airport has been at the center of legal and political disputes for many years which had brought into question the continued operation of the facility. The airport worked out an agreement in 1983 which resulted in the Santa Monica Municipal Airport Master Plan Study. The plan states that by 2003 there could be up to 213,950 annual operations. Though the airport could accommodate as many as 750 based aircraft the city has determined that a total of 590 aircraft will meet the needs of aircraft owners, and also serve to limit future growth so that aircraft activity in the future will not increase and become a greater annoyance to neighbors.

Surrounding land uses are recreational, commercial and residential.

TORRANCE MUNICIPAL AIRPORT

3115 Airport Drive

Torrance, California 90505-6197

Torrance Municipal Airport is owned and operated by the City of Torrance. Originally called Lomita Flight Strip, the airport was established in 1931 and deeded to the City in 1948. In 1956 the City adopted a Master Plan that proposed air carrier service at this airport. However, in 1962 this was amended to general aviation. This facility is 500 acres in total size. 140 acres of the 500 total acres is commercial development and 360 acres is used for aeronautical purposes. Of the acres used for aeronautical purposes, 140 are partially used for agriculture. 825 aircraft are based at this facility and the average daily traffic count is 591 operations. Total annual operations are 243,324.

The field is used by general aviation aircraft, turbo prop and occasionally executive business jets. The two lighted runways are 5,000 feet and 3,000 feet long and equipped for a maximum load of 20,000 pounds.

Torrance Municipal Airport has adopted stringent noise control guidelines. Aircraft which cannot meet these guidelines are banned. The Airport Master Plan proposes airport development that will result in decreased aircraft noise impact.

The surrounding land use is commercial, industrial, recreational, and residential.

VAN NUYS AIRPORT

16461 Sherman Way

Van Nuys, California 91406

Van Nuys Airport, located in the heart of the San Fernando Valley, is owned by the City of Los Angeles and operated by the City of Los Angeles Department of Airports. The airport, originally called Metropolitan Airport, began in 1928. It was acquired by the City of Los Angeles in 1949 and became Van Nuys Airport in 1957.

The total size of the airport is 725 acres. 1000 aircraft are based at this site, including 90 jets and 60 helicopters. Van Nuys Airport is only a general aviation airport (no scheduled air carrier services), but has an average daily traffic count of 1,450 operations or a total of 528,000 annual operations. (1990) This is an extremely high number of operations and therefore, Van Nuys Airport is ranked as the busiest general aviation airport in the nation. There are two lighted runways. One, 8,000 feet long handles aircraft up to 210,000 pounds. The other, which is 4,000 feet long handles aircraft up to 10,000 pounds.

The surrounding land uses are industrial, commercial and residential.

No Airport Master Plan has been completed.

WHITEMAN AIRPORT
12653 Osborne Street
Pacoima, California 91331

Whiteman Airport, located in the Pacoima area of the City of Los Angeles, is owned and operated by Los Angeles County. It began service in 1946 as a privately owned public use airport. In 1970, the airport was acquired by the County. It is a general aviation airport of 183 acres in size and contains 655 based aircraft. An average of 422 private and business operations arrive and depart the field each day. Annual operations number 141,000. The lighted runway is 3,700 feet long and 40 feet wide and can only accommodate craft under 12,000 pounds gross.

Projected growth figures for Whiteman Airport are for a total of 285,000 annual operations and 930 based aircraft by 2010. Due to physical constraints, the maximum number of based aircraft that can be accommodated at this site is 960.

The surrounding land uses are industrial, commercial and residential.

III. PLAN BOUNDARIES

For each of the public use airports in Los Angeles County, the Airport Land Use Commission has adopted planning boundaries. Within these boundaries certain proposed local actions must be submitted to the ALUC for review (See page 14). The planning boundaries delineate areas subject to noise impacts and safety hazards (height restriction areas and approach surface and runway protection zones).

Safety

Establishing and enforcing safety restrictions around the airports is a cooperative undertaking by the FAA, the ALUC and the affected jurisdictions. The safety zones established for this Comprehensive Land Use Plan have been patterned after the Approach Surface and Runway Protection Zone (formerly called clear zone) instituted by the Federal Aviation Administration by Federal Aviation Regulations Part 77. The Approach Surface and Runway Protection Zone dimensions are dependent on the type of approach being made to a runway.

The Approach Surface is an imaginary inclined plane beginning at the end of the primary surface and extending outward to distances up to 10 miles depending on runway use. The width and slope are also dependent on runway use. The Approach Surface governs the height of objects on or near the airport. Objects should not penetrate or extend above the approach surface. If they do, they are classified as obstructions and must either be marked or removed.

The Runway Protection Zone is an area at ground level that provides for the unobstructed passage of landing aircraft through the above airspace. The Runway Protection Zone begins at the end of the primary surface and has a size which varies with the designated use of the runway. This zone is the most critical safety area under the approach path and should be kept free of all obstructions. No structure will be permitted nor the congregation of people allowed within this zone. Control of the runway protection zone by the airport owner is essential. The FAA recommends that the airport operator have sufficient control over property rights within a Runway Protection Zone to assure

the safety of aircraft approaches and to keep the area clear of congregations of people. Since control is essential, it is desirable that the airport owner acquire adequate property interests whether by means of outright ownership or aviation easements to ensure compliance.

Height Restriction boundaries are based on FAR Part 77 guidelines. (These guidelines are contained in the Appendix) FAR Part 77 establishes standards for determining obstructions that cause substantial adverse effect on air navigation. Proposed projects that exceed the height limit set by Part 77 must submit approval from FAA to the local jurisdiction.

Noise

Insuring compatibility between aircraft noise and various types of land uses is one of the primary functions of the ALUC. The impact of aircraft noise is potentially the most critical of all environmental effects associated with airport development and aircraft operations. This section describes types of noise, how noise is measured and the effects noise can have.

Sound refers to anything that is or may be heard. Noise has been defined as unpleasant sound. The sound from an individual source decreases with increasing distance. The amount of sound reaching the receiver is affected by barriers between the source and receiver, such as walls, landscaping, and buildings, atmospheric conditions, such as wind, temperature and humidity and the number of sources emitting sound.

The typical community noise environment is comprised of a background noise level and higher noise levels, frequently transportation oriented. As

industrialization became more prevalent in the American economy, excessive noise became recognized as a serious problem. Also, as transportation became an increasing force, noise problems increased. The problems posed by high noise levels from individual sources are more pronounced during nighttime hours, since background noise levels are lower and because this is the time of day when most people demand greater quiet.

Noise Measurement Methods

Approximately 60 methods of noise measurement have been developed to relate the various characteristics of sound to human perception and reaction. The loudness of sound is usually expressed in decibel(dB), a logarithmic scale measuring sound pressure.

The Community Noise Equivalent Level (CNEL) is an average made up of numerous single noise events. CNEL readings are used to establish noise impact contours around airports. The contours take into account such things as aircraft fleet mix, number of flights, and time of day. Noise readings taken in a 24 hour period are weighted depending on when during the day the noise occurs. Evening and nighttime events are given greater weight than those occurring during the day. (Noise occurrences between 7:00pm and 10:00pm are given a weight of 3 additional decibels while those occurrences between 10:00pm and 7:00 am are given an additional 10 decibels.)

According to the FAA's Office of Environmental Quality "Impact of Noise on People" study (May 1977), generally at a 65 CNEL level 33% of those exposed will be highly annoyed and 5% will actually complain. As the noise level drops to 60 CNEL 24% are projected to be highly annoyed and 2% will complain. For general aviation airports (Agua Dulce, Brackett Field, Catalina, Compton, El Monte, Fox, Hawthorne, Santa Monica, Torrance, Van Nuys, and Whiteman) the 60-65 CNEL contour more accurately represents the annoyance factor associated with smaller but lower flying aircraft (These contours will be used where

available. The CLUP will be amended when new CNEL contours are obtained.) For the commercial airports, LAX, Burbank, Long Beach and Palmdale (Plant 42) the 65-70 CNEL contour boundaries will be used.

Sources of Transportation Noise

Some of the most common sources of noise are highways (auto and truck traffic), railroads, mass transit (buses) and airports. Several types of noise are common in the vicinity of airports. Noise generated during take-off and landing is most commonly the focus of neighborhood concern and complaint, but other types of aircraft generated noise, such as planes diverting from the regular flight track, engine "run-up" or jet aircraft low frequency "rumble" can also be intrusive.

Effects of Noise

Noise can have varied effects on the human lifestyle. The magnitude of the problem depends on the volume, frequency and time of day of aircraft operations, the types of aircraft and the character of land use in the area exposed. These effects can be physiological, psychological, sociological, or economic.

Exposure to sufficient levels of noise for long periods of time can produce temporary or permanent loss of hearing. Generally, noise levels of 80 dB or greater are necessary before hearing loss occurs. The vast majority of people exposed to aircraft noise are not in danger of direct physical harm. Noise levels in neighborhoods, even those subject to a great deal of airport noise, are generally not sufficient to cause hearing loss. Physiological effects other than hearing loss can include: rapid heart beat, dilation of pupils, paling of the skin, headaches, nausea, insomnia and fatigue.

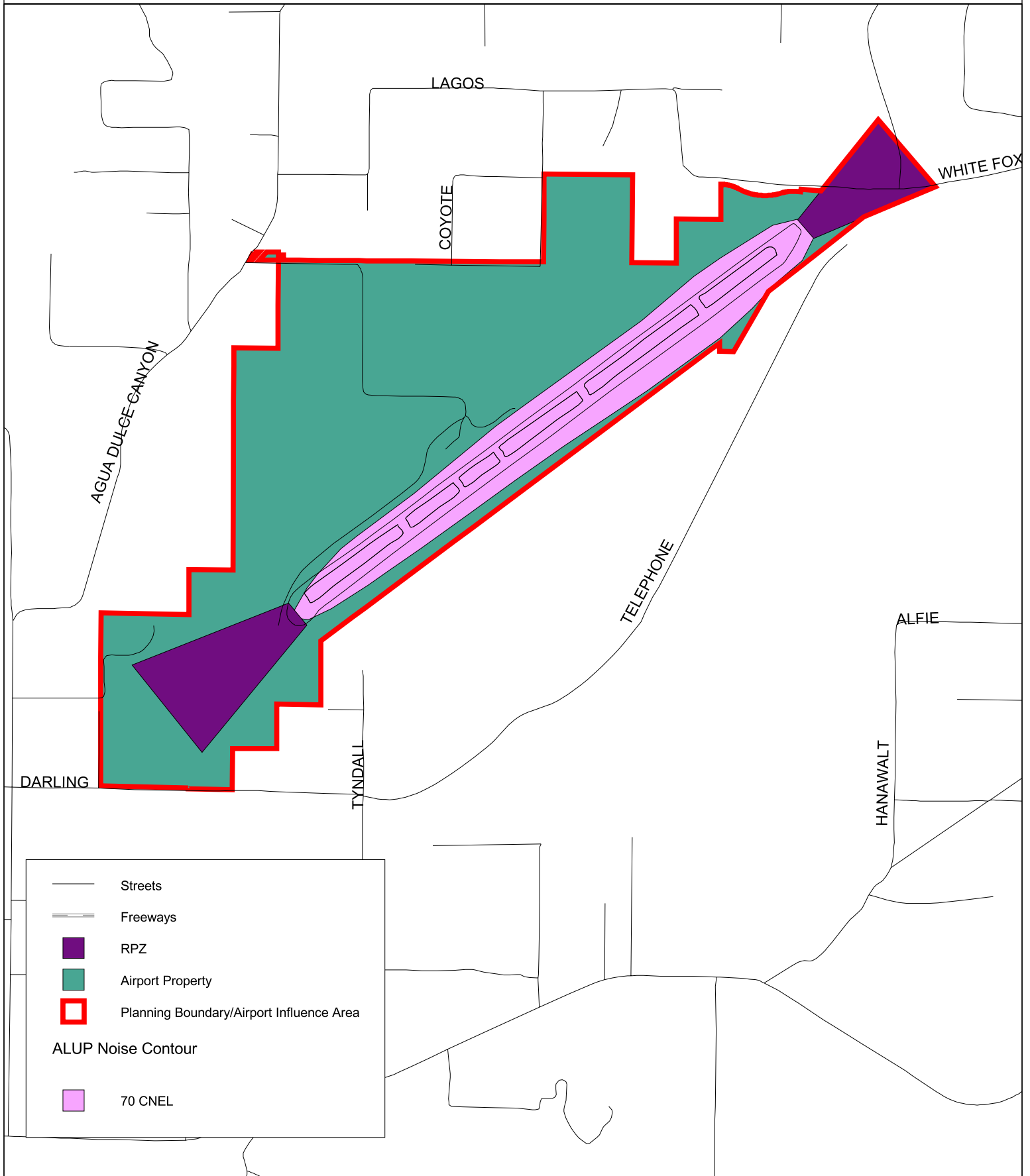
Excessive noise can have psychological effects on individuals who are consistently exposed due mostly to interference with the ability to sleep. Sleep disturbance does not refer only to awakening from sleep but can also refer to the altering of the

pattern and stages of sleep. Effects can include: anxiety, anger, vertigo, hallucinations, and in extreme cases, homicidal or suicidal tendencies. While these symptoms occur in persons exposed to excessive noise, it has not been scientifically proven that their cause is primarily due to that exposure.

Sociological effects are related to the ability to handle the problem of noise exposure. There are two ways to handle noise intrusions. One way is to eliminate the problem by shielding or escaping from the noise. A second way is to adapt to the new environment. Actions required to adapt may adversely affect group interrelationships. Individual reactions may be compounded in a group situation. Speech interference is one of the primary concerns in environmental noise problems. As background noise gets louder the distance between speakers needs to decrease or the conversation level needs to increase or be discontinued until the noise subsides. Also, children who live or attend school near sources of excessive noise can be handicapped not only in their ability to learn but in the socialization process as well.

The economic costs of noise are appreciable and include: medical care, loss of efficiency and production, reduction of property values, aviation easements, litigation, abatement measures and increased vacancies.

AGUA DULCE AIRPORT



Streets

Freeways

RPZ

Airport Property

Planning Boundary/Airport Influence Area

ALUP Noise Contour

70 CNEL



LOS ANGELES COUNTY
AIRPORT LAND USE COMMISSION
320 W. Temple Street
Los Angeles, CA 90012
(213) 974-6425

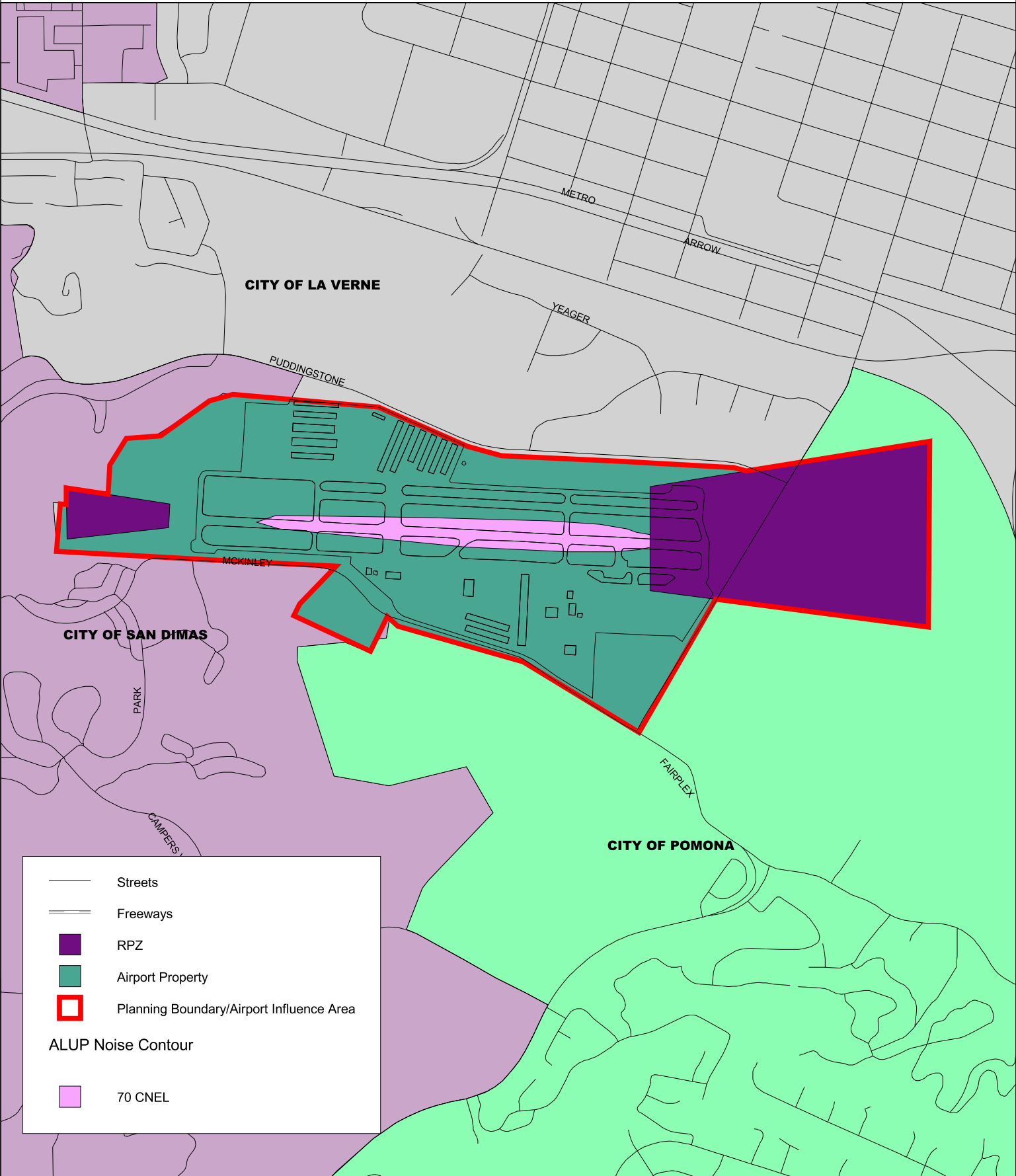
AIRPORT INFLUENCE AREA

0 400 800 1200 Feet



5/13/03

BRACKETT FIELD



LOS ANGELES COUNTY
AIRPORT LAND USE COMMISSION
320 W. Temple Street
Los Angeles, CA 90012
(213) 974-6425

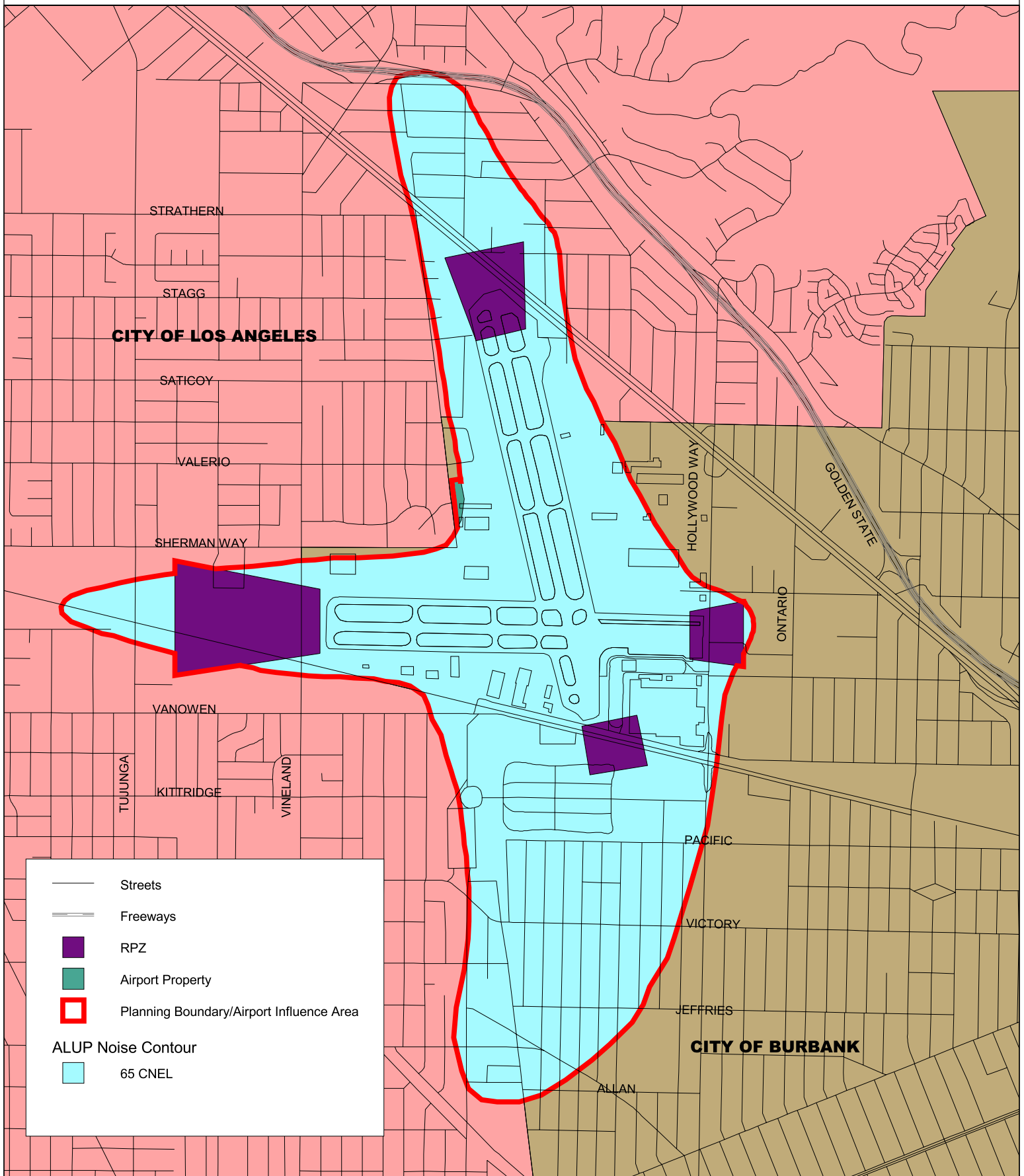
AIRPORT INFLUENCE AREA

0 500 1000 1500 Feet



5/13/03

BURBANK/GLENDALE/PASADENA AIRPORT



LOS ANGELES COUNTY
AIRPORT LAND USE COMMISSION
320 W. Temple Street
Los Angeles, CA 90012
(213) 974-6425

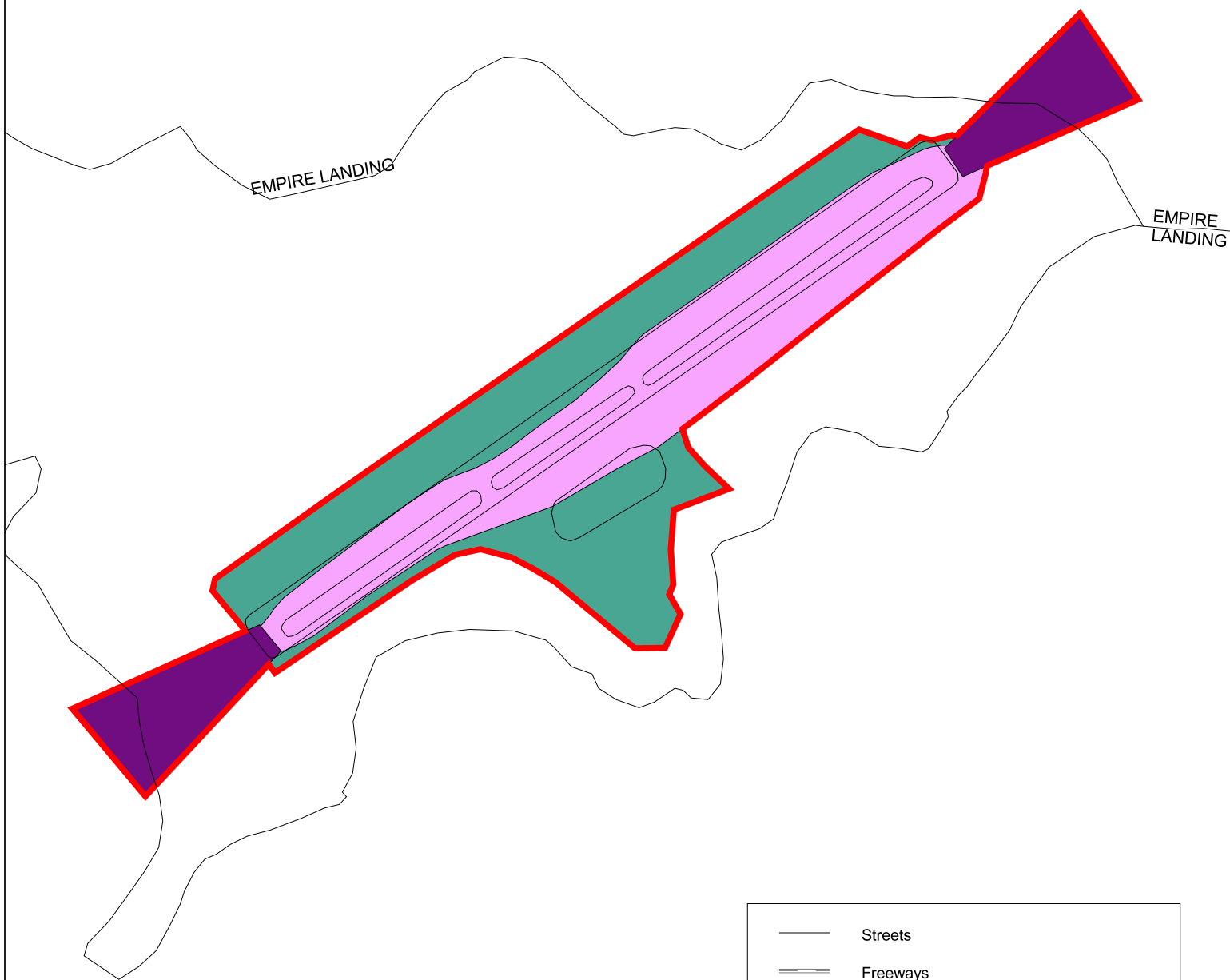
AIRPORT INFLUENCE AREA

0 800 1600 2400 Feet



5/13/03

CATALINA AIRPORT



- Streets
- Freeways
- RPZ
- Airport Property
- Planning Boundary/Airport Influence Area
- ALUP Noise Contour
- 70 CNEL



LOS ANGELES COUNTY
AIRPORT LAND USE COMMISSION
320 W. Temple Street
Los Angeles, CA 90012
(213) 974-6425

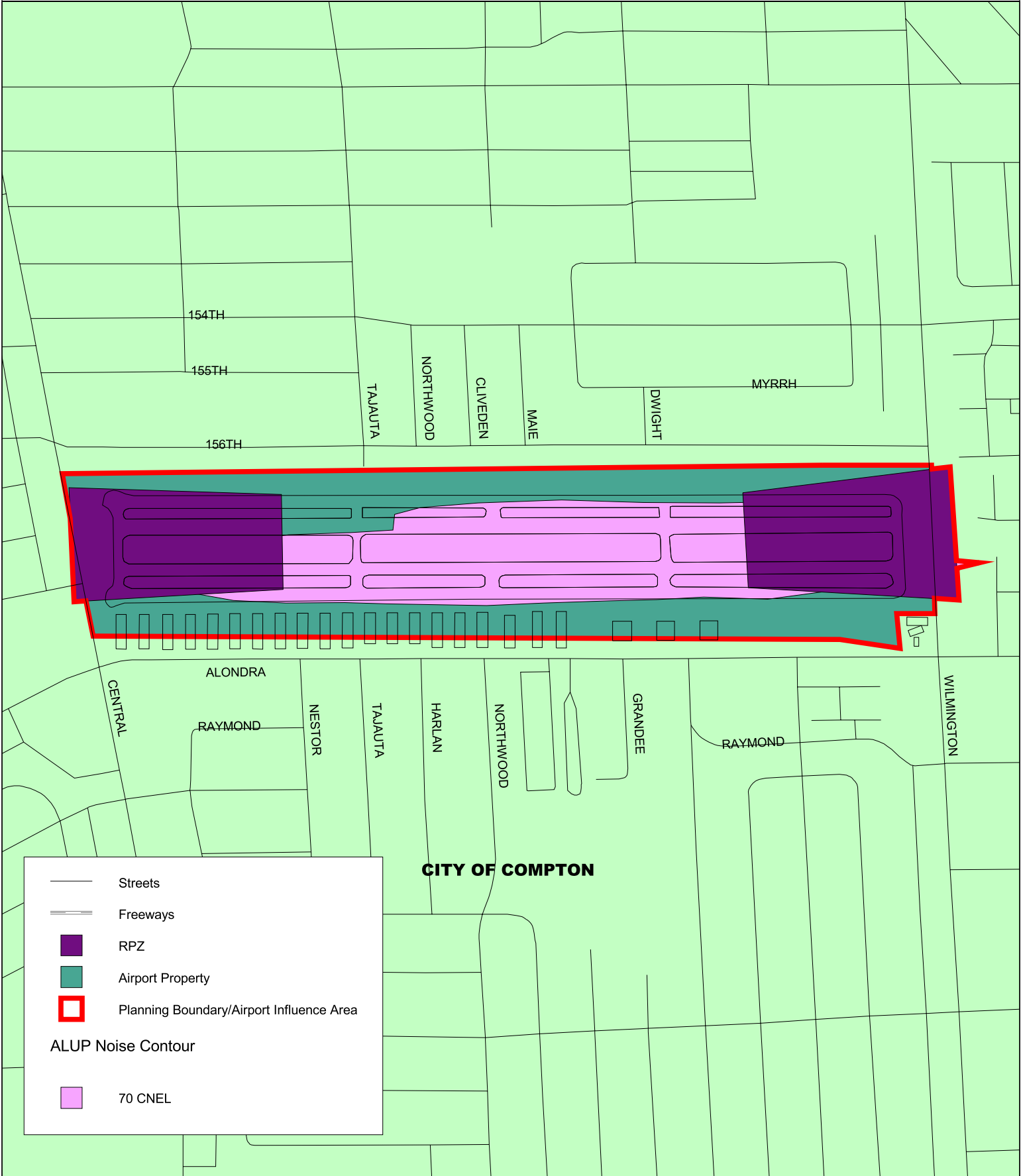
AIRPORT INFLUENCE AREA

0 200 400 600 Feet



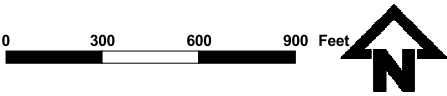
5/13/03

COMPTON/WOODLEY AIRPORT

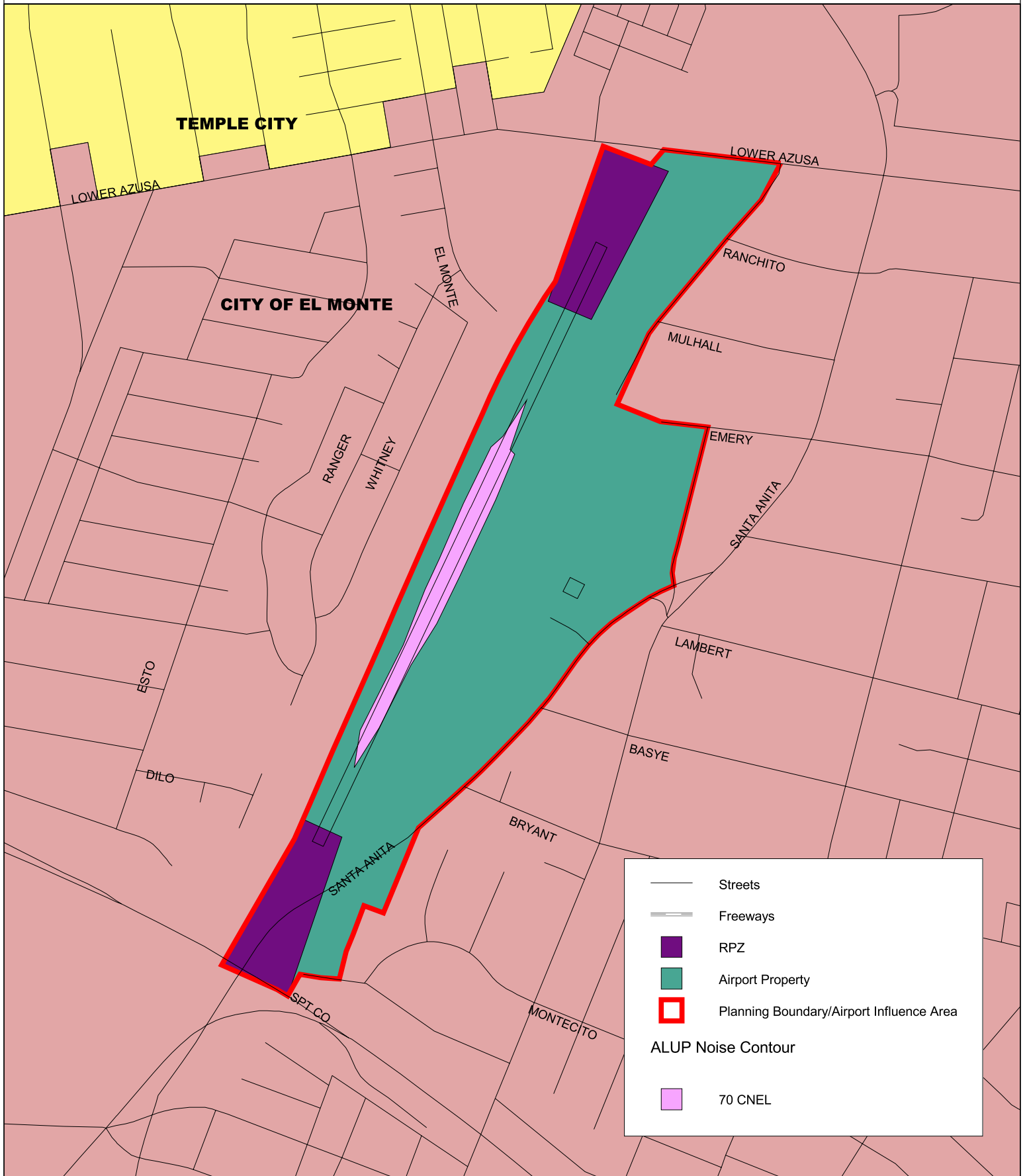


LOS ANGELES COUNTY
AIRPORT LAND USE COMMISSION
320 W. Temple Street
Los Angeles, CA 90012
(213) 974-6425

AIRPORT INFLUENCE AREA



EL MONTE AIRPORT



LOS ANGELES COUNTY
AIRPORT LAND USE COMMISSION
320 W. Temple Street
Los Angeles, CA 90012
(213) 974-6425

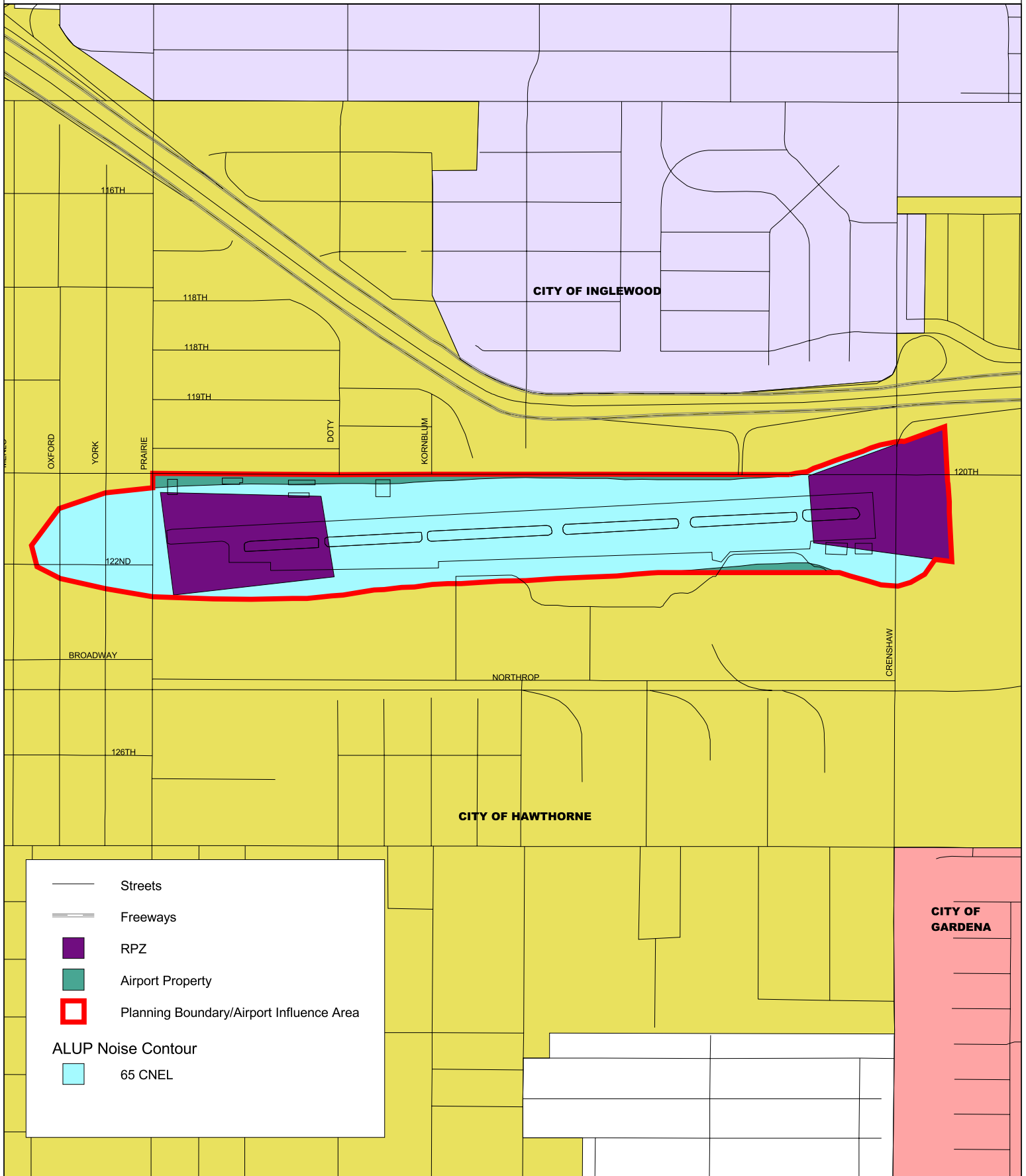
AIRPORT INFLUENCE AREA

0 300 600 900 Feet



5/13/03

HAWTHORNE AIRPORT



LOS ANGELES COUNTY
AIRPORT LAND USE COMMISSION
320 W. Temple Street
Los Angeles, CA 90012
(213) 974-6425

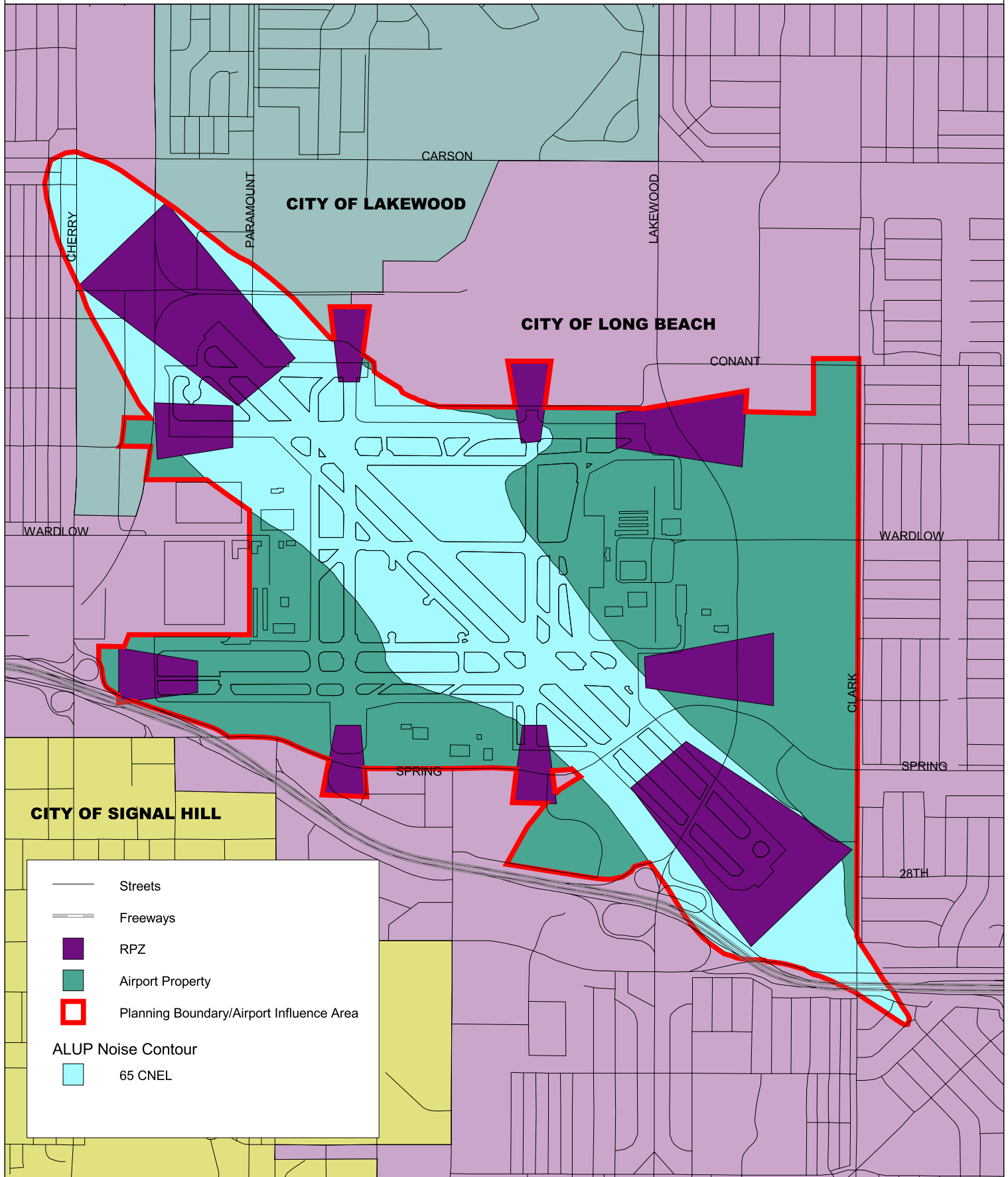
AIRPORT INFLUENCE AREA

0 400 800 1200 Feet



5/13/03

LONG BEACH AIRPORT



Streets

Freeways

RPZ

Airport Property

Planning Boundary/Airport Influence Area

ALUP Noise Contour

65 CNEL



LOS ANGELES COUNTY
AIRPORT LAND USE COMMISSION
320 W. Temple Street
Los Angeles, CA 90012
(213) 974-6425

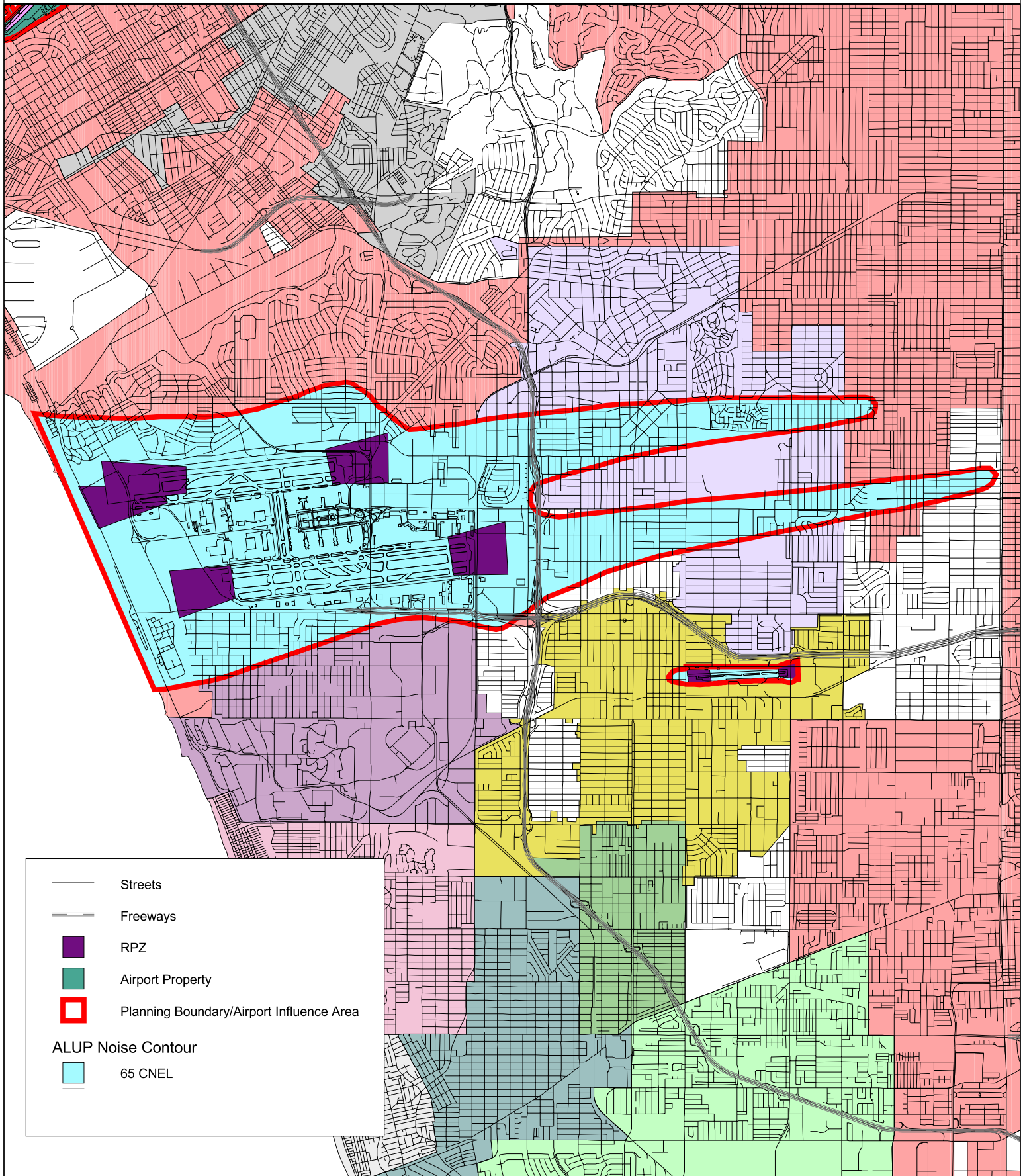
AIRPORT INFLUENCE AREA

0 700 1400 2100 Feet



5/13/03

LOS ANGELES INTERNATIONAL AIRPORT



LOS ANGELES COUNTY
AIRPORT LAND USE COMMISSION
320 W. Temple Street
Los Angeles, CA 90012
(213) 974-6425

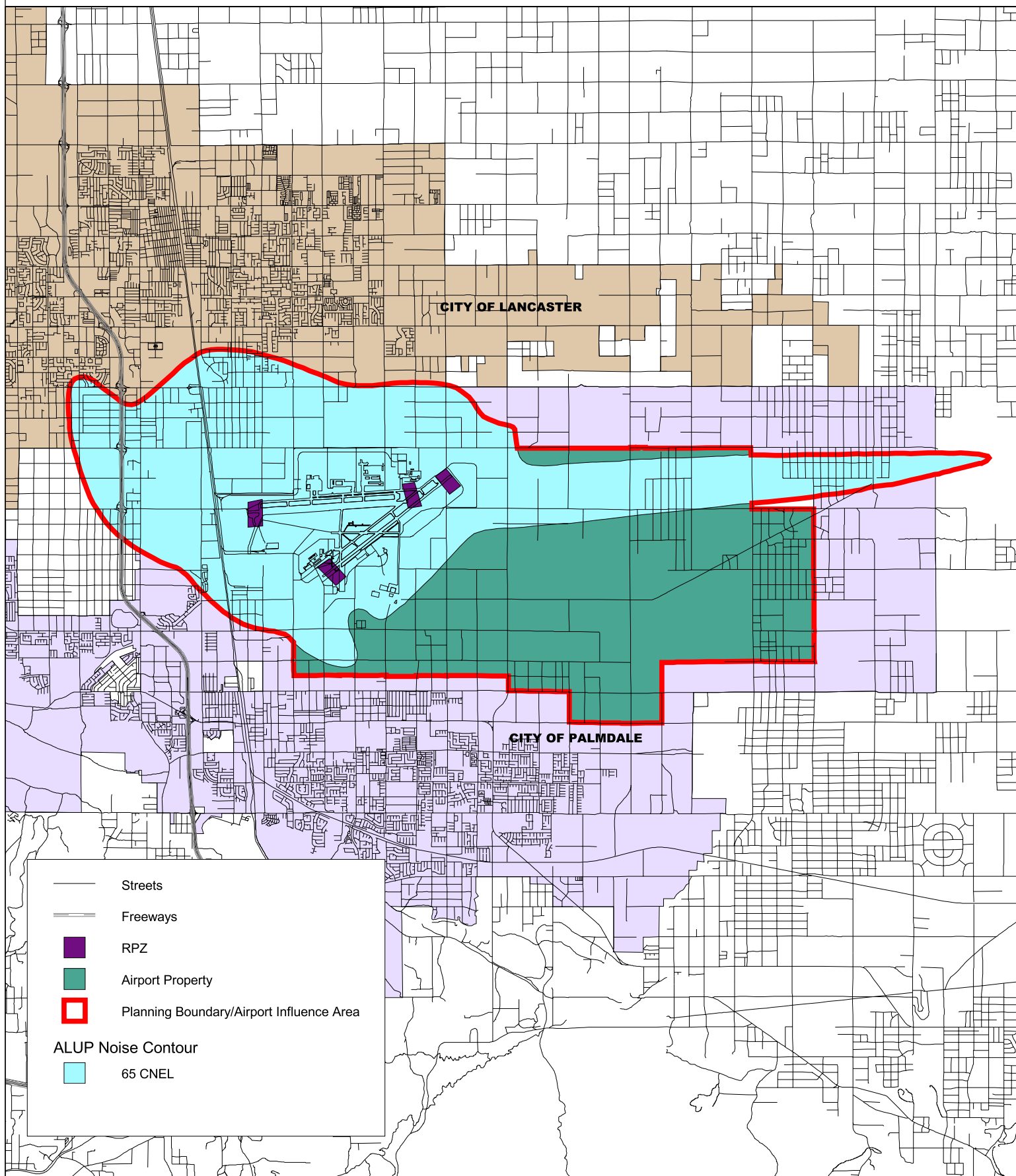
AIRPORT INFLUENCE AREA

0 3000 6000 9000 Feet



5/13/03

PALMDALE AIRPORT / USAF PLANT 42



LOS ANGELES COUNTY
AIRPORT LAND USE COMMISSION
320 W. Temple Street
Los Angeles, CA 90012
(213) 974-6425

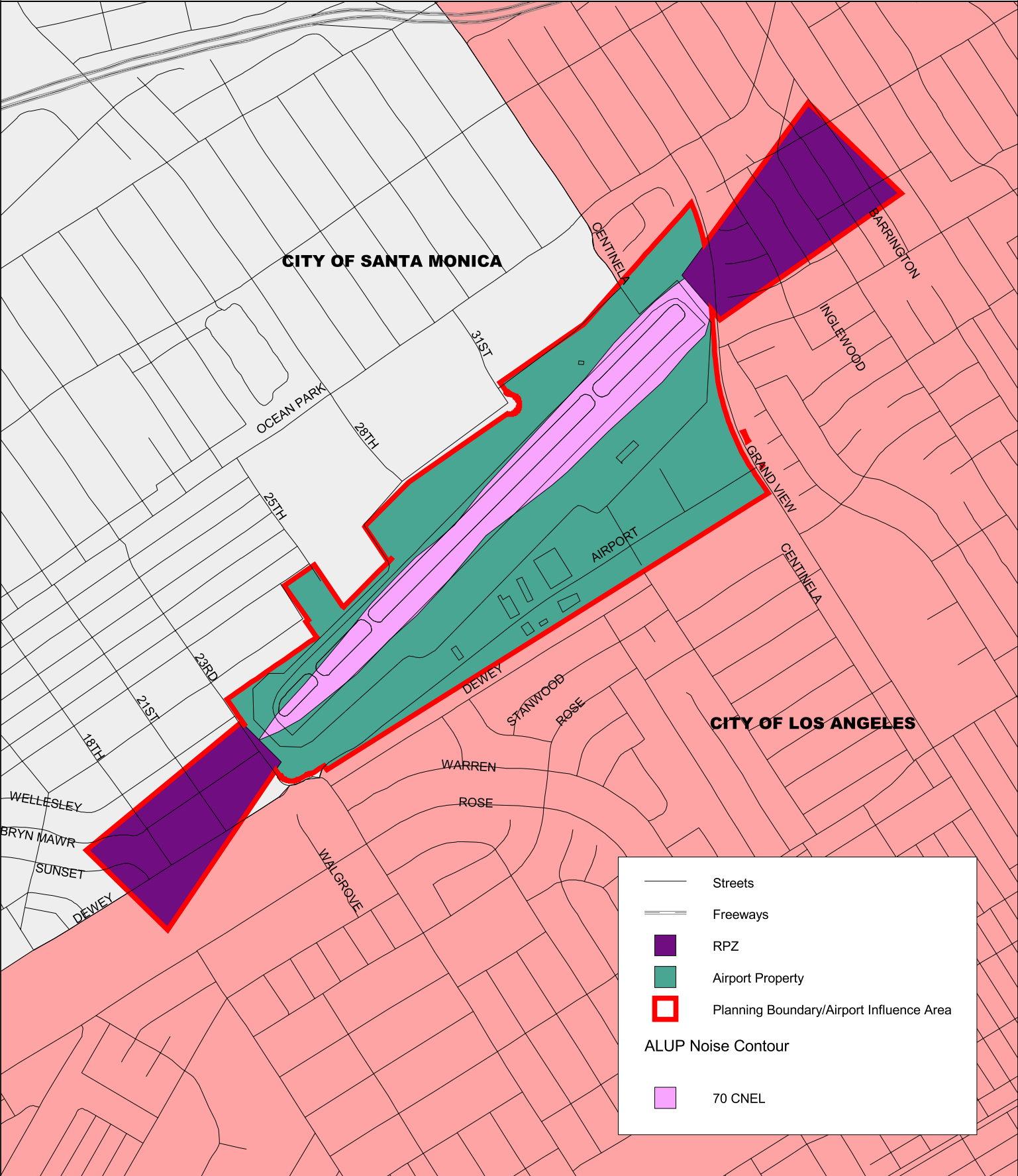
AIRPORT INFLUENCE AREA

0 4000 8000 12000 Feet



5/13/03

SANTA MONICA AIRPORT



LOS ANGELES COUNTY
AIRPORT LAND USE COMMISSION
320 W. Temple Street
Los Angeles, CA 90012
(213) 974-6425

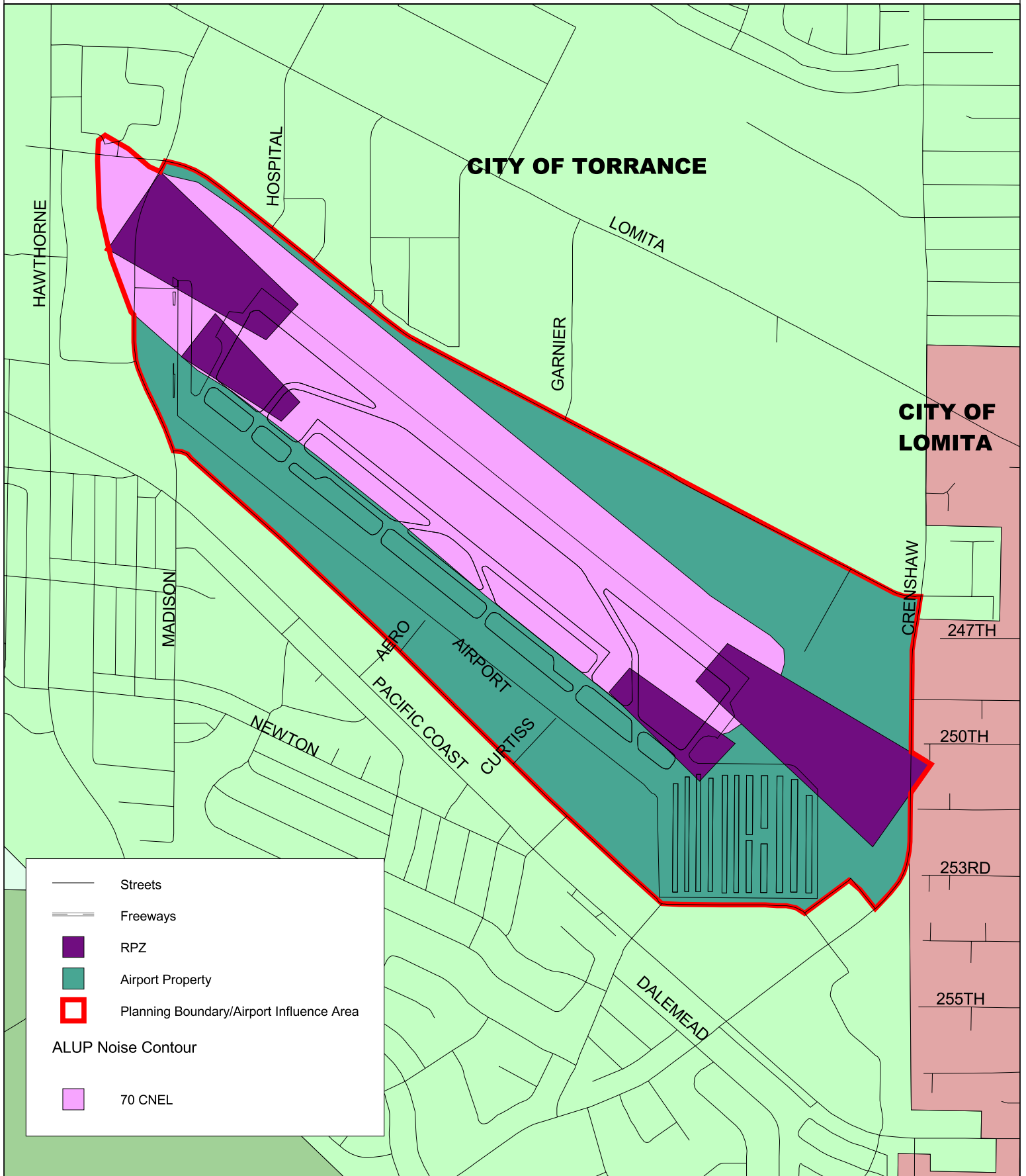
AIRPORT INFLUENCE AREA

0 400 800 1200 Feet



5/13/03

TORRANCE AIRPORT



LOS ANGELES COUNTY
AIRPORT LAND USE COMMISSION
320 W. Temple Street
Los Angeles, CA 90012
(213) 974-6425

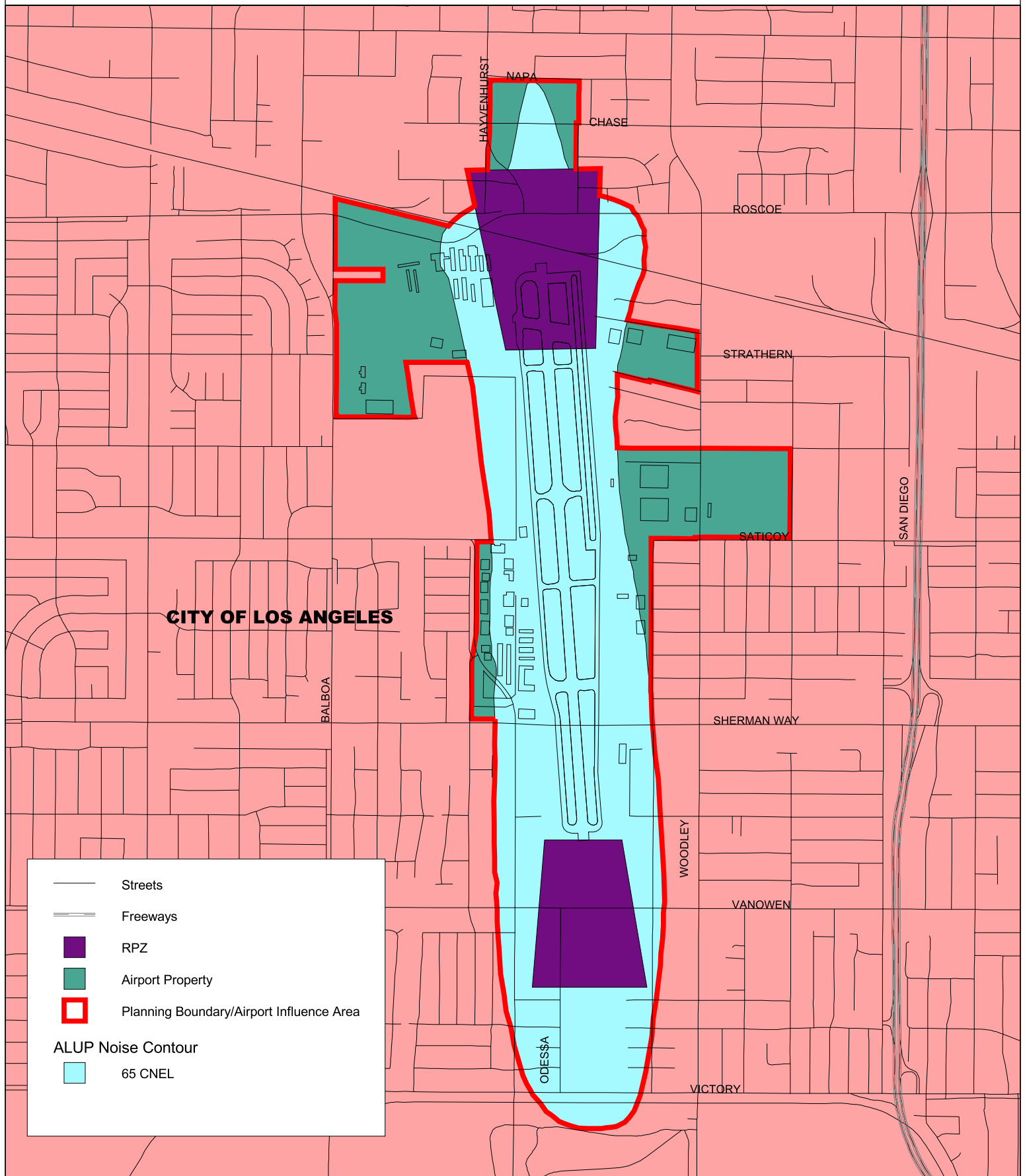
AIRPORT INFLUENCE AREA

0 400 800 1200 Feet



5/13/03

VAN NUYS AIRPORT



Streets

Freeways

RPZ

Airport Property

Planning Boundary/Airport Influence Area

ALUP Noise Contour

65 CNEL



LOS ANGELES COUNTY
AIRPORT LAND USE COMMISSION
320 W. Temple Street
Los Angeles, CA 90012
(213) 974-6425

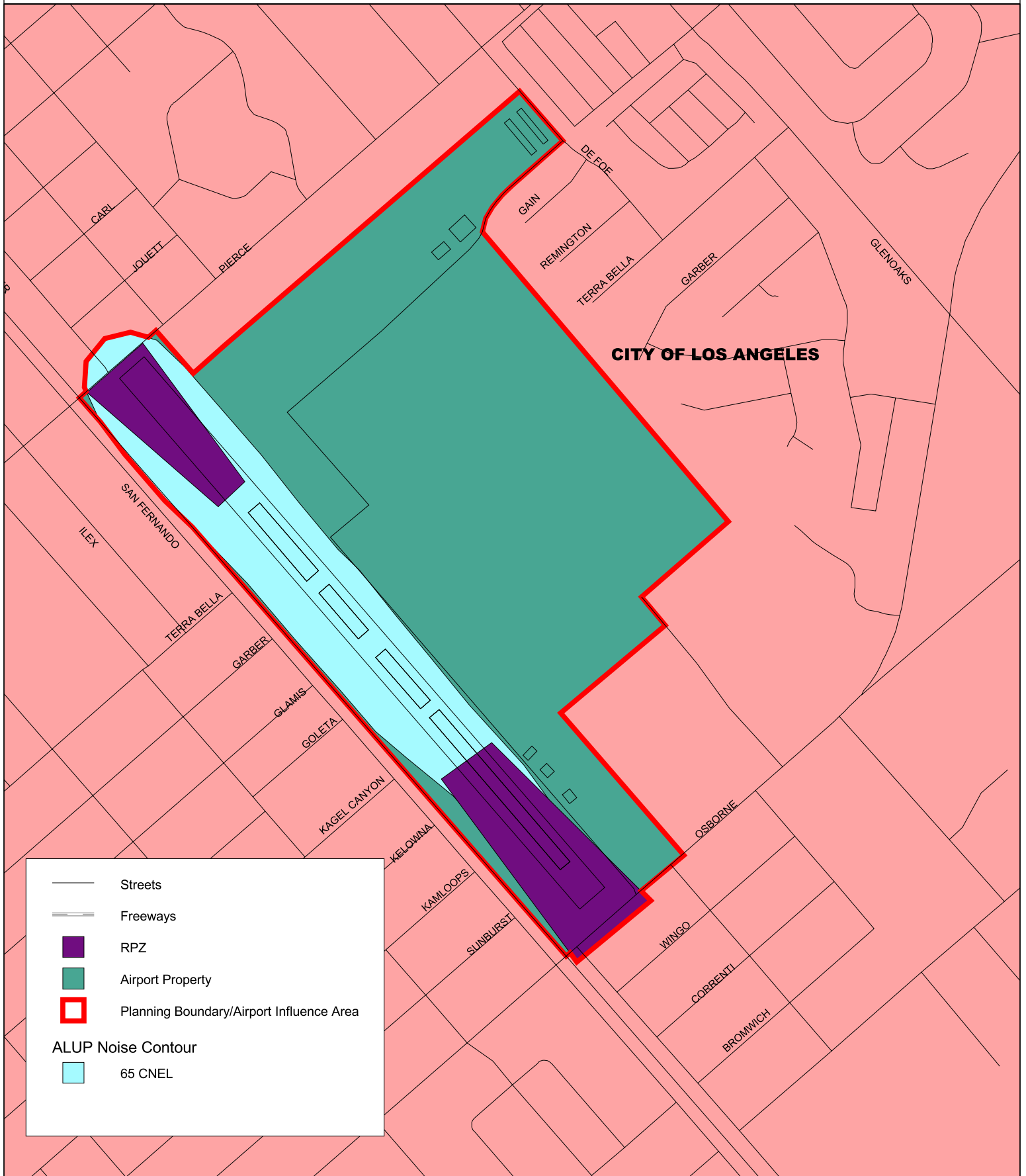
AIRPORT INFLUENCE AREA

0 800 1600 2400 Feet



5/13/03

WHITEMAN AIRPORT



LOS ANGELES COUNTY
AIRPORT LAND USE COMMISSION
320 W. Temple Street
Los Angeles, CA 90012
(213) 974-6425

AIRPORT INFLUENCE AREA

0 300 600 900 Feet



5/13/03

IV. POLICIES AND PROGRAMS

The following policies and programs apply to all airports except Fox Airfield, which has a separate compatibility plan with its own policies and programs.

General Policies:

- G-1** Require new uses to adhere to the Land Use Compatibility Chart.
- G-2** Encourage the recycling of incompatible land uses to uses which are compatible with the airport, pursuant to the Land Use Compatibility Table.
- G-3** Consider requiring dedication of an aviation easement to the jurisdiction owning the airport as a condition of approval on any project within the designated planning boundaries.
- G-4** Prohibit any uses which will negatively affect safe air navigation.
- G-5** Airport proprietors should achieve airport/community land use compatibility by adhering to the guidelines of the California Noise Standards

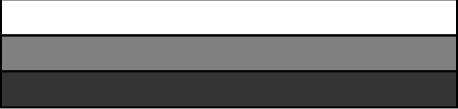
Policies related to noise:

- N-1** Use the Community Noise Equivalent Level (CNEL) method for measuring noise impacts near airports in determining suitability for various types of land uses.
- N-2** Require sound insulation to insure a maximum interior 45 db CNEL in new residential, educational, and health-related uses in areas subject to exterior noise levels of 65 CNEL or greater.
- N-3** Utilize the Table Listing Land Use Compatibility for Airport Noise Environments in evaluating projects within the planning boundaries.
- N-4** Encourage local agencies to adopt procedures to ensure that prospective property owners in aircraft noise exposure areas above a current or anticipated 60 db CNEL are informed of these noise levels and of any land use restrictions associated with high noise exposure.

Policies related to safety

- S-1** Establish "runway protection zones" contiguous to the ends of each runway. These runway protection zones shall be identical to the FAA's runway protection zone (formally called clear zone). (See Appendix)
- S-2** Prohibit above ground storage of more than 100 gallons of flammable liquids or toxic materials on any one net acre in a designated runway protection zone. It is recommended that these materials be stored underground.
- S-3** Prohibit, within a runway protection zone, 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 take-off or toward an aircraft engaged in a final approach toward landing at an airport.
- S-4** Prohibit, within a designated runway protection zone, the erection or growth of objects which rise above an approach surface unless supported by evidence that it does not create a safety hazard and is approved by the FAA.
- S-5** Prohibit uses which would attract large concentrations of birds, emit smoke, or which may otherwise affect safe air navigation.
- S-6** Prohibit uses which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
- S-7** Comply with the height restriction standards and procedures set forth in FAR Part 77.

V. STATEMENT OF LAND USE COMPATIBILITY

<i>LAND USE COMPATIBILITY TABLE</i>						
	<i>Satisfactory</i>					
	<i>Caution. Review Noise Insulation Needs</i>					
	<i>Avoid Land Use Unless Related to Airport Services</i>					
<i>Land Use Category</i>	<i>Community Noise Exposure</i>					
	<i>55</i>	<i>60</i>	<i>65</i>	<i>70</i>	<i>75</i>	
<i>Residential</i>						
<i>Educational Facilities</i>						
<i>Commercial</i>						
<i>Industrial</i>						
<i>Agriculture</i>						
<i>Recreation</i>						

Consider FAR Part 150 for commercial and recreational uses above the 75 CNEL.

VI. PLAN CONSISTENCY AND IMPLEMENTATION

General and Specific Plans

State law requires that general plans and specific plans be consistent with the ALUC land use policy. Once a CLUP is adopted, local agencies must submit these plans to the ALUC for a consistency determination.

Amendments to General or Specific Plans

When a city whose territory falls within the planning boundary for a particular airport amends its general plan or specific plans, or makes significant amendments to its zoning ordinances or its building regulations which may affect the CLUP, referrals must be made to the ALUC for determination that the change is consistent with the CLUP.

AIRPORT MASTER PLANS

Before the adoption or modification of an airport master plan, (See discussion of airport master plans on page 2) the airport operator must submit the appropriate documents to the ALUC for a determination of consistency.

Amending the CLUP

Amendments to the CLUP may be necessitated by changes in airport size, changes in the number or type of aircraft using a particular airport, lengthening of runways, changes in State law, need to clarify existing policies or add new ones, or for other reasons.

State law limits amendments of the CLUP to one per year. Final decision on the proposed amendment will be made by the ALUC at a noticed public hearing. After adoption of an amendment, copies are sent to the affected jurisdictions and the State Division of Aeronautics.

Amendments to the CLUP must be reflected in the general plans and any specific plans of the affected jurisdictions. Local jurisdictions are given 180 days upon receipt of a CLUP amendment to amend their plans as necessary in order to maintain consistency.

If the jurisdiction disagrees with changes in the CLUP, they have the option of overriding with a 2/3 vote upon making specific findings as required by State law.

Procedures for Submitting Projects to the ALUC for Review

Within the planning boundaries established by the Airport Land Use Commission, proposed general plan or specific plan amendments and substantial changes to a zoning or building ordinance made by a local agency which affects the CLUP shall be submitted to the ALUC for determination of consistency with the CLUP.

ALUC staff will review all amendments as described above referred by local agencies. In certain cases, the ALUC Administrative Officer may make the determination of plan consistency. In more complicated cases, ALUC staff will submit the proposed project to the Commission for the determination. Under State law, the ALUC must make a determination of plan consistency within 60 days of project referral. If the ALUC fails to make the determination within that period, the proposed action shall be deemed consistent with the CLUP.

At the public hearing, the ALUC will consider public testimony and make a finding of project consistency or inconsistency with the policies in the CLUP. Such a finding may be conditional. After a decision is made by the Airport Land Use Commission, a written statement of that determination shall be submitted by the Commission Chairman to the public agency that filed the application. Such notification shall take place within 30 days of the Commission's decision.

If the application submitted by the public agency is found to be inconsistent with the CLUP, the public agency may either amend the proposal to be consistent or hold a public hearing to reconsider the action of the Airport Land Use Commission. The public agency, by a 2/3 vote of its governing board, may overrule the ALUC action if specific findings are made. The most important consequence of an override is to grant immunity to the airport operator for liability insofar as damages to property or personal injury under the specific circumstances listed in the Public Utilities Code. This immunity recognizes that the airport operators have no control over the development around airports and should not be held liable for land use decisions that neither they nor the ALUC deem to be appropriate. (It is important to note that an override does not transfer liability to the overriding jurisdiction, but simply grants limited immunity to the airport operator.

To supplement this section, the ALUC adopted a separate Review Procedures document on December 1, 2004. The document provides additional guidance to the ALUC and applicants and may be appropriate in certain situations. A copy of the Review Procedures document is available at the ALUC website.
<http://planning.co.la.ca.us/ALUC.htm>

GLOSSARY

Accident Potential Zones (APZs): Designated areas of higher likelihood of accidents; accident potential zones for military airports are developed by reviewing the accident history of the airport, usually as part of an AICUZ study.

Acoustical Study: A study performed by a person qualified in acoustical analyses, identifying construction materials and techniques required to achieve noise level reduction in residences and offices as specified by the ALUC plan.

Air Carrier: Commercial aircraft operating pursuant to a federal certificate of public convenience and necessity, issued by the Civil Aeronautics Board.

Airport: An area of land or water used or intended to be used for the landing and takeoff of aircraft, and includes its buildings and facilities, if any

Airport Control Tower: A facility that through the use of air/ground communications, visual signalling, and other devices, provides air traffic control services to airborne aircraft in the vicinity of the airport and to aircraft operating on the airport/airfield movement area.

Airport Hazard: Any structure or object of natural growth located on or in the vicinity of a public-use airport, or any use of land near such airport, that obstructs the airspace required for the flight of aircraft in landing or taking off at such airport or is otherwise hazardous to such landing or taking off of aircraft.

Airport Land Use Commission (ALUC): A State-authorized body existing in each county having the responsibility to develop plans for achieving land use compatibility between airports and their environs.

Airport Layout Plan: Depicts existing and proposed airport facilities and land uses, their locations, and the pertinent clearance and dimensional information required to show conformance with the applicable standards. It shows the airport location, clear zones, approach areas, and other environmental features that may influence airport usage and expansion capabilities, and includes the following elements:

- ▶ airport layout
- ▶ location map
- ▶ vicinity map
- ▶ basic data table
- ▶ wind information

Airport Master Plan: A plan to provide guidelines for future development of an airport which will satisfy aviation demand and be compatible with the environment, community development, other modes of transportation, and other airports.

Airport Noise Control and Land Use Compatibility (ANCLUC) Study: A study tailored to the needs of the community and the airport, and designed to produce a variety of recommendations with regard to airport operations procedures, land use planning, and public involvement, which if implemented would limit the impacts of airport and aircraft noise on the airport environs.

Air Traffic: Aircraft operating in the air or on an airport surface, exclusive of loading ramps and parking areas.

Altitude: The height of a point, measured in feet Above Ground Level (AGL) or from Mean Sea Level (MSL).

ALUC Project: Any action under consideration by a local public agency or airport operator which is subject to ALUC review. Under existing State ALUC law, such actions include amendment of a general plan or specific plan or approval of a zoning ordinance or building regulation affecting land use within an ALUC planning boundary. It also includes plans for any proposed new airport or heliport and modification of an airport master plan by the airport owner.

Ambient Noise Level: Background noise level, the normal or existing level of environmental noise at a given location.

Avigation Easement: Avigation easements are used to grant to the airport rights of the subject land. The most commonly granted rights are: right of flight at any altitude above the acquired easement surfaces, right to cause noise, vibrations, dust and fuel particle emissions, and the right to prevent construction or growth of all structures, objects or natural growth above the acquired easement surfaces. Avigation easements also contain provisions releasing the aircraft operator from liability under specified conditions, waiving the property owner's right to sue, and continuing the easement on the transfer of ownership.

Business Jet: Generally, twin engine turbojet/turboprop aircraft, a high percentage of which are owned by private companies who use the aircraft for business purposes.

Clear Zone: (Runway Protection Zone) Defined in Federal Aviation Regulations, Part 152.9(b): an area at ground level, extending beyond the runway primary surface and underlying the approach

Surface; these zones, which include all of the area out to a point where the approach surface reaches 50 feet above ground level, are presented in detail on the

Airport Layout Plan for each airport. The federal government requires that the airport owner have an "adequate property interest" in the clear-zone area in order that the requirements of FAR Part 77 can be met and the area protected from future encroachments. Adequate property interest may be in the form of ownership in fee simple (the most preferred) or lease (provided it is long term) or any other demonstration of legal ability to prevent future obstructions in the runway clear zone.

Community Noise Equivalent Level (CNEL): Average daily noise level, averaged for each of the 24 hours, and weighted more heavily during evening and nighttime hours to account for the lower tolerance of persons to noise during those hours.

Commuter Air Carrier: An air carrier which performs at least five round trips per week between two or more points and publishes flight schedules of its operating times and destinations. These airlines are exempt from some of the regulations covering large carriers. Commuter airlines must be certified by the FAA and must comply with the flight and safety regulations appropriate to the size and aircraft operated. Commuters may operate aircraft seating up to 60 passengers. If the carrier elects to apply for a certificate of public convenience and necessity from the Civil Aeronautics Board, larger aircraft may be operated.

Consistency: An action, program, or project is consistent with the general plan if it, considering all its aspects, will further the objectives and policies of the general plan and not obstruct their attainment.

dBA: A-weighted sound level, in decibels, as measured on a sound level meter equipped with weighing networks that represent the way the human ear hears certain sounds. Overall readings can be taken with weighing networks which are called A-scale or C-scale settings on the meter. These scales do not represent the true sound pressure level because some of the sound has been filtered out. The A-scale setting filters out as much as 20 to 40 dB of the sound below 100 Hz, while the B-scale setting filters out as much as 5 to 20 dB of the sound below 100 Hz. The C-scale setting retains almost all the sound signal over the full frequency range. However, the B-scale and C-scale settings are rarely used.

Decibel, dB: A unit for describing the intensity or level of sound, equal to 20 times the logarithm to the base 10 of the pressure of the sound measured to a standard reference pressure.

Federal Aviation Administration (FAA): A federal agency charged with regulating air commerce to promote its safety and development, encouraging and developing civil aviation, air traffic control, and air navigation and promoting the development of a national system of airports.

Federal Aviation Regulations (FAR): Regulations issued by the FAA to regulate air commerce; issued as separate "Parts", e.g., part 77.

FAR Part 77: Establishes standards for determining obstructions in navigable airspace, sets forth requirements for notice of proposed construction or alteration and provides for aeronautical studies of obstructions to air navigation.

Frequency: The number of cycles per second (CPS) of a sound.

General Aviation: All types of aviation other than that performed by air carriers and the military.

Heliport: An area of land or water used or intended to be used for the landing and takeoff of helicopters, and includes its buildings and facilities, if any.

Intensity: The intensity of a particular sound, determined by measuring its pressure relative to a base or reference sound pressure, and expressed in decibels, dB.

Intermittent Noise: Noise that is not constantly present, but occurs periodically throughout the day.

Knots: nautical miles per hours, the most common way to measure aircraft speed.

Ldn: Average day-night sound level.

Military: Refers to U.S. Army, Navy, Air Force, Marines, Coast Guard, Air National Guard.

Noise: Defined subjectively as unwanted sound. The measurement of noise involves understanding three characteristics of sound: intensity, frequency, and duration.

Noise Abatement Procedures: Changes in runway usage, flight approach and departure routes and procedures, and vehicle movement, such as ground maneuvers or other air traffic procedures, which shift aviation impacts away from noise sensitive areas (e.g., runway use programs and preferred arrivals and departures).

Noise Complaint: A recorded complaint concerning airport noise made by an individual and kept on file at the airport.

Noise Contours: Lines drawn about a noise source indicating constant energy levels of noise exposure. CNEL and Ldn are the measures used to describe community exposure to noise.

Noise Impact Area: The area in square statute miles enclosed by the noise impact boundary less that area of land usage within the boundary that is considered to be compatible with the actual noise environment.

Noise Insulation: Also called sound insulation, the materials and construction techniques applied to a structure to achieve outside to inside noise reduction.

Nonconforming Use: A pre-existing structure, tree, or use of land, which is inconsistent with the provisions of the CLUP, local general or specific plans, or airport master plans.

Obstruction: Any object of natural growth, terrain, or permanent or temporary construction or alteration, including equipment or materials used therein, the height of which exceeds the obstruction standards of subpart C of FAR Part 77 "Objects Affecting Navigable Airspace."

Operation: An aircraft takeoff or landing.

Planning Boundary: The area designated by the ALUC surrounding each airport pursuant to section 21675(c) of the Public Utilities Code in which the CLUP applies.

Public Use Airport: Publicly or privately owned airport that offers the use of its facilities to the public without prior notice or special invitation or clearance, and that has been issued a California Airport Permit by the Division of Aeronautics of the California Department of Transportation.

Runway: A defined area on a land airport, prepared for the landing and takeoff of aircraft. Runways are normally numbered in relation to their magnetic direction.

Runway Protection Zone: A trapezoidal area at ground level, beyond the runway and under the control of the airport authorities, for the purpose of protecting the safety of approaches and keeping the area clear of the congregation of people. The runway protection zone begins at the end of each primary surface and is centered upon the extended runway centerline. The term runway protection zone has replaced the term clear zone.

Runway Safety Area: A cleared, drained, graded and preferably turfed area symmetrically located about the runway which under normal conditions is capable of supporting fire fighting and rescue equipment and of accommodating the occasional passage of aircraft

without causing major damage to the aircraft. This area must be free of objects.

Safety Zone(s): The areas(s) in the vicinity of an airport in which land use restrictions are established to protect the safety of the public.

Single Event Noise Exposure Level (SENEL) or Sound Exposure Level (SEL): The A-weighted sound level of a single noise event, such as an aircraft overflight, measured over the time interval between the initial and final times for which the noise level exceeds a threshold level and normalized to a reference duration of 1 second. SENEL and SEL values are identical: SENEL is used in California, SEL is adopted by the EPA and the FAA.

The SENEL (SEL) expresses the level of a continuous 1-second signal that contains the same amount of energy as the entire noise event. This value is not equal to the maximum A-level occurring during the noise event. Aircraft noise events last more than 1 second. SENEL/SEL values will be higher than the maximum A-level for the same events.

Structure: An object, including a mobile object, constructed or installed by man, including but without limitation, buildings, towers cranes, smokestacks, earth formation, and overhead transmission lines.

Traffic Pattern: Projection on the ground of the aerial path associated with an aircraft on the crosswind, downwind, base, and final approach legs of the approach/departure process:

- ▶ **Crosswind Leg.** A flight path at right angles to the landing runway off its upwind end.
- ▶ **Downwind Leg.** A flight path parallel to the landing runway in the direction opposite to landing. The downwind leg normally extends between the crosswind leg and the base leg.
- ▶ **Base Leg.** A flight path at right angles to the landing runway off its approach end. The base leg normally extends from the downwind leg to the intersection of the extended runway centerline.
- ▶ **Final Approach.** A flight path in the direction of landing along the extended runway centerline. The final approach normally extends from the base leg to the runway. An aircraft making a straight-in approach VFR is considered to be on final approach.

BIBLIOGRAPHY

Airport Master Plans

Brackett Field (prepared by P&D Technologies)
Compton Airport (prepared by Hodges & Shutt)
Hawthorne Municipal Airport (prepared by Foresite West)
Torrance Airport
Whiteman Airport (prepared by Hodges & Shutt)

Alameda County Airport Land Use Commission

Airport Land Use Policy Plan 1973

Federal Aviation Administration

Advisory Circular 150
Regulations Part 77

City of Inglewood

Noise Element of the General Plan 1987 (prepared by Mestre Greve Associates)

Kern County

Airport Land Use Planning Handbook 1990 (prepared by Hodges & Shutt)

Long Beach Airport

History 1989

City of Los Angeles

Department of Airports 1990 Annual Report

Los Angeles County

Department of Regional Planning Airport Survey 1989
General Plan Background Report 1980
Noise Element of the General Plan
Safety Element of the General Plan

Orange County

ALUC proposed amendments to Airport Environs Land Use Plan 1990
John Wayne Airport Draft ANCLUC Plan 1980 (prepared by VTN Consolidated Inc.)

City of Palmdale

Draft Airport Corridor Specific Plan 1991
Joint Land Use Committee Policy Recommendations 1991

Santa Clara County Airport Land Use Commission

Land Use Plan for Areas Surrounding Airports

San Diego Association of Governments

Implementation of SB 255

City of Santa Monica

Santa Monica Airport Agreement 1984

State of California Department of Transportation

Division of Aeronautics Airport Land Use Planning Handbook 1983

Torrance Municipal Airport

Your Neighbor Torrance Municipal Airport, An Overview

Appendix Contents

Public Utilities Code

Federal Air Regulations: Part 77

FAA Advisory Circular 70/7460-2K

CALIFORNIA CODES
PUBLIC UTILITIES CODE

SECTION 21670-21679.5

21670. (a) The Legislature hereby finds and declares that:

(1) It is in the public interest to provide for the orderly development of each public use airport in this state and the area surrounding these airports so as to promote the overall goals and objectives of the California airport noise standards adopted pursuant to Section 21669 and to prevent the creation of new noise and safety problems.

(2) It is the purpose of this article to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses.

(b) In order to achieve the purposes of this article, every county in which there is located an airport which is served by a scheduled airline shall establish an airport land use commission. Every county, in which there is located an airport which is not served by a scheduled airline, but is operated for the benefit of the general public, shall establish an airport land use commission, except that the board of supervisors of the county may, after consultation with the appropriate airport operators and affected local entities and after a public hearing, adopt a resolution finding that there are no noise, public safety, or land use issues affecting any airport in the county which require the creation of a commission and declaring the county exempt from that requirement. The board shall, in this event, transmit a copy of the resolution to the Director of Transportation.

For purposes of this section, "commission" means an airport land use commission. Each commission shall consist of seven members to be selected as follows:

(1) Two representing the cities in the county, appointed by a city selection committee comprised of the mayors of all the cities within that county, except that if there are any cities contiguous or adjacent to the qualifying airport, at least one representative shall be appointed therefrom. If there are no cities within a county, the number of representatives provided for by paragraphs (2) and (3) shall each be increased by one.

(2) Two representing the county, appointed by the board of supervisors.

(3) Two having expertise in aviation, appointed by a selection committee comprised of the managers of all of the public airports within that county.

(4) One representing the general public, appointed by the other six members of the commission.

(c) Public officers, whether elected or appointed, may be appointed and serve as members of the commission during their terms of public office.

(d) Each member shall promptly appoint a single proxy to represent him or her in commission affairs and to vote on all matters when the member is not in attendance. The proxy shall be designated in a signed written instrument which shall be kept on file at the commission offices, and the proxy shall serve at the pleasure of the appointing member. A vacancy in the office of proxy shall be filled promptly by appointment of a new proxy.

(e) A person having an "expertise in aviation" means a person who, by way of education, training, business, experience, vocation, or

CALIFORNIA CODES
PUBLIC UTILITIES CODE

avocation has acquired and possesses particular knowledge of, and familiarity with, the function, operation, and role of airports, or is an elected official of a local agency which owns or operates an airport.

(f) It is the intent of the Legislature to clarify that, for the purposes of this article, that special districts, school districts, and community college districts are included among the local agencies that are subject to airport land use laws and other requirements of this article.

21670.1. (a) Notwithstanding any other provision of this article, if the board of supervisors and the city selection committee of mayors in the county each makes a determination by a majority vote that proper land use planning can be accomplished through the actions of an appropriately designated body, then the body so designated shall assume the planning responsibilities of an airport land use commission as provided for in this article, and a commission need not be formed in that county.

(b) A body designated pursuant to subdivision (a) which does not include among its membership at least two members having an expertise in aviation, as defined in subdivision (e) of Section 21670, shall, when acting in the capacity of an airport land use commission, be augmented so that body, as augmented, will have at least two members having that expertise. The commission shall be constituted pursuant to this section on and after March 1, 1988.

(c) (1) Notwithstanding subdivisions (a) and (b), and subdivision (b) of Section 21670, if the board of supervisors of a county and each affected city in that county each makes a determination that proper land use planning pursuant to this article can be accomplished pursuant to this subdivision, then a commission need not be formed in that county.

(2) If the board of supervisors of a county and each affected city makes a determination that proper land use planning may be accomplished and a commission is not formed pursuant to paragraph (1), that county and the appropriate affected cities having jurisdiction over an airport, subject to the review and approval by the Division of Aeronautics of the department, shall do all of the following:

(A) Adopt processes for the preparation, adoption, and amendment of the airport land use compatibility plan for each airport that is served by a scheduled airline or operated for the benefit of the general public.

(B) Adopt processes for the notification of the general public, landowners, interested groups, and other public agencies regarding the preparation, adoption, and amendment of the airport land use compatibility plans.

(C) Adopt processes for the mediation of disputes arising from the preparation, adoption, and amendment of the airport land use compatibility plans.

(D) Adopt processes for the amendment of general and specific plans to be consistent with the airport land use compatibility plans.

(E) Designate the agency that shall be responsible of the preparation, adoption, and amendment of each airport land use compatibility plan.

(3) The Division of Aeronautics of the department shall review the

CALIFORNIA CODES
PUBLIC UTILITIES CODE

processes adopted pursuant to paragraph (2), and shall approve the processes if the division determines that the processes are consistent with the procedure required by this article and will do all of the following:

(A) Result in the preparation, adoption, and implementation of plans within a reasonable amount of time.

(B) Rely on the height, use, noise, safety, and density criteria that are compatible with airport operations, as established by this article, and referred to as the Airport Land Use Planning Handbook, published by the division, and any applicable federal aviation regulations, including, but not limited to, Part 77 (commencing with Section 77.1) of Title 14 of the Code of Federal Regulations.

(C) Provide adequate opportunities for notice to, review of, and comment by the general public, landowners, interested groups, and other public agencies.

(4) If the county does not comply with the requirements of paragraph (2) within 120 days, then the airport land use compatibility plan and amendments shall not be considered adopted pursuant to this article and a commission shall be established within 90 days of the determination of noncompliance by the division and an airport land use compatibility plan shall be adopted pursuant to this article within 90 days of the establishment of the commission.

(d) A commission need not be formed in a county that has contracted for the preparation of airport land use compatibility plans with the Division of Aeronautics under the California Aid to Airports Program (Title 21 (commencing with Section 4050) of the California Code of Regulations), Project Ker-VAR 90-1, and that submits all of the following information to the Division of Aeronautics for review and comment that the county and the cities affected by the airports within the county, as defined by the airport land use compatibility plans:

(1) Agree to adopt and implement the airport land use compatibility plans that have been developed under contract.

(2) Incorporated the height, use, noise, safety, and density criteria that are compatible with airport operations as established by this article, and referred to as the Airport Land Use Planning Handbook, published by the division, and any applicable federal aviation regulations, including, but not limited to, Part 77 (commencing with Section 77.1) of Title 14 of the Code of Federal Regulations as part of the general and specific plans for the county and for each affected city.

(3) If the county does not comply with this subdivision on or before May 1, 1995, then a commission shall be established in accordance with this article.

(e) (1) A commission need not be formed in a county if all of the following conditions are met:

(A) The county has only one public use airport that is owned by a city.

(B) (i) The county and the affected city adopt the elements in paragraph (2) of subdivision (d), as part of their general and specific plans for the county and the affected city.

(ii) The general and specific plans shall be submitted, upon adoption, to the Division of Aeronautics. If the county and the affected city do not submit the elements specified in paragraph (2) of subdivision (d), on or before May 1, 1996, then a commission shall be established in accordance with this article.

CALIFORNIA CODES
PUBLIC UTILITIES CODE

21670.2. (a) Sections 21670 and 21670.1 do not apply to the County of Los Angeles. In that county, the county regional planning commission has the responsibility for coordinating the airport planning of public agencies within the county. In instances where impasses result relative to this planning, an appeal may be made to the county regional planning commission by any public agency involved. The action taken by the county regional planning commission on an appeal may be overruled by a four-fifths vote of the governing body of a public agency whose planning led to the appeal.

(b) By January 1, 1992, the county regional planning commission shall adopt the airport land use compatibility plans required pursuant to Section 21675.

(c) Sections 21675.1, 21675.2, and 21679.5 do not apply to the County of Los Angeles until January 1, 1992. If the airport land use compatibility plans required pursuant to Section 21675 are not adopted by the county regional planning commission by January 1, 1992, Sections 21675.1 and 21675.2 shall apply to the County of Los Angeles until the airport land use compatibility plans are adopted.

21670.3. (a) Sections 21670 and 21670.1 do not apply to the County of San Diego. In that county, the San Diego County Regional Airport Authority, as established pursuant to Section 170002, is responsible for coordinating the airport planning of public agencies within the county and shall, on or before June 30, 2005, after reviewing the existing comprehensive land use plan adopted pursuant to Section 21675, adopt a comprehensive land use plan.

(b) Any comprehensive land use plan developed pursuant to Section 21675 and adopted pursuant to Section 21675.1 by the San Diego Association of Governments shall remain in effect until June 30, 2005, unless the San Diego County Regional Airport Authority adopts a plan prior to that date pursuant to subdivision (a).

21670.4. (a) As used in this section, "intercounty airport" means any airport bisected by a county line through its runways, runway protection zones, inner safety zones, inner turning zones, outer safety zones, or sideline safety zones, as defined by the department's Airport Land Use Planning Handbook and referenced in the airport land use compatibility plan formulated under Section 21675.

(b) It is the purpose of this section to provide the opportunity to establish a separate airport land use commission so that an intercounty airport may be served by a single airport land use planning agency, rather than having to look separately to the airport land use commissions of the affected counties.

(c) In addition to the airport land use commissions created under Section 21670 or the alternatives established under Section 21670.1, for their respective counties, the boards of supervisors and city selection committees for the affected counties, by independent majority vote of each county's two delegations, for any intercounty airport, may do either of the following:

CALIFORNIA CODES
PUBLIC UTILITIES CODE

(1) Establish a single separate airport land use commission for that airport. That commission shall consist of seven members to be selected as follows:

(A) One representing the cities in each of the counties, appointed by that county's city selection committee.

(B) One representing each of the counties, appointed by the board of supervisors of each county.

(C) One from each county having expertise in aviation, appointed by a selection committee comprised of the managers of all the public airports within that county.

(D) One representing the general public, appointed by the other six members of the commission.

(2) In accordance with subdivision (a) or (b) of Section 21670.1, designate an existing appropriate entity as that airport's land use commission.

21671. In any county where there is an airport operated for the general public which is owned by a city or district in another county or by another county, one of the representatives provided by paragraph (1) of subdivision (b) of Section 21670 shall be appointed by the city selection committee of mayors of the cities of the county in which the owner of that airport is located, and one of the representatives provided by paragraph (2) of subdivision (b) of Section 21670 shall be appointed by the board of supervisors of the county in which the owner of that airport is located.

21671.5. (a) Except for the terms of office of the members of the first commission, the term of office of each member shall be four years and until the appointment and qualification of his or her successor. The members of the first commission shall classify themselves by lot so that the term of office of one member is one year, of two members is two years, of two members is three years, and of two members is four years. The body that originally appointed a member whose term has expired shall appoint his or her successor for a full term of four years. Any member may be removed at any time and without cause by the body appointing that member. The expiration date of the term of office of each member shall be the first Monday in May in the year in which that member's term is to expire. Any vacancy in the membership of the commission shall be filled for the unexpired term by appointment by the body which originally appointed the member whose office has become vacant. The chairperson of the commission shall be selected by the members thereof.

(b) Compensation, if any, shall be determined by the board of supervisors.

(c) Staff assistance, including the mailing of notices and the keeping of minutes and necessary quarters, equipment, and supplies shall be provided by the county. The usual and necessary operating expenses of the commission shall be a county charge.

(d) Notwithstanding any other provisions of this article, the commission shall not employ any personnel either as employees or independent contractors without the prior approval of the board of supervisors.

(e) The commission shall meet at the call of the commission

CALIFORNIA CODES
PUBLIC UTILITIES CODE

chairperson or at the request of the majority of the commission members. A majority of the commission members shall constitute a quorum for the transaction of business. No action shall be taken by the commission except by the recorded vote of a majority of the full membership.

(f) The commission may establish a schedule of fees necessary to comply with this article. Those fees shall be charged to the proponents of actions, regulations, or permits, shall not exceed the estimated reasonable cost of providing the service, and shall be imposed pursuant to Section 66016 of the Government Code. Except as provided in subdivision (g), after June 30, 1991, a commission that has not adopted the airport land use compatibility plan required by Section 21675 shall not charge fees pursuant to this subdivision until the commission adopts the plan.

(g) In any county that has undertaken by contract or otherwise completed airport land use compatibility plans for at least one-half of all public use airports in the county, the commission may continue to charge fees necessary to comply with this article until June 30, 1992, and, if the airport land use compatibility plans are complete by that date, may continue charging fees after June 30, 1992. If the airport land use compatibility plans are not complete by June 30, 1992, the commission shall not charge fees pursuant to subdivision (f) until the commission adopts the land use plans.

21672. Each commission shall adopt rules and regulations with respect to the temporary disqualification of its members from participating in the review or adoption of a proposal because of conflict of interest and with respect to appointment of substitute members in such cases.

21673. In any county not having a commission or a body designated to carry out the responsibilities of a commission, any owner of a public airport may initiate proceedings for the creation of a commission by presenting a request to the board of supervisors that a commission be created and showing the need therefor to the satisfaction of the board of supervisors.

21674. The commission has the following powers and duties, subject to the limitations upon its jurisdiction set forth in Section 21676:

(a) To assist local agencies in ensuring compatible land uses in the vicinity of all new airports and in the vicinity of existing airports to the extent that the land in the vicinity of those airports is not already devoted to incompatible uses.

(b) To coordinate planning at the state, regional, and local levels so as to provide for the orderly development of air transportation, while at the same time protecting the public health, safety, and welfare.

(c) To prepare and adopt an airport land use compatibility plan pursuant to Section 21675.

CALIFORNIA CODES
PUBLIC UTILITIES CODE

(d) To review the plans, regulations, and other actions of local agencies and airport operators pursuant to Section 21676.

(e) The powers of the commission shall in no way be construed to give the commission jurisdiction over the operation of any airport.

(f) In order to carry out its responsibilities, the commission may adopt rules and regulations consistent with this article.

21674.5. (a) The Department of Transportation shall develop and implement a program or programs to assist in the training and development of the staff of airport land use commissions, after consulting with airport land use commissions, cities, counties, and other appropriate public entities.

(b) The training and development program or programs are intended to assist the staff of airport land use commissions in addressing high priority needs, and may include, but need not be limited to, the following:

(1) The establishment of a process for the development and adoption of airport land use compatibility plans.

(2) The development of criteria for determining airport land use planning boundaries.

(3) The identification of essential elements that should be included in the airport land use compatibility plans.

(4) Appropriate criteria and procedures for reviewing proposed developments and determining whether proposed developments are compatible with the airport use.

(5) Any other organizational, operational, procedural, or technical responsibilities and functions that the department determines to be appropriate to provide to commission staff and for which it determines there is a need for staff training or development.

(c) The department may provide training and development programs for airport land use commission staff pursuant to this section by any means it deems appropriate. Those programs may be presented in any of the following ways:

(1) By offering formal courses or training programs.

(2) By sponsoring or assisting in the organization and sponsorship of conferences, seminars, or other similar events.

(3) By producing and making available written information.

(4) Any other feasible method of providing information and assisting in the training and development of airport land use commission staff.

21674.7. (a) An airport land use commission that formulates, adopts, or amends an airport land use compatibility plan shall be guided by information prepared and updated pursuant to Section 21674.5 and referred to as the Airport Land Use Planning Handbook published by the Division of Aeronautics of the Department of Transportation.

(b) It is the intent of the Legislature to discourage incompatible land uses near existing airports. Therefore, prior to granting permits for the renovation or remodeling of an existing building, structure, or facility, and before the construction of a new building, it is the intent of the Legislature that local agencies

CALIFORNIA CODES
PUBLIC UTILITIES CODE

shall be guided by the height, use, noise, safety, and density criteria that are compatible with airport operations, as established by this article, and referred to as the Airport Land Use Planning Handbook, published by the division, and any applicable federal aviation regulations, including, but not limited to, Part 77 (commencing with Section 77.1) of Title 14 of the Code of Federal Regulations, to the extent that the criteria has been incorporated into the plan prepared by a commission pursuant to Section 21675. This subdivision does not limit the jurisdiction of a commission as established by this article. This subdivision does not limit the authority of local agencies to overrule commission actions or recommendations pursuant to Sections 21676, 21676.5, or 21677.

21675. (a) Each commission shall formulate a comprehensive land use plan that will provide for the orderly growth of each public airport and the area surrounding the airport within the jurisdiction of the commission, and will safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general. The commission plan shall include and shall be based on a long-range master plan or an airport layout plan, as determined by the Division of Aeronautics of the Department of Transportation, that reflects the anticipated growth of the airport during at least the next 20 years.

In formulating a land use plan, the commission may develop height restrictions on buildings, specify use of land, and determine building standards, including soundproofing adjacent to airports, within the planning area. The comprehensive land use plan shall be reviewed as often as necessary in order to accomplish its purposes, but shall not be amended more than once in any calendar year.

(b) The commission shall include, within its plan formulated pursuant to subdivision (a), the area within the jurisdiction of the commission surrounding any military airport for all of the purposes specified in subdivision (a). The plan shall be consistent with the safety and noise standards in the Air Installation Compatible Use Zone prepared for that military airport. This subdivision does not give the commission any jurisdiction or authority over the territory or operations of any military airport.

(c) The planning boundaries shall be established by the commission after hearing and consultation with the involved agencies.

(d) The commission shall submit to the Division of Aeronautics of the department one copy of the plan and each amendment to the plan.

(e) If a comprehensive land use plan does not include the matters required to be included pursuant to this article, the Division of Aeronautics of the department shall notify the commission responsible for the plan.

21675.1. (a) By June 30, 1991, each commission shall adopt the airport land use compatibility plan required pursuant to Section 21675, except that any county that has undertaken by contract or otherwise completed airport land use compatibility plans for at least one-half of all public use airports in the county, shall adopt that airport land use compatibility plan on or before June 30, 1992.

(b) Until a commission adopts an airport land use compatibility

CALIFORNIA CODES
PUBLIC UTILITIES CODE

plan, a city or county shall first submit all actions, regulations, and permits within the vicinity of a public airport to the commission for review and approval. Before the commission approves or disapproves any actions, regulations, or permits, the commission shall give public notice in the same manner as the city or county is required to give for those actions, regulations, or permits. As used in this section, "vicinity" means land that will be included or reasonably could be included within the airport land use compatibility plan. If the commission has not designated a study area for the airport land use compatibility plan, then "vicinity" means land within two miles of the boundary of a public airport.

(c) The commission may approve an action, regulation, or permit if it finds, based on substantial evidence in the record, all of the following:

(1) The commission is making substantial progress toward the completion of the airport land use compatibility plan.

(2) There is a reasonable probability that the action, regulation, or permit will be consistent with the airport land use compatibility plan being prepared by the commission.

(3) There is little or no probability of substantial detriment to or interference with the future adopted airport land use compatibility plan if the action, regulation, or permit is ultimately inconsistent with the airport land use compatibility plan.

(d) If the commission disapproves an action, regulation, or permit, the commission shall notify the city or county. The city or county may overrule the commission, by a two-thirds vote of its governing body, if it makes specific findings that the proposed action, regulation, or permit is consistent with the purposes of this article, as stated in Section 21670.

(e) If a city or county overrules the commission pursuant to subdivision (d), that action shall not relieve the city or county from further compliance with this article after the commission adopts the airport land use compatibility plan.

(f) If a city or county overrules the commission pursuant to subdivision (d) with respect to a publicly owned airport that the city or county does not operate, the operator of the airport is not liable for damages to property or personal injury resulting from the city's or county's decision to proceed with the action, regulation, or permit.

(g) A commission may adopt rules and regulations that exempt any ministerial permit for single-family dwellings from the requirements of subdivision (b) if it makes the findings required pursuant to subdivision (c) for the proposed rules and regulations, except that the rules and regulations may not exempt either of the following:

(1) More than two single-family dwellings by the same applicant within a subdivision prior to June 30, 1991.

(2) Single-family dwellings in a subdivision where 25 percent or more of the parcels are undeveloped.

21675.2. (a) If a commission fails to act to approve or disapprove any actions, regulations, or permits within 60 days of receiving the request pursuant to Section 21675.1, the applicant or his or her representative may file an action pursuant to Section 1094.5 of the Code of Civil Procedure to compel the commission to act, and the court shall give the proceedings preference over all other actions or

CALIFORNIA CODES
PUBLIC UTILITIES CODE

proceedings, except previously filed pending matters of the same character.

(b) The action, regulation, or permit shall be deemed approved only if the public notice required by this subdivision has occurred. If the applicant has provided seven days advance notice to the commission of the intent to provide public notice pursuant to this subdivision, then, not earlier than the date of the expiration of the time limit established by Section 21675.1, an applicant may provide the required public notice. If the applicant chooses to provide public notice, that notice shall include a description of the proposed action, regulation, or permit substantially similar to the descriptions which are commonly used in public notices by the commission, the location of any proposed development, the application number, the name and address of the commission, and a statement that the action, regulation, or permit shall be deemed approved if the commission has not acted within 60 days. If the applicant has provided the public notice specified in this subdivision, the time limit for action by the commission shall be extended to 60 days after the public notice is provided. If the applicant provides notice pursuant to this section, the commission shall refund to the applicant any fees which were collected for providing notice and which were not used for that purpose.

(c) Failure of an applicant to submit complete or adequate information pursuant to Sections 65943 to 65946, inclusive, of the Government Code, may constitute grounds for disapproval of actions, regulations, or permits.

(d) Nothing in this section diminishes the commission's legal responsibility to provide, where applicable, public notice and hearing before acting on an action, regulation, or permit.

21676. (a) Each local agency whose general plan includes areas covered by an airport land use compatibility plan shall, by July 1, 1983, submit a copy of its plan or specific plans to the airport land use commission. The commission shall determine by August 31, 1983, whether the plan or plans are consistent or inconsistent with the airport land use compatibility plan. If the plan or plans are inconsistent with the airport land use compatibility plan, the local agency shall be notified and that local agency shall have another hearing to reconsider its airport land use compatibility plans. The local agency may propose to overrule the commission after the hearing by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article stated in Section 21670. At least 45 days prior to the decision to overrule the commission, the local agency governing body shall provide the commission and the division a copy of the proposed decision and findings. The commission and the division may provide comments to the local agency governing body within 30 days of receiving the proposed decision and findings. If the commission or the division's comments are not available within this time limit, the local agency governing body may act without them. The comments by the division or the commission are advisory to the local agency governing body. The local agency governing body shall include comments from the commission and the division in the final record of any final decision to overrule the commission, which may only be adopted by a two-thirds vote of the governing body.

CALIFORNIA CODES
PUBLIC UTILITIES CODE

(b) Prior to the amendment of a general plan or specific plan, or the adoption or approval of a zoning ordinance or building regulation within the planning boundary established by the airport land use commission pursuant to Section 21675, the local agency shall first refer the proposed action to the commission. If the commission determines that the proposed action is inconsistent with the commission's plan, the referring agency shall be notified. The local agency may, after a public hearing, propose to overrule the commission by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article stated in Section 21670. At least 45 days prior to the decision to overrule the commission, the local agency governing body shall provide the commission and the division a copy of the proposed decision and findings. The commission and the division may provide comments to the local agency governing body within 30 days of receiving the proposed decision and findings. If the commission or the division's comments are not available within this time limit, the local agency governing body may act without them. The comments by the division or the commission are advisory to the local agency governing body. The local agency governing body shall include comments from the commission and the division in the public record of any final decision to overrule the commission, which may only be adopted by a two-thirds vote of the governing body.

(c) Each public agency owning any airport within the boundaries of an airport land use compatibility plan shall, prior to modification of its airport master plan, refer any proposed change to the airport land use commission. If the commission determines that the proposed action is inconsistent with the commission's plan, the referring agency shall be notified. The public agency may, after a public hearing, propose to overrule the commission by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article stated in Section 21670. At least 45 days prior to the decision to overrule the commission, the public agency governing body shall provide the commission and the division a copy of the proposed decision and findings. The commission and the division may provide comments to the public agency governing body within 30 days of receiving the proposed decision and findings. If the commission or the division's comments are not available within this time limit, the public agency governing body may act without them. The comments by the division or the commission are advisory to the public agency governing body. The public agency governing body shall include comments from the commission and the division in the final decision to overrule the commission, which may only be adopted by a two-thirds vote of the governing body.

(d) Each commission determination pursuant to subdivision (b) or (c) shall be made within 60 days from the date of referral of the proposed action. If a commission fails to make the determination within that period, the proposed action shall be deemed consistent with the airport land use compatibility plan.

21676.5. (a) If the commission finds that a local agency has not revised its general plan or specific plan or overruled the commission by a two-thirds vote of its governing body after making specific findings that the proposed action is consistent with the purposes of

CALIFORNIA CODES
PUBLIC UTILITIES CODE

this article as stated in Section 21670, the commission may require that the local agency submit all subsequent actions, regulations, and permits to the commission for review until its general plan or specific plan is revised or the specific findings are made. If, in the determination of the commission, an action, regulation, or permit of the local agency is inconsistent with the airport land use compatibility plan, the local agency shall be notified and that local agency shall hold a hearing to reconsider its plan. The local agency may propose to overrule the commission after the hearing by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article as stated in Section 21670. At least 45 days prior to the decision to overrule the commission, the local agency governing body shall provide the commission and the division a copy of the proposed decision and findings. The commission and the division may provide comments to the local agency governing body within 30 days of receiving the proposed decision and findings. If the commission or the division's comments are not available within this time limit, the local agency governing body may act without them. The comments by the division or the commission are advisory to the local agency governing body. The local agency governing body shall include comments from the commission and the division in the final decision to overrule the commission, which may only be adopted by a two-thirds vote of the governing body.

(b) Whenever the local agency has revised its general plan or specific plan or has overruled the commission pursuant to subdivision (a), the proposed action of the local agency shall not be subject to further commission review, unless the commission and the local agency agree that individual projects shall be reviewed by the commission.

21677. Notwithstanding the two-thirds vote required by Section 21676, any public agency in the County of Marin may overrule the Marin County Airport Land Use Commission by a majority vote of its governing body. At least 45 days prior to the decision to overrule the commission, the public agency governing body shall provide the commission and the division a copy of the proposed decision and findings. The commission and the division may provide comments to the public agency governing body within 30 days of receiving the proposed decision and findings. If the commission or the division's comments are not available within this time limit, the public agency governing body may act without them. The comments by the division or the commission are advisory to the public agency governing body. The public agency governing body shall include comments from the commission and the division in the public record of the final decision to overrule the commission, which may be adopted by a majority vote of the governing body.

21678. With respect to a publicly owned airport that a public agency does not operate, if the public agency pursuant to Section 21676, 21676.5, or 21677 overrules a commission's action or recommendation, the operator of the airport shall be immune from liability for damages to property or personal injury caused by or resulting directly or indirectly from the public agency's decision to

CALIFORNIA CODES
PUBLIC UTILITIES CODE

overrule the commission's action or recommendation.

21679. (a) In any county in which there is no airport land use commission or other body designated to assume the responsibilities of an airport land use commission, or in which the commission or other designated body has not adopted an airport land use compatibility plan, an interested party may initiate proceedings in a court of competent jurisdiction to postpone the effective date of a zoning change, a zoning variance, the issuance of a permit, or the adoption of a regulation by a local agency, that directly affects the use of land within one mile of the boundary of a public airport within the county.

(b) The court may issue an injunction that postpones the effective date of the zoning change, zoning variance, permit, or regulation until the governing body of the local agency that took the action does one of the following:

(1) In the case of an action that is a legislative act, adopts a resolution declaring that the proposed action is consistent with the purposes of this article stated in Section 21670.

(2) In the case of an action that is not a legislative act, adopts a resolution making findings based on substantial evidence in the record that the proposed action is consistent with the purposes of this article stated in Section 21670.

(3) Rescinds the action.

(4) Amends its action to make it consistent with the purposes of this article stated in Section 21670, and complies with either paragraph (1) or (2), whichever is applicable.

(c) The court shall not issue an injunction pursuant to subdivision (b) if the local agency that took the action demonstrates that the general plan and any applicable specific plan of the agency accomplishes the purposes of an airport land use compatibility plan as provided in Section 21675.

(d) An action brought pursuant to subdivision (a) shall be commenced within 30 days of the decision or within the appropriate time periods set by Section 21167 of the Public Resources Code, whichever is longer.

(e) If the governing body of the local agency adopts a resolution pursuant to subdivision (b) with respect to a publicly owned airport that the local agency does not operate, the operator of the airport shall be immune from liability for damages to property or personal injury from the local agency's decision to proceed with the zoning change, zoning variance, permit, or regulation.

(f) As used in this section, "interested party" means any owner of land within two miles of the boundary of the airport or any organization with a demonstrated interest in airport safety and efficiency.

21679.5. (a) Until June 30, 1991, no action pursuant to Section 21679 to postpone the effective date of a zoning change, a zoning variance, the issuance of a permit, or the adoption of a regulation by a local agency, directly affecting the use of land within one mile of the boundary of a public airport, shall be commenced in any county in which the commission or other designated body has not

CALIFORNIA CODES
PUBLIC UTILITIES CODE

adopted an airport land use compatibility plan, but is making substantial progress toward the completion of the airport land use compatibility plan.

(b) If a commission has been prevented from adopting the airport land use compatibility plan by June 30, 1991, or if the adopted airport land use compatibility plan could not become effective, because of a lawsuit involving the adoption of the airport land use compatibility plan, the June 30, 1991, date in subdivision (a) shall be extended by the period of time during which the lawsuit was pending in a court of competent jurisdiction.

(c) Any action pursuant to Section 21679 commenced prior to January 1, 1990, in a county in which the commission or other designated body has not adopted an airport land use compatibility plan, but is making substantial progress toward the completion of the airport land use compatibility plan, which has not proceeded to final judgment, shall be held in abeyance until June 30, 1991. If the commission or other designated body adopts an airport land use compatibility plan on or before June 30, 1991, the action shall be dismissed. If the commission or other designated body does not adopt an airport land use compatibility plan on or before June 30, 1991, the plaintiff or plaintiffs may proceed with the action.

(d) An action to postpone the effective date of a zoning change, a zoning variance, the issuance of a permit, or the adoption of a regulation by a local agency, directly affecting the use of land within one mile of the boundary of a public airport for which an airport land use compatibility plan has not been adopted by June 30, 1991, shall be commenced within 30 days of June 30, 1991, or within 30 days of the decision by the local agency, or within the appropriate time periods set by Section 21167 of the Public Resources Code, whichever date is later.

Federal Aviation Regulations Part 77

Objects Affecting Navigable Airspace

Subpart A

GENERAL

Amdt. 77-11, Sept. 25, 1989.

77.1 Scope.

This part:

- (a) Establishes standards for determining obstructions in navigable airspace;
- (b) Sets forth the requirements for notice to the Administrator of certain proposed construction or alteration;
- (c) Provides for aeronautical studies of obstructions to air navigation, to determine their effect on the safe and efficient use of airspace;
- (d) Provides for public hearings on the hazardous effect of proposed construction or alteration on air navigation; and
- (e) Provides for establishing antenna farm areas.

77.2 Definition of Terms.

For the purpose of this part:

“Airport available for public use” means an airport that is open to the general public with or without a prior request to use the airport.

“A seaplane base” is considered to be an airport only if its sea lanes are outlined by visual markers.

“Nonprecision instrument runway” means a runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area type navigation equipment, for which a straight-in nonprecision instrument approach procedure has been approved, or planned, and for which no precision approach facilities are planned, or indicated on an FAA planning document or military service military airport planning document.

“Precision instrument runway” means a runway having an existing instrument approach procedure utilizing an Instrument Landing System (ILS), or a Precision Approach Radar (PAR). It also means a runway for which a precision approach system is planned and is so indicated by an FAA approved airport layout plan; a military service approved military airport layout plan; any other FAA planning document, or military service military airport planning document.

“Utility runway” means a runway that is constructed for and intended to be used by propeller driven aircraft of 12,500 pounds maximum gross weight and less.

“Visual runway” means a runway intended solely for the operation of aircraft using visual approach procedures, with no straight-in instrument approach procedure and no instrument designation indicated on an FAA approved airport layout plan, a military service approved military airport layout plan, or by any planning document submitted to the FAA by competent authority.

77.3 Standards.

- (a) The standards established in this part for determining obstructions to air navigation are used by the Administrator in:
 - (1) Administering the Federal-aid Airport Program and the Surplus Airport Program;
 - (2) Transferring property of the United States under section 16 of the Federal Airport Act;
 - (3) Developing technical standards and guidance in the design and construction of airports; and
 - (4) Imposing requirements for public notice of the construction or alteration of any structure where notice will promote air safety.
- (b) The standards used by the Administrator in the establishment of flight procedures and aircraft operational limitations are not set forth in this part but are contained in other publications of the Administrator.

77.5 Kinds of Objects Affected.

This part applies to:

- (a) Any object of natural growth, terrain, or permanent or temporary construction or alteration, including equipment or materials used therein, and apparatus of a permanent or temporary character; and
- (b) Alteration of any permanent or temporary existing structure by a change in its height (including appurtenances), or lateral dimensions, including equipment or materials used therein.

Subpart B

NOTICE OF CONSTRUCTION OR ALTERATION

77.11 Scope.

- (a) This subpart requires each person proposing any kind of construction or alteration described in §77.13(a) to give adequate notice to the Administrator. It specifies the locations and dimensions of the construction or alteration for which notice is required and prescribes the form and manner of the notice. It also requires supplemental notices 48 hours before the start and upon the completion of certain construction or alteration that was the subject of a notice under §77.13(a).
- (b) Notices received under this subpart provide a basis for:

-
- (1) Evaluating the effect of the construction or alteration on operational procedures and proposed operational procedures;
 - (2) Determinations of the possible hazardous effect of the proposed construction or alteration on air navigation;
 - (3) Recommendations for identifying the construction or alteration in accordance with the current Federal Aviation Administration Advisory Circular AC 70/7460-1 entitled "Obstruction Marking and Lighting," which is available without charge from the Department of Transportation, Distribution Unit, TAD 484.3, Washington, D.C. 20590.
 - (4) Determining other appropriate measures to be applied for continued safety of air navigation; and
 - (5) Charting and other notification to airmen of the construction or alteration.

77.13 Construction or Alteration Requiring Notice.

- (a) Except as provided in §77.15, each sponsor who proposes any of the following construction or alteration shall notify the Administrator in the form and manner prescribed in §77.17:
 - (1) Any construction or alteration of more than 200 feet in height above the ground level at its site.
 - (2) Any construction or alteration of greater height than an imaginary surface extending outward and upward at one of the following slopes:
 - (i) 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of each airport specified in paragraph (a)(5) of this section with at least one runway more than 3,200 feet in actual length, excluding heliports.
 - (ii) 50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest runway of each airport specified in paragraph (a)(5) of this section with its longest runway no more than 3,200 feet in actual length, excluding heliports.
 - (iii) 5 to 1 for a horizontal distance of 5,000 feet from the nearest point of the nearest landing and takeoff area of each heliport specified in paragraph (a)(5) of this section.
 - (3) Any highway, railroad, or other traverse way for mobile objects, of a height which, if adjusted upward 17 feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance, 15 feet for any other public roadway, 10 feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road, 23 feet for a railroad, and for a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it, would exceed a standard of paragraph (a) (1) or (2) of this section.
 - (4) When requested by the FAA, any construction or alteration that would be in an instrument approach area (defined in the FAA standards governing instrument approach procedures) and available information indicates it might exceed a standard of Subpart C of this part.
 - (5) Any construction or alteration on any of the following airports (including heliports):

-
- (i) An airport that is available for public use and is listed in the Airport Directory of the current Airman's Information Manual or in either the Alaska or Pacific Airman's Guide and Chart Supplement.
 - (ii) An airport under construction, that is the subject of a notice or proposal on file with the Federal Aviation Administration, and, except for military airports, it is clearly indicated that airport will be available for public use.
 - (iii) An airport that is operated by an armed force of the United States.
- (b) Each sponsor who proposes construction or alteration that is the subject of a notice under paragraph (a) of this section and is advised by an FAA regional office that a supplemental notice is required shall submit that notice on a prescribed form to be received by the FAA regional office at least 48 hours before the start of the construction or alteration.
 - (c) Each sponsor who undertakes construction or alteration that is the subject of a notice under paragraph (a) of this section shall, within 5 days after that construction or alteration reaches its greatest height, submit a supplemental notice on a prescribed form to the FAA regional office having jurisdiction over the region involved, if -
 - (1) The construction or alteration is more than 200 feet above the surface level of its site; or
 - (2) An FAA regional office advises him that submission of the form is required.

77.15 Construction or Alteration Not Requiring Notice.

No person is required to notify the Administrator for any of the following construction or alteration:

- (a) Any object that would be shielded by existing structures of a permanent and substantial character or by natural terrain or topographic features of equal or greater height, and would be located in the congested area of a city, town, or settlement where it is evident beyond all reasonable doubt that the structure so shielded will not adversely affect safety in air navigation.
- (b) Any antenna structure of 20 feet or less in height except one that would increase the height of another antenna structure.
- (c) Any air navigation facility, airport visual approach or landing aid, aircraft arresting device, or meteorological device, of a type approved by the Administrator, or an appropriate military service on military airports, the location and height of which is fixed by its functional purpose.
- (d) Any construction or alteration for which notice is required by any other FAA regulation.

77.17 Form and Time of Notice.

- (a) Each person who is required to notify the Administrator under §77.13 (a) shall send one executed form set (four copies) of FAA Form 7460-1, Notice of Proposed Construction or Alteration, to the Manager, Air Traffic Division, FAA Regional Office having jurisdiction over the area within which the construction or alteration will be located. Copies of FAA Form 7460-1 may be obtained from the headquarters of the Federal Aviation Administration and the regional offices.
- (b) The notice required under §77.13(a) (1) through (4) must be submitted at least 30 days before the earlier of the following dates:

-
- (1) The date the proposed construction or alteration is to begin.
 - (2) The date an application for a construction permit is to be filed.

However, a notice relating to proposed construction or alteration that is subject to the licensing requirements of the Federal Communications Act may be sent to FAA at the same time the application for construction is filed with the Federal Communications Commission, or at any time before that filing.

- (c) A proposed structure or an alteration to an existing structure that exceeds 2,000 feet in height above the ground will be presumed to be a hazard to air navigation and to result in an inefficient utilization of airspace and the applicant has the burden of overcoming that presumption. Each notice submitted under the pertinent provisions of this Part 77 proposing a structure in excess of 2,000 feet above ground, or an alteration that will make an existing structure exceed that height, must contain a detailed showing, directed to meeting this burden. Only in exceptional cases, where the FAA concludes that a clear and compelling showing has been made that it would not result in an inefficient utilization of the airspace and would not result in a hazard to air navigation, will a determination of no hazard be issued.
- (d) In the case of an emergency involving essential public services, public health, or public safety that requires immediate construction or alteration, the 30 day requirement in paragraph (b) of this section does not apply and the notice may be sent by telephone, telegraph, or other expeditious means, with an executed FAA Form 7460-1 submitted within 5 days thereafter. Outside normal business hours, emergency notices by telephone or telegraph may be submitted to the nearest FAA Flight Service Station.
- (e) Each person who is required to notify the Administrator by paragraph (b) or (c) of §77.13, or both, shall send an executed copy of FAA Form 117-1, Notice of Progress of Construction or Alteration, to the Manager, Air Traffic Division, FAA Regional Office having jurisdiction over the area involved.

77.19 Acknowledgment of Notice.

- (a) The FAA acknowledges in writing the receipt of each notice submitted under §77.13(a).
- (b) If the construction or alteration proposed in a notice is one for which lighting or marking standards are prescribed in the FAA Advisory Circular AC 70/7460-1, entitled “Obstruction Marking and Lighting,” the acknowledgment contains a statement to that effect and information on how the structure should be marked and lighted in accordance with the manual.
- (c) The acknowledgment states that an aeronautical study of the proposed construction or alteration has resulted in a determination that the construction or alteration:
 - (1) Would not exceed any standard of Subpart C and would not be a hazard to air navigation;
 - (2) Would exceed a standard of Subpart C but would not be a hazard to air navigation; or
 - (3) Would exceed a standard of Subpart C and further aeronautical study is necessary to determine whether it would be a hazard to air navigation, that the sponsor may request within 30 days that further study, and that, pending completion of any further study, it is presumed the construction or alteration would be a hazard to air navigation.

Subpart C

OBSTRUCTION STANDARDS

77.21 Scope.

- (a) This subpart establishes standards for determining obstructions to air navigation. It applies to existing and proposed manmade objects, objects of natural growth, and terrain. The standards apply to the use of navigable airspace by aircraft and to existing air navigation facilities, such as an air navigation aid, airport, Federal airway, instrument approach or departure procedure, or approved off airway route. Additionally, they apply to a planned facility or use, or a change in an existing facility or use, if a proposal therefore is on file with the Federal Aviation Administration or an appropriate military service on the date the notice required by §77.13(a) is filed.
- (b) At those airports having defined runways with specially prepared hard surfaces, the primary surface for each such runway extends 200 feet beyond each end of the runway. At those airports having defined strips or pathways that are used regularly for the taking off and landing of aircraft and have been designated by appropriate authority as runways, but do not have specially prepared hard surfaces, each end of the primary surface for each such runway shall coincide with the corresponding end of the runway. At those airports, excluding seaplane bases, having a defined landing and take-off area with no defined pathways for the landing and taking off of aircraft, a determination shall be made as to which portions of the landing and takeoff area are regularly used as landing and takeoff pathways. Those pathways so determined shall be considered runways and an appropriate primary surface as defined in §77.25(c) will be considered as being longitudinally centered on each runway so determined, and each end of that primary surface shall coincide with the corresponding end of that runway.
- (c) The standards in this subpart apply to the effect of construction or alteration proposals upon an airport if, at the time of filing of the notice required by §77.13(a), that airport is -
 - (1) Available for public use and is listed in the Airport Directory of the current Airman's Information Manual or in either the Alaska or Pacific Airman's Guide and Chart Supplement; or
 - (2) A planned or proposed airport or an airport under construction, that is the subject of a notice or proposal on file with the Federal Aviation Administration, and, except for military airports, it is clearly indicated that that airport will be available for public use; or,
 - (3) An airport that is operated by an armed force of the United States.

77.23 Standards for Determining Obstructions.

- (a) An existing object, including a mobile object, is, and a future object would be, an obstruction to air navigation if it is of greater height than any of the following heights or surfaces:
 - (1) A height of 500 feet above ground level at the site of the object.
 - (2) A height that is 200 feet above ground level or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile of distance from the airport up to a maximum of 500 feet.

-
- (3) A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.
 - (4) A height within an en route obstacle clearance area, including turn and termination areas, of a Federal airway or approved off airway route, that would increase the minimum obstacle clearance altitude.
 - (5) The surface of a takeoff and landing area of an airport or any imaginary surface established under §77.25, §77.28, or §77.29. However, no part of the takeoff or landing area itself will be considered an obstruction.
- (b) Except for traverse ways on or near an airport with an operative ground traffic control service, furnished by an air traffic control tower or by the airport management and coordinated with the air traffic control service, the standards of paragraph (a) of this section apply to traverse ways used or to be used for the passage of mobile objects only after the heights of these traverse ways are increased by:
- (1) Seventeen feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance.
 - (2) Fifteen feet for any other public roadway.
 - (3) Ten feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road.
 - (4) Twenty-three feet for a railroad, and,
 - (5) For a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it.

77.25 Civil Airport Imaginary Surfaces.

The following civil airport imaginary surfaces are established with relation to the airport and to each runway. The size of each such imaginary surface is based on the category of each runway according to the type of approach available or planned for that runway. The slope and dimensions of the approach surface applied to each end of a runway are determined by the most precise approach existing or planned for that runway end.

- (a) Horizontal surface. A horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of specified radii from the center of each end of the primary surface of each runway of each airport and connecting the adjacent arcs by lines tangent to those arcs. The radius of each arc is:
 - (1) 5,000 feet for all runways designated as utility or visual;
 - (2) 10,000 feet for all other runways. The radius of the arc specified for each end of a runway will have the same arithmetical value. That value will be the highest determined for either end of the runway. When a 5,000-foot arc is encompassed by tangents connecting two adjacent

10,000-foot arcs, the 5,000-foot arc shall be disregarded on the construction of the perimeter of the horizontal surface.

- (b) Conical surface. A surface extending outward and upward from the periphery of the horizontal surface at a slope of 20 to 1 for a horizontal distance of 4,000 feet.
- (c) Primary surface. A surface longitudinally centered on a runway. When the runway has a specially prepared hard surface, the primary surface extends 200 feet beyond each end of that runway; but when the runway has no specially prepared hard surface, or planned hard surface, the primary surface ends at each end of that runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline. The width of a primary surface is:
 - (1) 250 feet for utility runways having only visual approaches.
 - (2) 500 feet for utility runways having nonprecision instrument approaches.
 - (3) For other than utility runways the width is:
 - (i) 500 feet for visual runways having only visual approaches.
 - (ii) 500 feet for nonprecision instrument runways having visibility minimums greater than three-fourths statute mile.
 - (iii) 1,000 feet for a nonprecision instrument runway having a nonprecision instrument approach with visibility minimums as low as three-fourths of a statute mile, and for precision instrument runways.

The width of the primary surface of a runway will be that width prescribed in this section for the most precise approach existing or planned for either end of that runway.

- (d) Approach surface. A surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface. An approach surface is applied to each end of each runway based upon the type of approach available or planned for that runway end.
 - (1) The inner edge of the approach surface is the same width as the primary surface and it expands uniformly to a width of:
 - (i) 1,250 feet for that end of a utility runway with only visual approaches;
 - (ii) 1,500 feet for that end of a runway other than a utility runway with only visual approaches;
 - (iii) 2,000 feet for that end of a utility runway with a nonprecision instrument approach;
 - (iv) 3,500 feet for that end of a nonprecision instrument runway other than utility, having visibility minimums greater than three-fourths of a statute mile;
 - (v) 4,000 feet for that end of a nonprecision instrument runway, other than utility, having a nonprecision instrument approach with visibility minimums as low as three-fourths statute mile; and
 - (vi) 16,000 feet for precision instrument runways.

-
- (2) The approach surface extends for a horizontal distance of:
 - (i) 5,000 feet at a slope of 20 to 1 for all utility and visual runways;
 - (ii) 10,000 feet at a slope of 34 to 1 for all nonprecision instrument runways other than utility; and,
 - (iii) 10,000 feet at a slope of 50 to 1 with an additional 40,000 feet at a slope of 40 to 1 for all precision instrument runways.
 - (3) The outer width of an approach surface to an end of a runway will be that width prescribed in this subsection for the most precise approach existing or planned for that runway end.
 - (e) Transitional surface. 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. Transitional surfaces for those portions of the precision approach surface which project through and beyond the limits of the conical surface, extend a distance of 5,000 feet measured horizontally from the edge of the approach surface and at right angles to the runway centerline.

77.27 [Reserved]

77.28 Military Airport Imaginary Surfaces.

- (a) Related to airport reference points. These surfaces apply to all military airports. For the purposes of this section a military airport is any airport operated by an armed force of the United States.
 - (1) Inner horizontal surface. A plane is oval in shape at a height of 150 feet above the established airfield elevation. The plane is constructed by scribing an arc with a radius of 7,500 feet about the centerline at the end of each runway and interconnecting these arcs with tangents.
 - (2) Conical surface. A surface extending from the periphery of the inner horizontal surface outward and upward at a slope of 20 to 1 for a horizontal distance of 7,000 feet to a height of 500 feet above the established airfield elevation.
 - (3) Outer horizontal surface. A plane, located 500 feet above the established airfield elevation, extending outward from the outer periphery of the conical surface for a horizontal distance of 30,000 feet.
- (b) Related to runways. These surfaces apply to all military airports.
 - (1) Primary surface. A surface located on the ground or water longitudinally centered on each runway with the same length as the runway. The width of the primary surface for runways is 2,000 feet. However, at established bases where substantial construction has taken place in accordance with a previous lateral clearance criteria, the 2,000 foot width may be reduced to the former criteria.
 - (2) Clear zone surface. A surface located on the ground or water at each end of the primary surface, with a length of 1,000 feet and the same width as the primary surface.
 - (3) Approach clearance surface. An inclined plane, symmetrical about the runway centerline extended, beginning 200 feet beyond each end of the primary surface at the centerline elevation

of the runway end and extending for 50,000 feet. The slope of the approach clearance surface is 50 to 1 along the runway centerline extended until it reaches an elevation of 500 feet above the established runway surface. The surface then extends horizontally at this elevation to a point 50,000 feet from the point of beginning. The width of this surface at the runway end is the same as the primary surface, it flares uniformly, and the width at 50,000 is 16,000 feet.

- (4) Transitional surfaces. These surfaces connect the primary surfaces, the first 200 feet of the clear zone surfaces, and the approach clearance surfaces to the inner horizontal surface, conical surface, outer horizontal surface or other transitional surfaces. The slope of the transitional surface is 7 to 1 outward and upward at right angles to the runway centerline.

77.29 Airport Imaginary Surfaces for Heliports.

- (a) Heliport primary surface. The area of the primary surface coincides in size and shape with the designated takeoff and landing area of a heliport. This surface is a horizontal plane at the elevation of the established heliport elevation.
- (b) Heliport approach surface. The approach surface begins at each end of the heliport primary surface with the same width as the primary surface, and extends outward and upward for a horizontal distance of 4,000 feet where its width is 500 feet. The slope of the approach surface is 8 to 1 for civil heliports and 10 to 1 for military heliports.
- (c) Heliport transitional surfaces. These surfaces extend outward and upward from the lateral boundaries of the heliport primary surface and from the approach surfaces at a slope of 2 to 1 for a distance of 250 feet measured horizontally from the centerline of the primary and approach surfaces.

Subpart D

AERONAUTICAL STUDIES OF EFFECT OF PROPOSED CONSTRUCTION ON NAVIGABLE AIRSPACE

77.31 Scope.

- (a) This subpart applies to the conduct of aeronautical studies of the effect of proposed construction or alteration on the use of air navigation facilities or navigable airspace by aircraft. In the aeronautical studies, present and future IFR and VFR aeronautical operations and procedures are reviewed and any possible changes in those operations and procedures and in the construction proposal that would eliminate or alleviate the conflicting demands are ascertained.
- (b) The conclusion of a study made under this subpart is normally a determination as to whether the specific proposal studied would be a hazard to air navigation.

77.33 Initiation of Studies.

- (a) An aeronautical study is conducted by the FAA:
- (1) Upon the request of the sponsor of any construction or alteration for which a notice is submitted under Subpart B of this part, unless that construction or alteration would be located within an antenna farm area established under Subpart F of this part; or

-
- (2) Whenever the FAA determines it appropriate.

77.35 Aeronautical Studies.

- (a) The Regional Manager, Air Traffic Division of the region in which the proposed construction or alteration would be located, or his designee, conducts the aeronautical study of the effect of the proposal upon the operation of air navigation facilities and the safe and efficient utilization of the navigable airspace. This study may include the physical and electromagnetic radiation effect the proposal may have on the operation of an air navigation facility.
- (b) To the extent considered necessary, the Regional Manager, Air Traffic Division or his designee:
 - (1) Solicits comments from all interested persons;
 - (2) Explores objections to the proposal and attempts to develop recommendations for adjustment of aviation requirements that would accommodate the proposed construction or alteration;
 - (3) Examines possible revisions of the proposal that would eliminate the exceeding of the standards in Subpart C of this part; and
 - (4) Convenes a meeting with all interested persons for the purpose of gathering all facts relevant to the effect of the proposed construction or alteration on the safe and efficient utilization of the navigable airspace.
- (c) The Regional Manager, Air Traffic Division or his designee issues a determination as to whether the proposed construction or alteration would be a hazard to air navigation and sends copies to all known interested persons. This determination is final unless a petition for review is granted under §77.37.
- (d) If the sponsor revises his proposal to eliminate exceeding of the standards of Subpart C of this part, or withdraws it, the Regional Manager, Air Traffic Division, or his designee, terminates the study and notifies all known interested persons.

77.37 Discretionary Review.

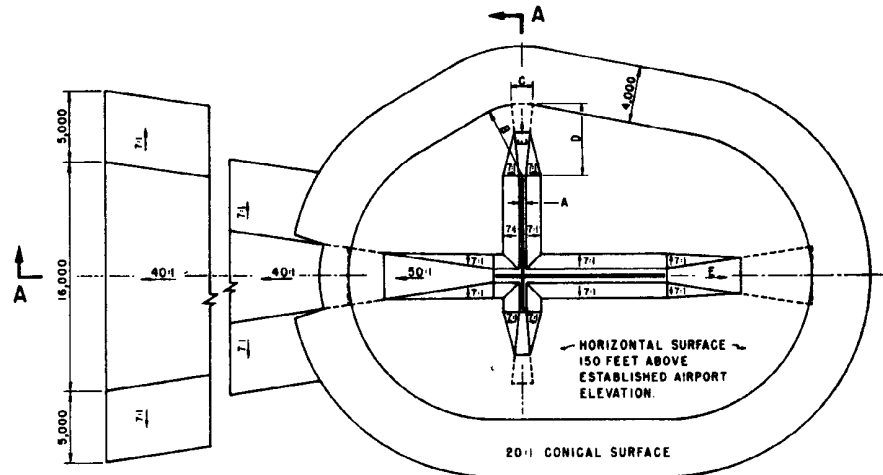
- (a) The sponsor of any proposed construction or alteration or any person who stated a substantial aeronautical objection to it in an aeronautical study, or any person who has a substantial aeronautical objection to it but was not given an opportunity to state it, may petition the Administrator, within 30 days after issuance of the determination under §77.19 or §77.35 or revision or extension of the determination under §77.39 (c), for a review of the determination, revision, or extension. This paragraph does not apply to any acknowledgment issued under §77.19 (c) (1).
- (b) The petition must be in triplicate and contain a full statement of the basis upon which it is made.
- (c) The Administrator examines each petition and decides whether a review will be made and, if so, whether it will be:
 - (1) A review on the basis of written materials, including study of a report by the Regional Manager, Air Traffic Division of the aeronautical study, briefs, and related submissions by any in-

terested party, and other relevant facts, with the Administrator affirming, revising, or reversing the determination issued under §77.19, §77.35 or §77.39 (c); or

- (2) A review on the basis of a public hearing, conducted in accordance with the procedures prescribed in Subpart E of this part.

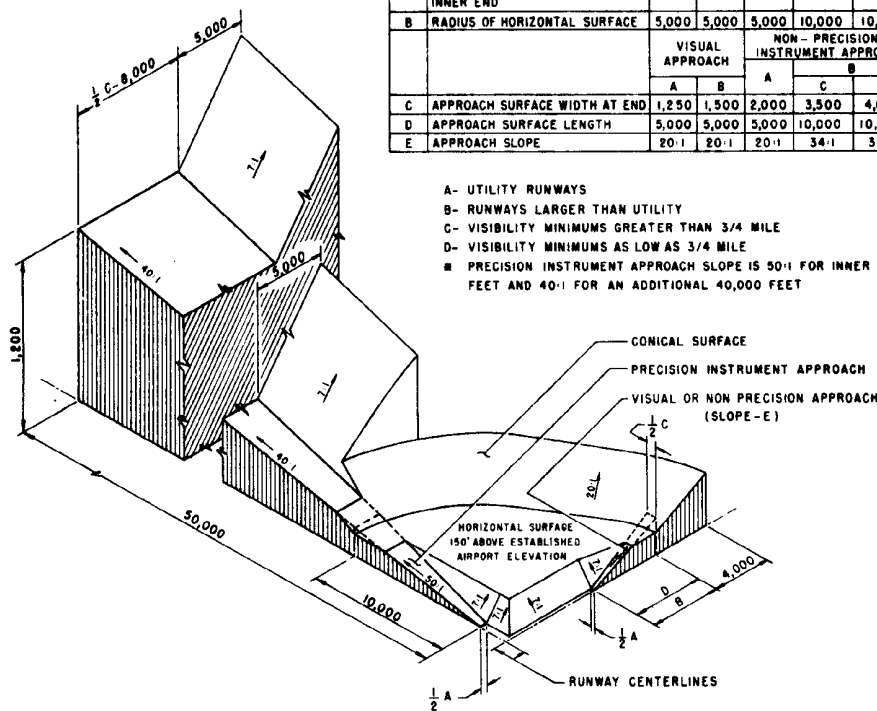
77.39 Effective Period of Determination of No Hazard.

- (a) Unless it is otherwise extended, revised, or terminated, each final determination of no hazard made under this subpart or Subpart B or E of this part expires 18 months after its effective date, regardless of whether the proposed construction or alteration has been started, or on the date the proposed construction or alteration is abandoned, whichever is earlier.
- (b) In any case, including a determination to which paragraph (d) of this section applies, where the proposed construction or alteration has not been started during the applicable period by actual structural work, such as the laying of a foundation, but not including excavation, any interested person may, at least 15 days before the date the final determination expires, petition the FAA official who issued the determination to:
 - (1) Revise the determination based on new facts that change the basis on which it was made; or
 - (2) Extend its effective period.
- (c) The FAA official who issued the determination reviews each petition presented under paragraph (b) of this section, and revises, extends, or affirms the determination as indicated by his findings.
- (d) In any case in which a final determination made under this subpart or Subpart B or E of this part relates to proposed construction or alteration that may not be started unless the Federal Communications Commission issues an appropriate construction permit, the effective period of each final determination includes -
 - (1) The time required to apply to the Commission for a construction permit, but not more than 6 months after the effective date of the determination; and
 - (2) The time necessary for the Commission to process the application except in a case where the Administrator determines a shorter effective period is required by the circumstances.
- (e) If the Commission issues a construction permit, the final determination is effective until the date prescribed for completion of the construction. If the Commission refuses to issue a construction permit, the final determination expires on the date of its refusal.



DIM	ITEM	DIMENSIONAL STANDARDS (FEET)					
		VISUAL RUNWAY		NON - PRECISION INSTRUMENT RUNWAY		PRECISION INSTRUMENT RUNWAY	
		A	B	A	B	C	D
A	WIDTH OF PRIMARY SURFACE AND APPROACH SURFACE WIDTH AT INNER END	250	500	500	500	1,000	1,000
B	RADIUS OF HORIZONTAL SURFACE	5,000	5,000	5,000	10,000	10,000	10,000
		VISUAL APPROACH		NON - PRECISION INSTRUMENT APPROACH		PRECISION INSTRUMENT APPROACH	
		A	B	A	B	C	D
		1,250	1,500	2,000	3,500	4,000	16,000
C	APPROACH SURFACE WIDTH AT END	5,000	5,000	5,000	10,000	10,000	10,000
D	APPROACH SURFACE LENGTH	5,000	5,000	5,000	10,000	10,000	10,000
E	APPROACH SLOPE	20:1	20:1	20:1	34:1	34:1	34:1

- A- UTILITY RUNWAYS
- B- RUNWAYS LARGER THAN UTILITY
- C- VISIBILITY MINIMUMS GREATER THAN 3/4 MILE
- D- VISIBILITY MINIMUMS AS LOW AS 3/4 MILE
- PRECISION INSTRUMENT APPROACH SLOPE IS 50:1 FOR INNER 10,000 FEET AND 40:1 FOR AN ADDITIONAL 40,000 FEET



ISOMETRIC VIEW OF SECTION A-A

§ 77.25 CIVIL AIRPORT IMAGINARY SURFACES

Source: Federal Aviation Regulations Part 77

FAR Part 77 Imaginary Surfaces

Please Type or Print on This Form

Form Approved OMB No. 2120-0001

U.S. Department of Transportation
Federal Aviation Administration

Failure To Provide All Requested Information May Delay Processing Of Your Notice

Notice of Proposed Construction or Alteration

For FAA Use Only

Aeronautical Study Number

- - -

1. Sponsor (person, company, etc. proposing this action)

Attn. of _____

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone: _____ Fax: _____

2. Sponsor's Representative (if other than #1)

Attn. of _____

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone: _____ Fax: _____

3. Notice of: ☐ New Construction ☐ Alteration ☐ Existing4. Duration: ☐ Permanent ☐ Temporary (_____ months, _____ days)

5. Work Schedule: Beginning: _____ End: _____

6. Type: ☐ Antenna Tower ☐ Crane ☐ Building ☐ Power Line☐ Landfill ☐ Water Tank ☐ Other _____

7. Marking/Painting and/or Lighting Preferred:

☐ Red Lights and Paint ☐ Dual - Red and Medium Intensity White☐ White - Medium Intensity ☐ Dual - Red and High Intensity White☐ White - High Intensity ☐ Other _____

8. FCC Antenna Structure Registration Number (if applicable)

9. Latitude: _____ ° _____ ' _____ " "

10. Longitude: _____ ° _____ ' _____ " "

11. Datum: ☐ NAD 83 ☐ NAD 27 ☐ Other _____

12. Nearest: City: _____ State: _____

13. Nearest Public-use (not private-use) or Military Airport or Heliport:

14. Distance from #13. to Structure: _____

15. Direction from #13. to Structure: _____

16. Site Elevation (AMSL): _____ ft.

17. Total Structure Height (AGL): _____ ft.

18. Overall height (#16. + #17.) (AMSL): _____ ft.

19. Previous FAA Aeronautical Study Number (if applicable):

_____ -OE

20. Description of Location: (Attach a USGS 7.5 minute
Quadrangle Map with the precise site marked and any certified survey.)

21. Complete Description of Proposal:

Frequency/Power (kW)

Notice is required by 14 Code of Federal Regulations, part 77 pursuant to 49 U.S.C. Section 44718. Persons who knowingly and willfully violate the notice requirements of part 77 are subject to a civil penalty of \$1,000 per day until the notice is received, pursuant to 49 U.S.C., section 46301 (a).

I HEREBY CERTIFY that all of the above statements made by me are true, complete, and correct to the best of my knowledge. In addition, I agree to obstruction mark and/or light the structure in accordance with established marking and lighting standards as necessary.

Date

Typed or Printed Name and Title of Person Filing Notice

Signature

FAA Form 7460-1 (2-99) Supersedes Previous Edition

Part 77 Notification

FAA Form 7460



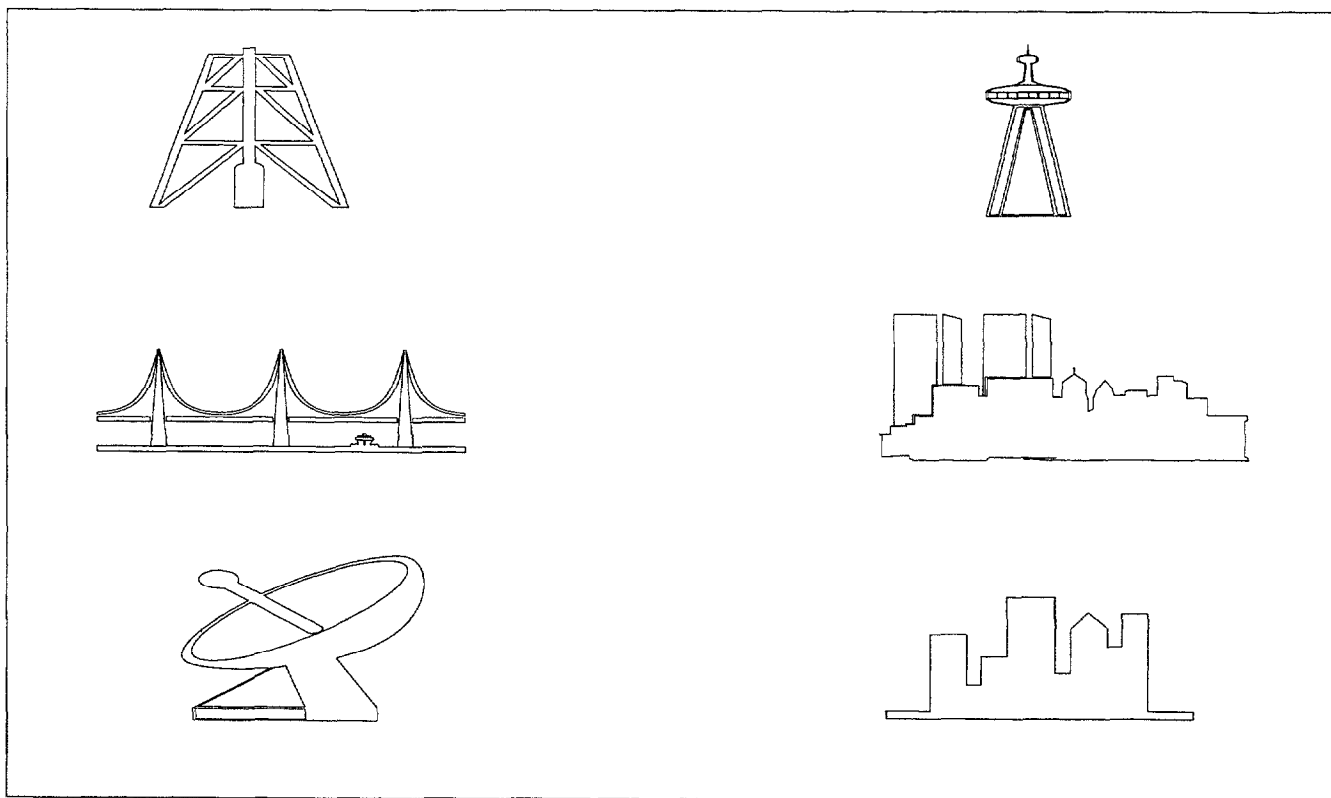
U.S. Department
of Transportation

**Federal Aviation
Administration**

ADVISORY CIRCULAR

AC 70/7460-2K

Proposed Construction or Alteration of Objects that May Affect the Navigable Airspace





U.S. Department
of Transportation

Federal Aviation
Administration

ADVISORY CIRCULAR

Subject: PROPOSED CONSTRUCTION OR ALTERATION OF OBJECTS THAT MAY AFFECT THE NAVIGABLE AIRSPACE

Date: 3/1/00

AC No: 70/7460.2K

Initiated by: ATA-400

1. PURPOSE.

This Advisory Circular (AC) provides information to persons proposing to erect or alter an object that may affect the navigable airspace. The AC also explains the requirement to notify the Federal Aviation Administration (FAA) before construction begins and FAA's responsibility to respond to these notices in accordance with Title 14 Code of Federal Regulations (14 CFR) part 77, Objects Affecting Navigable Airspace. Additionally, the AC explains the process by which to petition the FAA's Administrator for discretionary review of the determinations issued by the FAA.

2. CANCELLATION.

AC 70/7460-2J, Proposed Construction or Alteration of Objects That May Affect the Navigable Airspace, dated 11/29/95, is cancelled.

3. BACKGROUND/AUTHORITY.

a. 49 U.S.C. Section 44718 mandates, in pertinent part, that "The Secretary of Transportation shall require a person to give adequate public notice...of the construction or alteration, establishment or extension, or the proposed construction, alteration, establishment, or expansion, of any structure...when the notice will promote:

- (1) safety in air commerce, and
- (2) the efficient use and preservation of the navigable airspace and of airport traffic capacity at public-use airports."

b. To this end, 14 CFR Part 77 was issued prescribing that notice shall be given to the Administrator of certain proposed construction or alteration.

4. EFFECTIVE DATE.

This advisory circular becomes effective March 1, 2000.

5. NOTICES.

a. WHY IS NOTIFICATION REQUIRED?

In administering 14 CFR Part 77, the FAA's prime objectives are to ensure the safe and efficient use of the navigable airspace. The FAA recognizes that there are varied demands for the use of airspace, both by aviation and nonaviation interests. When conflicts arise out of construction proposals, the FAA emphasizes the need for conserving the navigable airspace. Therefore, early notice of proposed construction or alteration provides the FAA the opportunity to:

(1) Recognize potential aeronautical hazards to minimize the adverse effects to aviation.

(2) Revise published data or issue a Notice to Airmen (NOTAM) to alert pilots to airspace or procedural changes made as a result of the structure.

(3) Recommend appropriate marking and lighting to make objects visible to pilots. Before filing FAA Form 7460-1, Notice of Proposed Construction or Alteration, construction sponsors should become knowledgeable in the different types of obstruction marking and lighting systems that meet FAA standards. Information about these systems can be obtained from the manufacturers. Proponents can then determine which system best meets their needs based on purchase, installation, and maintenance costs. The FAA will make every effort to accommodate the request.

(4) Depict obstacles on aeronautical charts for pilotage and safety.

b. WHO MUST FILE NOTICE?

Any person or an agent who intends to sponsor construction is required to submit notice to the Administrator if the proposed construction or alteration falls within any of the following categories:

(1) *Greater than 200 feet in height.* The proposed object would be more than 200 feet above ground level (AGL) at its location.

NOTE-
See FIG 1 and FIG 2.

Greater Than 200 Feet AGL at Object's Location [Over Land]

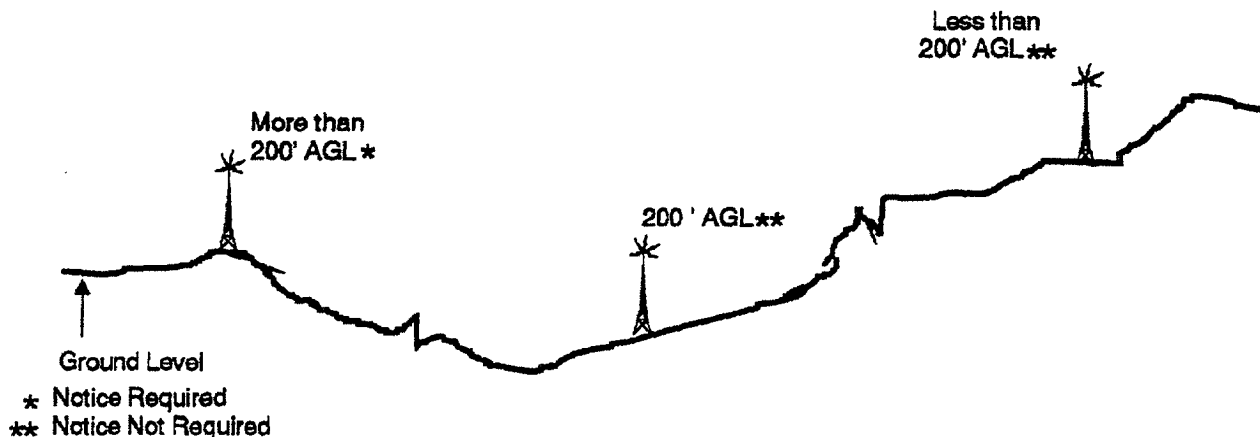


FIG 1

Greater Than 200 Feet AGL at Object's Location [Over Water]

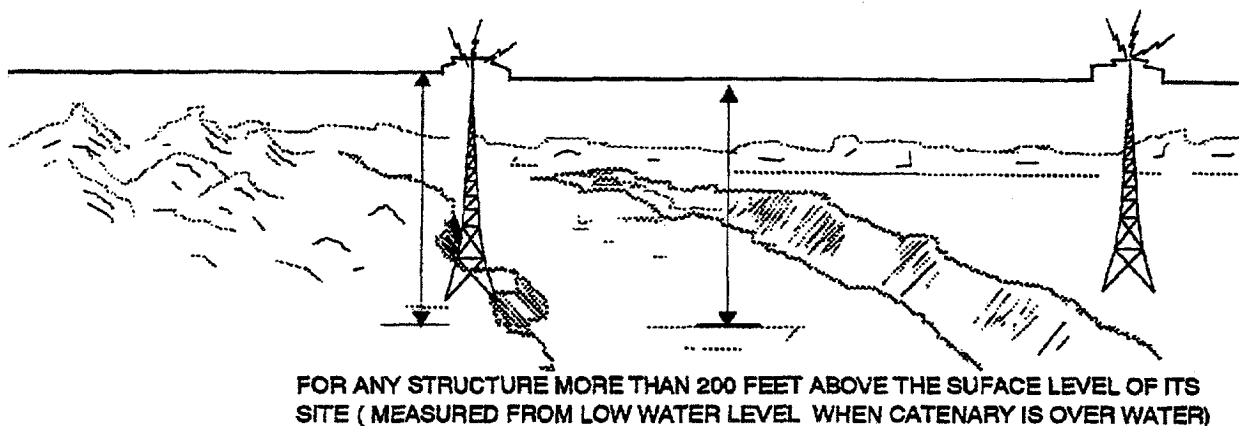


FIG 2

(2) *Near a Public-Use or Military Airport, Heliport, or Seaplane Base.* A public use airport, heliport or a seaplane base with visually marked seaplanes that is listed in the current Airport Facility Directory, the Alaska Supplement or the Pacific Chart Supplement, or near an airport operated by an armed force of the United States.

(a) *Airport or Seaplane Base.* The proposed object or alteration would be within:

(1) 20,000 feet of an airport or seaplane base with at least one runway more than 3,200 feet in length

and the object would exceed a slope of 100:1 horizontally (100 feet horizontally for each 1 foot vertically) from the nearest point of the nearest runway.

(2) 10,000 feet of an airport or seaplane base that does not have a runway more than 3,200 feet in length and the object would exceed a 50:1 horizontal slope (50 feet horizontally for each 1 foot vertically) from the nearest point of the nearest runway.

NOTE-
See FIG 3.

Object Penetrates Airport/Seaplanes Base Surface

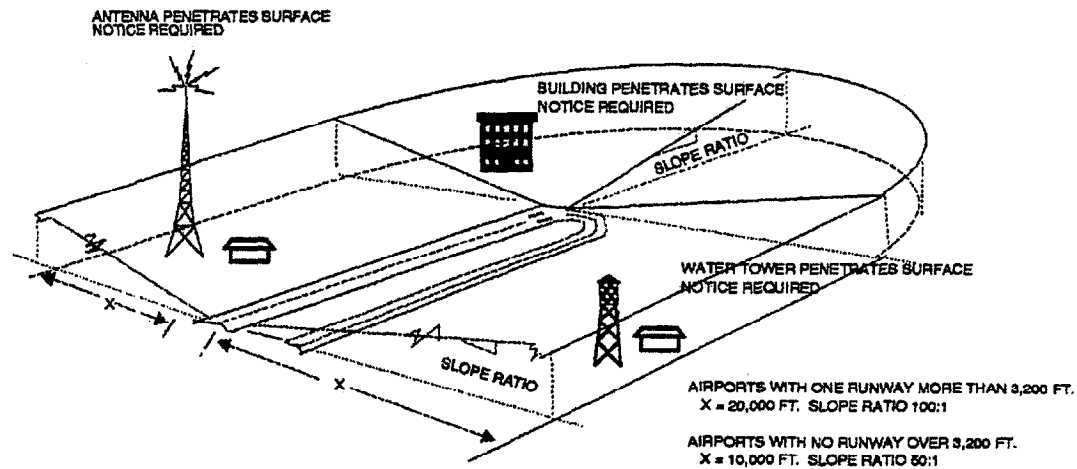


FIG 3

(b) *Heliport.* The proposed object would be within 5,000 feet of a heliport and would exceed a 25:1 horizontal slope (25 feet horizontally for each 1 foot vertically) from the nearest landing and takeoff area of that heliport.

NOTE-
See FIG 4.

Object Penetrates Heliport Surface

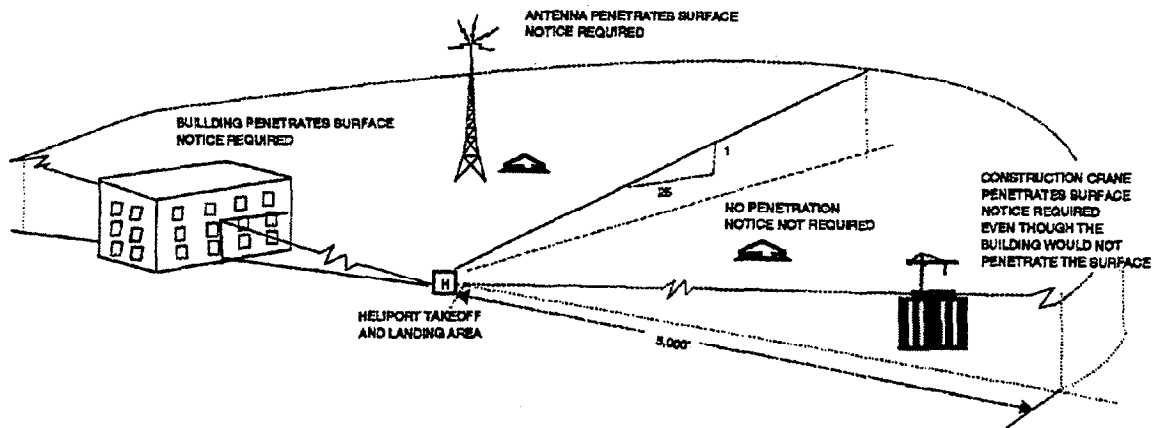


FIG 4

(3) *Highways and Railroads.* The proposed object is a traverse way which would exceed one or more of the standards listed in paragraphs a and b above, after the height of the object is adjusted upward as follows:

(a) *Private road:* 10 feet or the height of the highest mobile object that would traverse the roadway, whichever is greater.

(b) *Other public roadways:* 15 feet.

(c) *Interstate Highways:* 17 feet.

(d) *Railroad:* 23 feet.

(e) *Waterway or any other thoroughfare not previously mentioned:* an amount equal to the highest mobile object that would traverse the waterway or thoroughfare.

NOTE-
See FIG 5.

Proposed Object in a Traverse Way

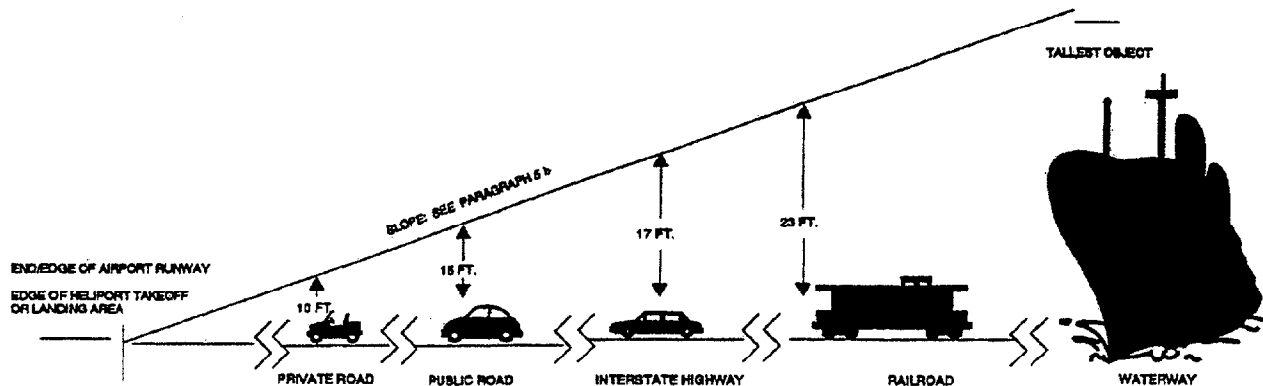


FIG 5

(4) *Objects on a Public-Use or Military Airport or Heliport.* The proposed construction or alteration would be on an airport or heliport, or any airport operated by an armed force of the United States, regardless of height or location.

(5) *When Requested by the FAA.* The FAA may request notice if available information indicates the proposal may exceed an obstruction standard or the proposal may cause electromagnetic interference to aircraft, particularly construction associated with an AM, FM, or TV station including a change in authorized frequency or transmitting power, may cause transmitted signals to be reflected upon ground-based or airborne air navigation communications equipment, or affect instrument procedures. In addition, notice may be requested when the proposal may affect an air traffic control procedure, may obstruct air traffic controllers' line of sight capability, or may affect air traffic control radar.

c. WHAT KIND OF STRUCTURES REQUIRE FAA NOTIFICATION?

The following are examples of structures requiring notice to the FAA.

(1) Proposed construction or alteration of structures such as:

- (a) Buildings.
- (b) Antenna Towers.
- (c) Roadways.
- (d) Overhead communications and transmission lines as well as the height of the supporting structures.
- (e) Water towers and the supporting structure.

(2) Construction equipment or other temporary structures such as:

- (a) Cranes.
- (b) Derricks.
- (c) Stockpiles of equipment.
- (d) Earth moving equipment.

d. WHEN MUST NOTICES BE FILED?

Notice must be submitted:

(1) At least 30 days before the earlier of the following:

- (a) The date the proposed construction or alteration is to begin, or
- (b) The date the application for a construction permit will be filed.

(2) On or before the date the application for construction is filed with the Federal Communications Commission (FCC), if the proposed structure is subject to FCC licensing requirements.

(3) Immediately by telephone or other expeditious means to the nearest FSS, with written notification submitted within 5 days thereafter, if immediate construction or alteration is required as in cases involving public services, health or safety.

(4) As early as possible in the planning stage but not less than 30 days before construction will begin.

e. HOW AND WHERE TO FILE NOTICE.

Notification of the proposal should be made on FAA Form 7460-1, Notice of Proposed Construction or Alteration. Additional information such as charts and/or drawings that accurately depict the proposed construction or alteration should be included to

facilitate the FAA's analysis of the project. The completed form should be mailed to the Manager, Air Traffic Division, of the regional office having jurisdiction over the area within which the construction or alteration will occur.

NOTE-

Information on regional addresses may be found on the FAA's website at www.faa.gov/ats/ata/ata-400/oeaaa.htm or contact the FAA listed in local telephone books under United States Government.

f. PENALTY FOR FAILING TO PROVIDE NOTICE.

Persons who knowingly and willfully violate the notice requirements of 14 CFR part 77 are subject to a civil penalty.

g. COMPLIANCE RESPONSIBILITY.

A notice filed with the FAA does not relieve the proponent of compliance with laws, ordinances or regulations of any other Federal, state or local governmental entity.

h. ASSOCIATED PUBLICATIONS.

The following publications contain obstruction criteria, marking and lighting standards and specifications for lighting and paint.

(1) *Federal Aviation Regulations 14 CFR, part 77, Objects Affecting Navigable Airspace*. This part sets forth the requirements for notice to the FAA of proposed construction or alteration and provides standards for determining obstructions to navigable airspace. 14 CFR, part 77 (Stock No. 050-007-00276-9) may be ordered from:

Superintendent of Documents
U. S. Government Printing Office
Washington, DC 20402

(2) *Advisory Circulars*. FAA advisory circulars are available free of charge from:

Department of Transportation
TASC
Subsequent Distribution Office,
SVC-121.23
Ardmore East Business Center
3341 Q 75th Avenue
Landover, MD 20785

(a) *AC 70/7460-1, Obstruction Marking and Lighting*, describes the standards for marking and lighting structures such as buildings, chimneys, antenna towers, cooling towers, storage tanks, supporting structures of overhead wires, etc.

(b) *AC 150/5190-4, A Model Zoning Ordinance to Limit Height or Objects Around Airports*, provides a

model-zoning ordinance to be used as a guide to control the height of objects around airports.

(c) *AC 150/5300-13, Airport Design*, includes planning information on electronic and visual navigational aids and air traffic control facility siting and clearance requirements that influence the physical layout of airports.

(d) *AC 150/5345-53, Airport Lighting Equipment Certification Program*, addendum lists equipment model numbers and manufacturer's part numbers in compliance with item (e) below. The addendum is located on the Internet at the Office of Airports homepage: <http://www.faa.gov/arp/arphome.htm> under Advisory Circulars.

(e) *AC 150/5345-43, Specification for Obstruction Lighting Equipment*, contains specifications for equipment used in obstruction lighting systems.

(3) *Marking Specifications and Standards*. Aviation colors and paint standards and specifications are available from:

General Services Administration
Specifications Section
470 L'Enfant Plaza, Suite 8214
Washington, DC 20407

(4) *FAA Forms*. FAA forms are available free of charge from all FAA regional offices.

(a) *FAA Form 7460-1, Notice of Proposed Construction or Alteration*, is used to notify the FAA of proposed construction or alteration of an object that may affect the navigable airspace.

(b) *FAA Form 7460-2, Notice of Actual Construction or Alteration*, is used to notify the FAA of progress or abandonment, as requested on the form. The FAA regional office routinely includes this form with a determination when such information will be required. The information is used for charting purposes, to change affected aeronautical procedures and to notify pilots of the location of the structure.

i. ADMINISTRATIVE ASSISTANCE TO CONSTRUCTION PROPONENTS.

(1) Airspace specialists are available in each regional office to assist proponents in filing their notice. Proponents are encouraged to call in advance for appointments. Limited resources often prevent the specialist from responding spontaneously without advanced planning or preparation.

(2) To insure timely determinations, construction proponents must submit complete and accurate data. Lack of complete and accurate data could result in the return of the form. United States Geological Survey quadrangle maps are available at nominal costs to aid in determining

the geographical coordinates (latitude/longitude) and site elevation above mean sea level. The latitude/longitude information should be submitted in North American Datum of 1983. The quadrangle maps can be obtained from:

U.S. Geological Survey
Reston, Virginia 22092
Telephone No. (703) 860-6045

U.S. Geological Survey
District Branch
P.O. Box 25286, Bldg. #41
Denver, Colorado 80225
Telephone No. (303) 844-4169

(3) Airport planners are available for assistance with construction proposals on Federally obligated airports.

(4) Proposals for electronic transmitting devices should include frequency, effective radiated power (ERP), radiation center height (RCAMSL), and antenna characteristics such as number of bays, beam tilt, and null fill.

6. FAA's RESPONSIBILITY.

a. The FAA will acknowledge receipt of the notice.

b. After initial screening, the outcome of the screening will be sent to the filer and may state one of the following:

(1) The proposal is not identified as an obstruction and would not be a hazard to air navigation, or

(2) The proposal would be an obstruction unless reduced to a specified height and is presumed to be a hazard to air navigation pending further study. When this is indicated, the acknowledgement will either specify that the FAA has initiated further study, or the proponent may elect to reduce the height or request further study within (sixty) 60 days, in which event, the FAA will begin the study when the proponent so advises.

c. If further aeronautical study is initiated, public notice may be prepared and distributed for comments to those agencies, organizations, or individuals with known aeronautical interests to determine if the proposal would be a hazard to air navigation. State and local aviation authorities, as well as various military organizations of the Department of Defense, are also offered the opportunity to comment on the aeronautical effects of the proposal.

d. All responses received by the end of the specified comment period are analyzed by the FAA regional specialists for valid aeronautical comments and objections.

e. The office conducting the study may decide to conduct an informal airspace meeting with interested parties to discuss the effects of the proposal and to gather additional facts or information relevant to the study.

f. The FAA specialists may negotiate with the proponent during the study process to resolve any adverse

effect(s) on aeronautical operations. Many times, a minor reduction in height and/or relocation of a proposed structure will eliminate or sufficiently minimize adverse aeronautical effects that would permit the issuance of a Determination of No Hazard to Air Navigation.

g. After the aeronautical study is completed, the regional office will normally issue a:

(1) Determination of Hazard to Air Navigation; or

(2) Determination of No Hazard to Air Navigation.

h. An FAA determination is a conclusion based on the study of a structure's projected impact on the safe and efficient use of the navigable airspace by aircraft. It should not be construed as an approval or disapproval of the project.

i. The FAA usually recommends marking and/or lighting of a structure when its height exceeds 200 feet above ground level (AGL) or exceeds Part 77 obstruction criteria. However, the FAA may recommend marking and/or lighting of a structure that does not exceed 200 feet AGL or Part 77 obstruction standards because of its particular location.

7. HOW TO PETITION THE ADMINISTRATOR FOR DISCRETIONARY REVIEW.

a. When a determination is issued under 14 CFR Section 77.19 (except Section 77.19 c.(1)), or Section 77.35 or when a revision or extension is issued under Section 77.39 (c), you may petition the FAA Administrator for a review of the determination, revision, or extension if you:

(1) Are the sponsor of the proposed construction or alteration,

(2) Stated a substantial aeronautical objection to the proposal during an aeronautical study, or

(3) Have a substantial aeronautical objection but were not given an opportunity to state it.

b. The petition must be submitted within 30 days after the issue date of the determination, revision, or extension and must contain a full statement of the basis upon which it is made. Submit an original and two copies to:

Manager, Airspace and Rules
Division, ATA-400
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Nancy Kalinowski

John S. Walker

Program Director, Air Traffic
Airspace Management Program