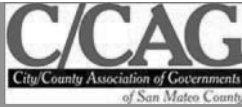


Attachment A
City of Millbrae ALUC Application



APPLICATION FOR LAND USE CONSISTENCY DETERMINATION
San Mateo County Airport Land Use Commission
C/CAG ALUC

APPLICANT INFORMATION

Agency: City of Millbrae

Project Name: Amendments to the Millbrae Downtown and El Camino Real Specific Plan and the City's Zoning Map

Address: 621 Magnolia Avenue

APN: Citywide

City: Millbrae

State: California

ZIP Code: 94030

Staff Contact: Nestor Guevara

Phone: 650-259-2335

Email: nquevara@ci.millbrae.ca.us

PROJECT DESCRIPTION

The project consists of amendments Figure 5.1 Land Use Designations of the Downtown and El Camino Real Specific Plan to extend the Commercial Preference Area overlay north of Meadow Glen Avenue for Commercial Mixed Use zoned and Residential Focused Mixed Use zoned parcels and related text amendments, an amendment to allow maximum height up to 100' for Residential Focused Mixed Use zoned parcels within the Commercial Preference Area Overlay, and a amendment to the Millbrae Zoning Map to be consistent with the Specific Plan map.

REQUIRED PROJECT INFORMATION

For General Plan, Specific Plan or Zoning Amendments and Development Projects:

A copy of the relevant amended sections, maps, etc., together with a detailed description of the proposed changes, sufficient to provide the following:

1. Adequate information to establish the relationship of the project to the three areas of Airport Land Use compatibility concern (ex. a summary of the planning documents and/or project development materials describing how ALUCP compatibility issues are addressed):

a) Noise: Location of project/plan area in relation to the noise contours identified in the applicable ALUCP.

- Identify any relevant citations/discussion included in the project/plan addressing compliance with ALUCP noise policies.

b) Safety: Location of project/plan area in relation to the safety zones identified in the applicable ALUCP.

- Include any relevant citations/discussion included in the project/plan addressing compliance with ALUCP safety policies.

c) Airspace Protection:

- Include relevant citations/discussion of allowable heights in relation to the protected airspace/proximity to airport, as well as addressment of any land uses or design features that may cause visual, electronic, navigational, or wildlife hazards, particularly bird strike hazards.

- If applicable, identify how property owners are advised of the need to submit Form 7460-1, *Notice of Proposed /Construction or Alteration* with the FAA.

2. Real Estate Disclosure requirements related to airport proximity
3. Any related environmental documentation (electronic copy preferred)
4. Other documentation as may be required (ex. related staff reports, etc.)

Additional information For Development Projects:

1. 25 sets of scaled plans, no larger than 11" x 17"
2. Latitude and longitude of development site
3. Building heights relative to mean sea level (MSL)

ALUCP Plans can be accessed at <http://ccag.ca.gov/plansreportslibrary/airport-land-use/>

Please contact C/CAG staff at 650 599-1467 with any questions.

<i>For C/CAG Staff Use Only</i>
<i>Date Application Received</i>
<i>Date Application Deemed Complete</i>
<i>Tentative Hearing Dates:</i>
- <i>Airport Land Use Committee</i>
- <i>C/CAG ALUC</i>

LAND USE REGULATIONS

The regulations and standards in this section ensure that future development is compatible with the existing scale and character of adjacent development and are contributing to overall placemaking. While the development standards regulate the form and intensity of future development, there is flexibility in the corresponding land uses to provide the ability to respond to changing market demands.

LAND USE DESIGNATIONS

The following land use designations allow for a wide variety of uses to create mixed use districts within the Plan Area. They describe the appropriate mix of uses to achieve the intended character in each district. The Land Use designations along with development standards will be the primary tool for regulating the form and character of future development. The Specific Plan proposes five land use designations.

COMMERCIAL PREFERENCE AREA OVERLAY

Purpose

The Commercial Preference Area Overlay encourages and maintains commercial uses and residential mixed-use development along the El Camino Real transit corridor.

- Development in the Commercial Preference Area Overlay is not subject to the maximum floor area ratio requirements of the underlying zoning.
- Transit oriented commercial and residential mixed-use projects with community-serving active ground floor commercial uses facing El Camino Real are required.

DOWNTOWN MIXED USE (DMU)

Purpose

The purpose of the Downtown Mixed-use designation is to maintain the existing economic base of the downtown while enhancing

vibrancy of the downtown district by encouraging diversity of businesses and longer hours of activity.

Key characteristics of the Downtown Mixed-use designation are described below:

- Active ground floor uses, predominantly retail as well as non-retail uses such as banks, fitness uses, eating and drinking establishments, personal service uses, gallery space, entertainment or community gathering space may be allowed.
- Vertical mixed-use development with residential and office uses on upper floors to encourage increased customer base for the restaurant and retail businesses as well as after-hours activity that residential uses bring.
- Building Heights: Maximum building heights allowed range from 55' on parcels fronting Broadway Avenue; and maximum of 85' on parcels fronting El Camino Real.

- Minimum ground floor height of 14' from finished floor to finished ceiling.

CORRIDOR MIXED USE (CMU)

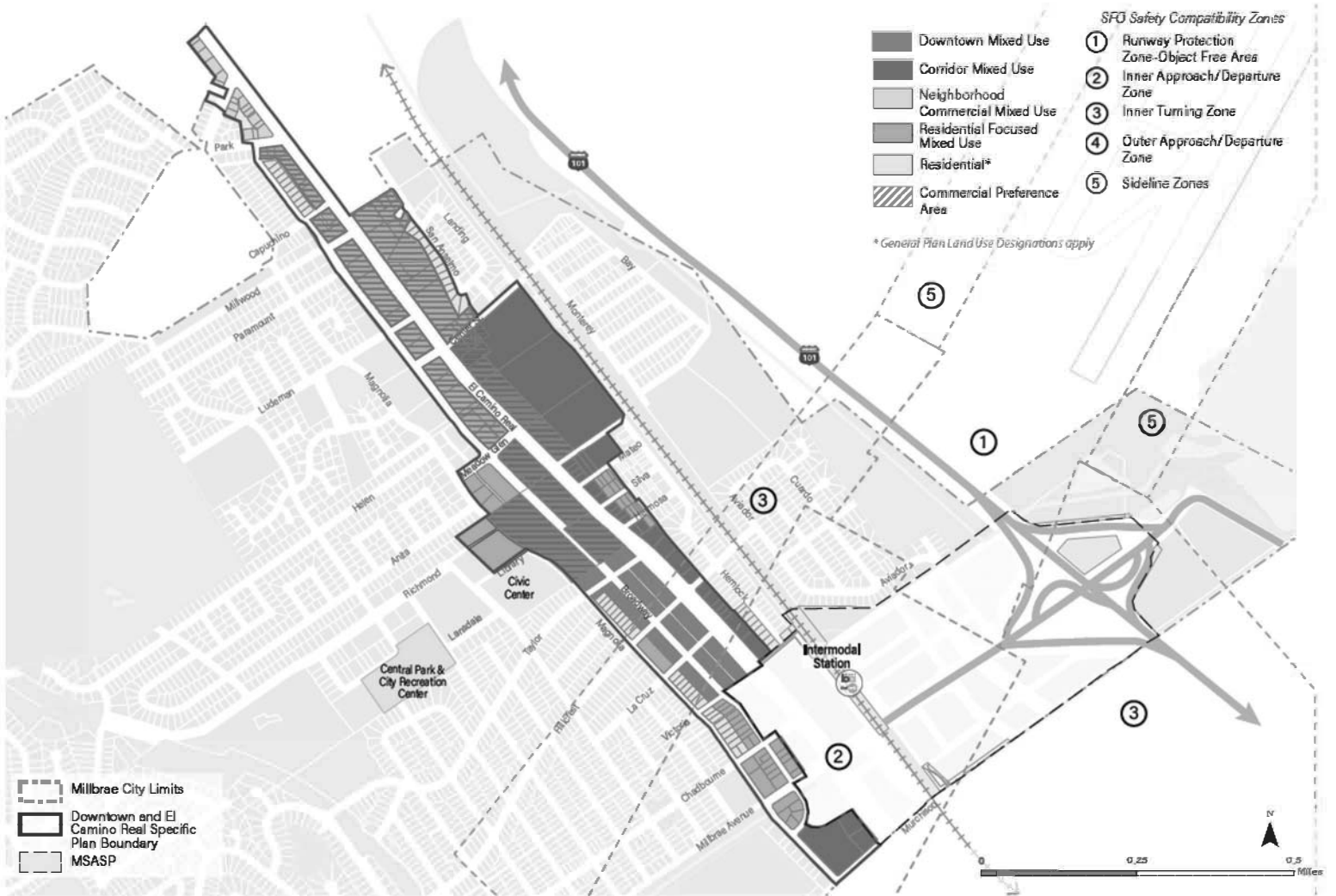
Purpose

The purpose of this designation is to create opportunity for higher intensity development along El Camino Real corridor on parcels of varying sizes. The Corridor mixed use will take advantage of proximity to the inter-modal stations and multi-modal complete street that El Camino Real is envisioned to be by allowing a mix of uses along the corridor.

Key characteristics of the Corridor Mixed-use designation are described below:

- Vertical mixed-use development will include residential, office, hotel, meeting rooms, small convention facility, lifestyle stores, specialty large format retail, entertainment, and cultural facility.
- The Commercial Preference Area Overlay in the Corridor Mixed Use (CMU) designation indicates

FIG 5.1: LAND USE DESIGNATIONS



parcels where commercial use is required either (1) if currently developed with commercial space to retain the same square footage of commercial space if redeveloped or (2) if vacant or occupied by non-commercial uses, the majority of the square footage in the new development project must be commercial. This serves to take advantage of the larger parcel sizes and to complement uses in the downtown. Hotels are strongly encouraged, with the tallest heights of 125' on these sites.

- All new development in the Commercial Preference Area Overlay in the Corridor Mixed Use (CMU) designation shall comply with the following requirements: (1) if currently developed with commercial space to retain the same square footage of commercial space if redeveloped or (2) if vacant or occupied by non-commercial uses, the majority of the square footage in the new development project must be commercial.
- Ground floor should have uses such as restaurants, cafes, retail, small offices, maker spaces, grocery stores, entrance lobbies, galleries, fitness centers, and community centers that contribute to a lively street environment.

- Building Heights: Maximum building heights allowed range from 65' fronting Broadway Avenue and the railroad; 85' fronting El Camino Real and 125' on larger parcels such as 900 to 1100 El Camino Real.
- Minimum ground floor height of 14' from finished floor to finished ceiling.

RESIDENTIAL FOCUSED MIXED USE (RFMU)

Purpose

The Residential Focused Mixed-Use designation focuses on medium to high-density multi-family residential use to allow a variety of multi-family residential typology such as town homes, stacked flats, senior housing, live-work units, co-living, etc. with high quality shared amenities. This designation allows commercial uses on the ground floor to create opportunity for neighborhood scale and local businesses, and to provide space for community-serving uses.

Key characteristics of the Residential Mixed-use designation are described below:

- Vertical mixed-use development is encouraged with residential on upper floors while allowing for non-residential uses on the ground floor.

- The Commercial Preference Overlay in the Residential Focused Mixed Use (RFMU) designation indicates parcels where residential mixed-use with ground floor commercial facing El Camino Real is required. If currently developed with commercial space, the same square footage must be retained if redeveloped. Residential mixed-use development in the overlay area is granted additional building height up to 100'. Development in the overlay is not subject to the maximum 2.5 floor area ratio requirement.

- Ground floor may include uses such as cafes, neighborhood serving retail, community gathering space, galleries, professional offices, co-working spaces, small meeting rooms, community kitchens, maker spaces, service-oriented businesses, and residential stoops that contribute to a lively street environment.
- Building Heights: Maximum building heights allowed, range from 55' on parcels adjacent to existing single-family neighborhoods to 85' along El Camino Real.

- Minimum ground floor height of 15' from finished floor to finished ceiling for non-residential uses.

NEIGHBORHOOD COMMERCIAL MIXED USE (NCMU)

Purpose

The Neighborhood Commercial Mixed-use designation intends to strengthen the neighborhood-serving function of the Neighborhood Anchor district by concentrating small offices for service-oriented businesses, retail, restaurants, live-work units and some residential use on the upper floors.

Key characteristics of the Neighborhood Commercial Mixed-use designation are described below:

- Vertical mixed-use development with small offices, live-work units, or residential use on upper floors
- Ground floor may include uses such as cafes, neighborhood serving retail, community gathering space, galleries, co-working spaces, maker spaces, service-oriented businesses, commercial kitchens.
- Building Heights: Maximum building height allowed is 55'

TABLE 5.3 LAND USE DESIGNATION SUMMARY WITH ALLOWED HEIGHT AND INTENSITY

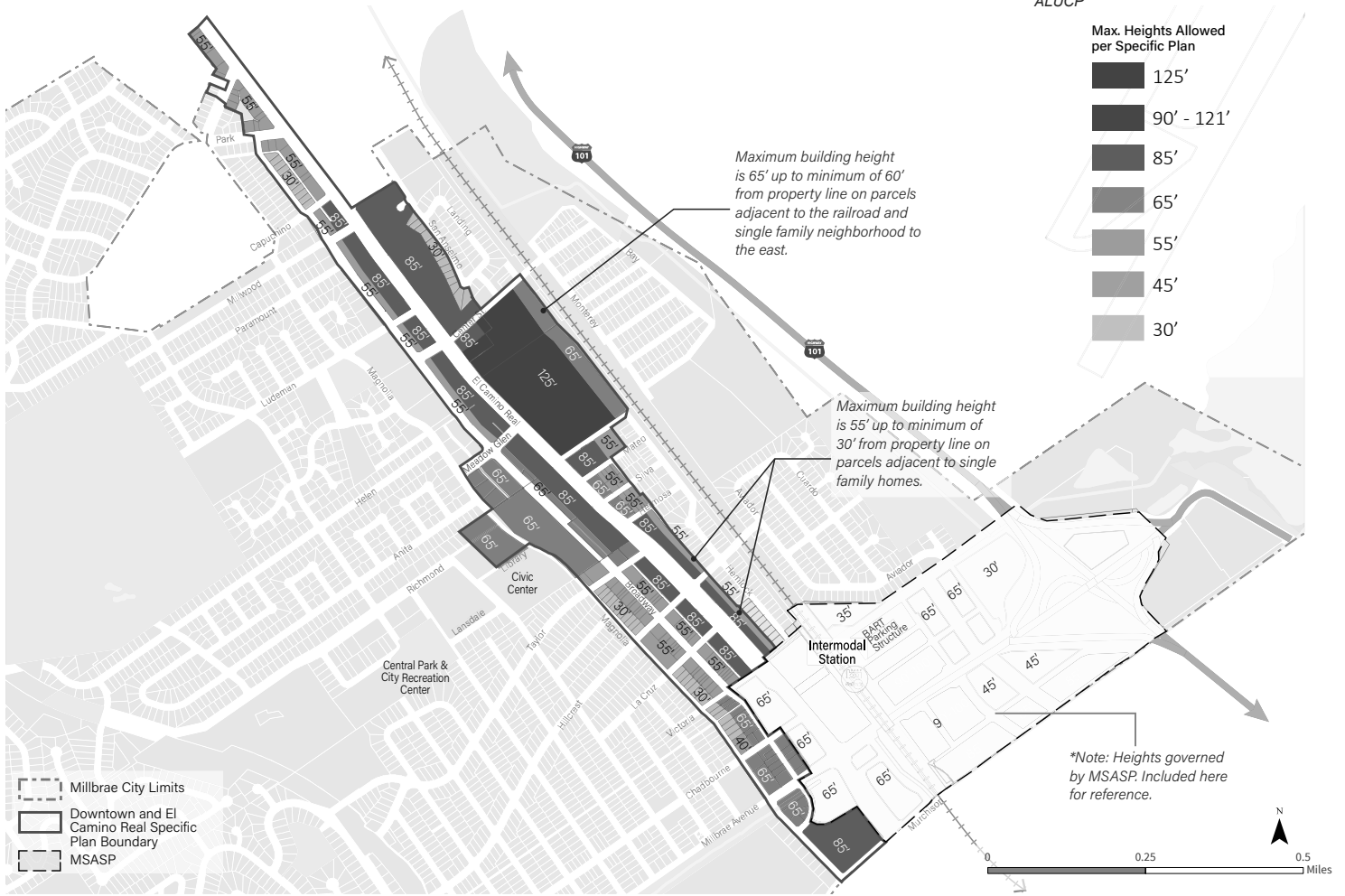
LAND USE DESIGNATION	PURPOSE	MAXIMUM F.A.R.	PERMITTED DENSITY RANGE
Downtown Mixed Use (DMU)	<ul style="list-style-type: none"> Maintain the existing economic base of the downtown while enhancing vibrancy of the downtown district by encouraging diversity of businesses and longer hours of activity. 	3.5	<ul style="list-style-type: none"> 25 to 50 Du/Ac on parcels fronting Broadway Ave. 70 to 110 Du/Ac on parcels fronting ECR
Corridor Mixed Use (CMU)	<ul style="list-style-type: none"> Create opportunity for higher intensity development along El Camino Real corridor on parcels of varying sizes. Take advantage of proximity to the inter-modal stations and multi-modal complete street that El Camino Real is envisioned to be by allowing a mix of uses along the corridor. 	3.5	70 to 130 Du/Ac
Residential Focused Mixed Use (RFMU)	<ul style="list-style-type: none"> Focuses on medium to high-density multi-family residential use to allow of a variety of multi-family residential typology such as apartments, stacked flats, senior housing, live-work units, co-living, etc. with high quality shared amenities Allows commercial uses on the ground floor to create opportunity for neighborhood scale and local businesses, and to provide space for community serving uses. 	2.5	60 to 80 Du/Ac
Neighborhood Commercial Mixed Use (NCMU)	<ul style="list-style-type: none"> Allows small offices for service-oriented businesses, along with retail, to strengthen its neighborhood serving function, within the Neighborhood Anchor district with residential use on upper floors. 	2.5	80 Du/Ac
Residential	<ul style="list-style-type: none"> Unchanged. Defined in General Plan 2040 	Refer to General Plan and Zoning Code	Refer to General Plan and Zoning Code

Note: Maximum FAR not required in the Commercial Preference Area Overlay.

The Commercial Preference Area Overlay allows additional height limits for Residential Mixed-Use Projects.

All heights must be compatible with the SFO ALUCP

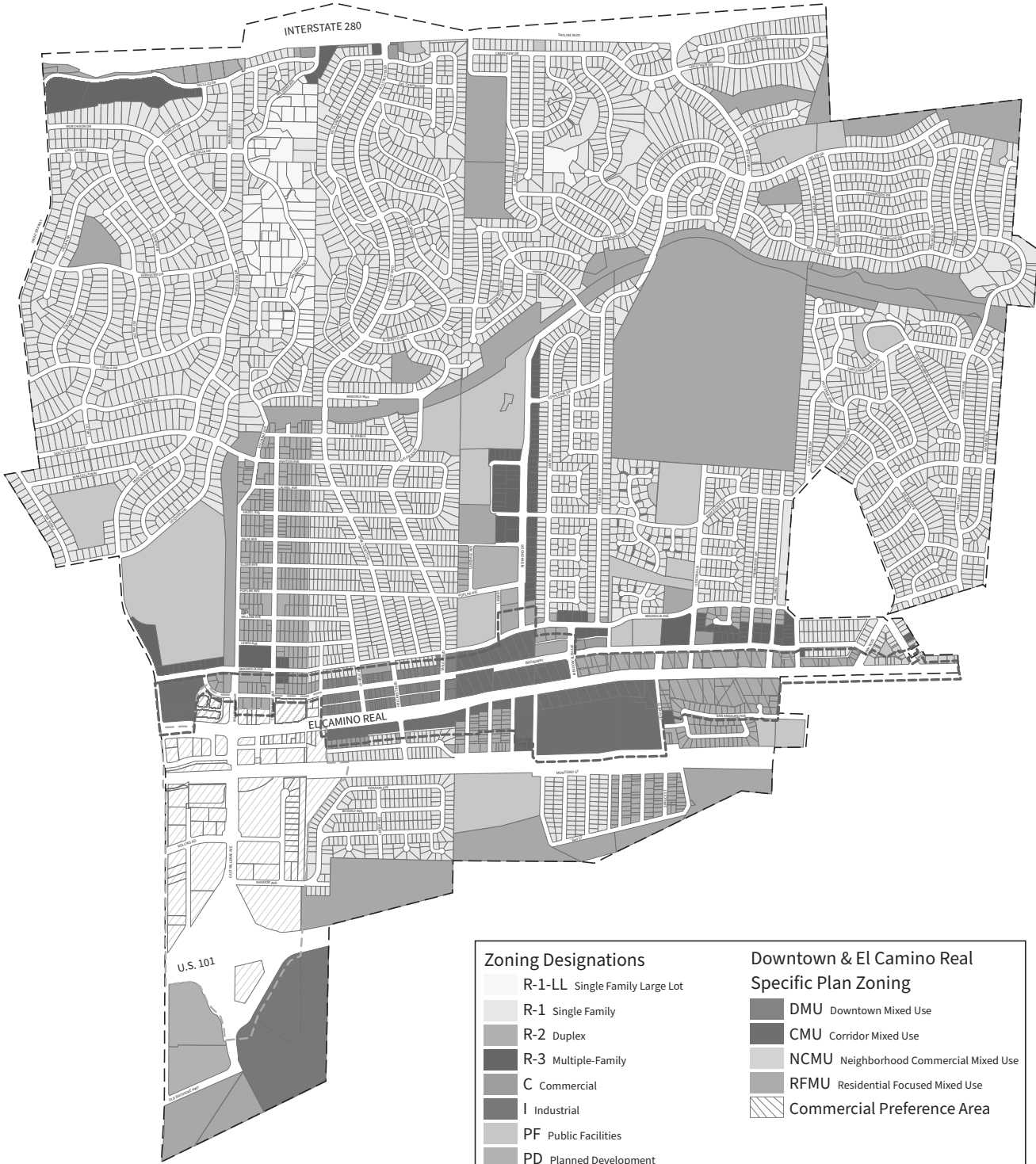
FIG 5.2: BUILDING HEIGHTS



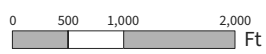


Official City of Millbrae Zoning Map

DRAFT FEBRUARY 2024



Zoning Designations		Downtown & El Camino Real Specific Plan Zoning	
	R-1-LL Single Family Large Lot		DMU Downtown Mixed Use
	R-1 Single Family		CMU Corridor Mixed Use
	R-2 Duplex		NCMU Neighborhood Commercial Mixed Use
	R-3 Multiple-Family		RFMU Residential Focused Mixed Use
	C Commercial		Commercial Preference Area
	I Industrial		
	PF Public Facilities		
	PD Planned Development		
	O Open Space		
	MSASP Millbrae Station Area Specific Plan		
Boundaries			
	City Limits		
	DT&ECR Downtown & El Camino Real Specific Plan Boundary		
	MSASP Millbrae Station Area Specific Plan Boundary		



Source: City of Millbrae, 2022; Mintier Hamish, 2022.
Map Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

Attachment B
SFO ALUCP Airport Influence Areas

4.2 Airport Influence Area (AIA)

The AIA for SFO includes two parts: Area A and Area B. Area A is the larger of the two areas and encompasses all of San Mateo County. Area B lies within Area A and includes land exposed to aircraft noise above CNEL 65 dB or lying below critical airspace.

Area A, depicted on **Exhibit IV-1**, includes the entire county, all of which is overflown by aircraft flying to and from SFO at least once per week at altitudes of 10,000 feet or less above mean sea level (MSL). (Appendix L explains the rationale for defining the AIA Area A boundary.)

Area B of the AIA, depicted on **Exhibit IV-2**, is based on a combination of the outer boundaries of the noise compatibility and safety zones, the 14 CFR Part 77 conical surface, and the TERPS approach and One-Engine Inoperative (OEI) departure surfaces.¹ As depicted on Exhibit IV-2, the Area B boundary has been adjusted to follow streets, highways, and corporate boundaries to make it easier to identify and implement. See **Exhibit IV-3** for a close-up view of the northwestern half of Area B and **Exhibit IV-4** for a close-up view of the southeastern half.

The following AIA policies (IP) shall apply to the ALUCP.

IP-1 AIRPORT INFLUENCE AREA A – REAL ESTATE DISCLOSURE AREA

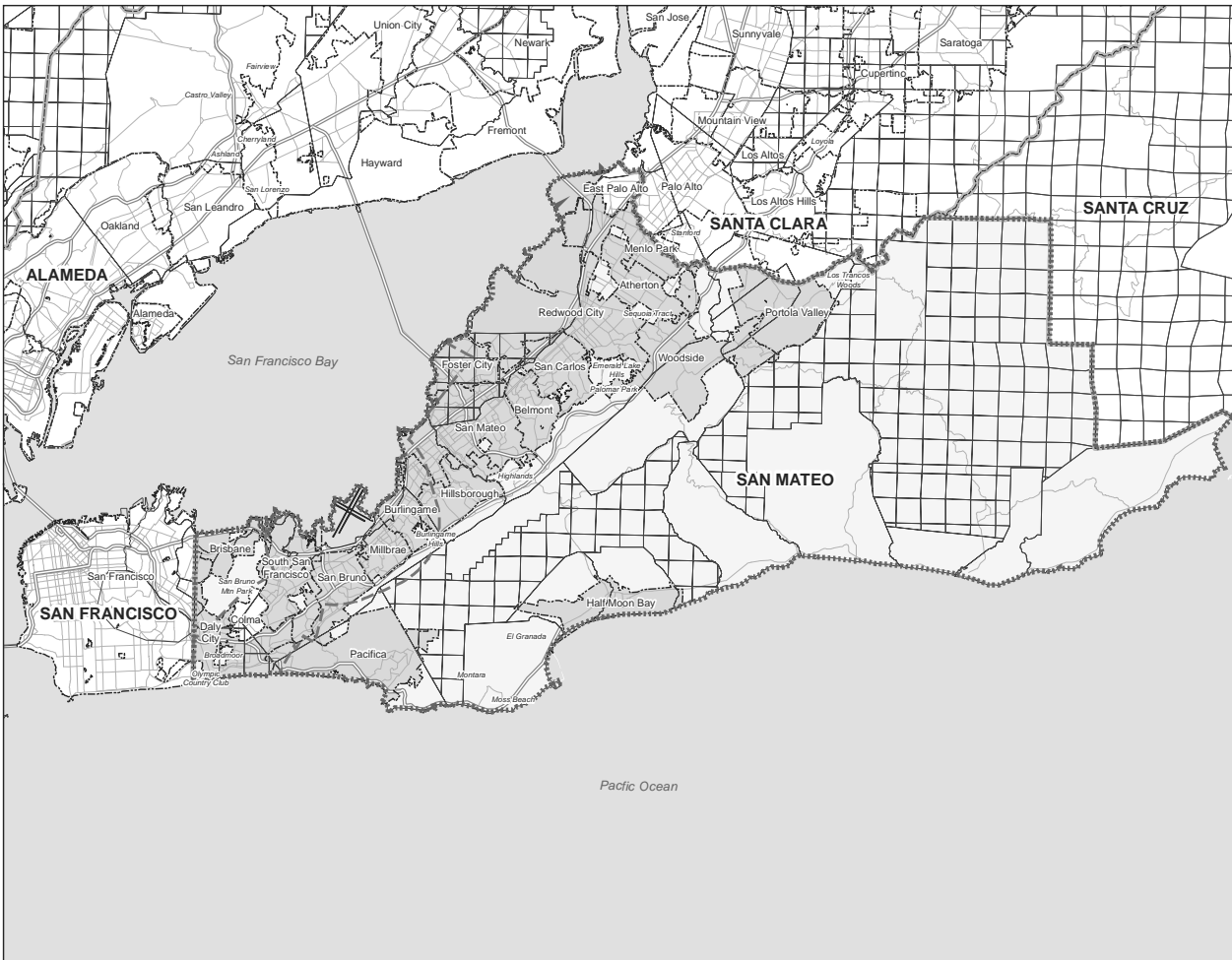
Within Area A, the real estate disclosure requirements of state law apply. Section 11010 of the Business and Professions Code requires people offering subdivided property for sale or lease to disclose the presence of all existing and planned airports within two miles of the property.² The law requires that, if the property is within an “airport influence area” designated by the airport land use commission, the following statement must be included in the notice of intention to offer the property for sale:

NOTICE OF AIRPORT IN VICINITY

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

¹ On the northwest side, the Area B boundary corresponds to the 800-foot elevation line of the TERPS approach surface and the OEI departure surface. On the southeast side, the Area B boundary corresponds with the transitional surfaces rising from the flat, central portion of the TERPS surface having an elevation of 210 feet MSL. See Exhibits IV-17 and IV-18 for a detailed depiction of the airspace surfaces.

² California Business and Professions Code, Section 11010(b)(13).



- LEGEND**
- Boundary for Airport Influence Area B
 - Airport Influence Area A Boundary
 - County Boundary
 - City Boundary
 - Range/ Township/ Section and Rancho Lines
 - Freeways
 - Roads
 - Municipal Members of SFO/Community Roundtable
 - Unincorporated San Mateo County



Exhibit IV-1
**AIRPORT INFLUENCE AREA A -
REAL ESTATE DISCLOSURE AREA**
Comprehensive Airport Land Use Plan
For The Environs of San Francisco International Airport
C/CAG
City/County Association of Governments
of San Mateo County, California



- LEGEND**
- Boundary for Airport Influence Area B
 - Outer Boundary of Safety Zones
 - CNEL Contour, 2020 Forecast
 - 14 CFR Part 77 Conical Surface
 - Outer Boundary of TERPS Approach and OEI Departure Surfaces
 - ▭ Airport Property
 - ▲ BART Station
 - CALTRAIN Station
 - - - Municipal Boundary
 - Railroad
 - Freeway
 - Road
 - ▭ Local Park, Golf Course, Cemetery
 - ▭ Regional Park or Recreation Area
 - ▭ Open Space

Sources:

100:1 FAA Notification Zone: Ricondo & Associates, Inc. and Jacobs Consultancy, based on 14 CFR Part 77, Subpart B, Section 77.9.

Outer Boundary of TERPS Approach and OEI Departure Surfaces: San Francisco International Airport, Jacobs Consultancy, and Planning Technology Inc., 2009

Safety Compatibility Zones: Jacobs Consultancy Team, 2009, Ricondo & Associates, Inc., 2011

Noise Contour: URS Corporation and BridgeNet International, Draft Environmental Assessment, San Francisco International Airport Proposed Runway Safety Area Program, June 2011

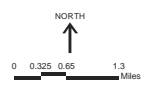


Exhibit IV-2
AIRPORT INFLUENCE AREA B
LAND USE POLICY ACTION/PROJECT REFERRAL AREA
 Comprehensive Airport Land Use Plan
 for the Environs of San Francisco International Airport
C/CAG
 City/County Association of Governments
 of San Mateo County, California



- LEGEND**
- Boundary for Airport Influence Area B
 - Outer Boundary of Safety Zones
 - CNEL Contour, 2020 Forecast
 - 14 CFR Part 77 Conical Surface
 - Outer Boundary of TERPS Approach and OEI Departure Surfaces
 - Airport Property
 - ▲ BART Station
 - CALTRAIN Station
 - Municipal Boundary
 - Railroad
 - Freeway
 - Road
 - Local Park, Golf Course, Cemetery
 - Regional Park or Recreation Area
 - Open Space

Sources:

100:1 FAA Notification Zone: Ricondo & Associates, Inc. and Jacobs Consultancy, based on 14 CFR Part 77, Subpart B, Section 77.9.

Outer Boundary of TERPS Approach and OEI Departure Surfaces: San Francisco International Airport, Jacobs Consultancy, and Planning Technology Inc., 2009

Safety Compatibility Zones: Jacobs Consultancy Team, 2009; Ricondo & Associates, Inc., 2011

Noise Contour: URS Corporation and BridgeNet International. Draft Environmental Assessment, San Francisco International Airport Proposed Runway Safety Area Program, June 2011

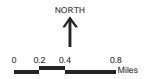


Exhibit IV-3
AIRPORT INFLUENCE AREA B – NORTH SIDE
 Comprehensive Airport Land Use Plan
 for the Environs of San Francisco International Airport
C/CAG
 City/County Association of Governments
 of San Mateo County, California

IP-2 AIRPORT INFLUENCE AREA B – POLICY/PROJECT REFERRAL AREA

Within Area B, the Airport Land Use Commission (the C/CAG Board) shall exercise its statutory duties to review proposed land use policy actions, including new general plans, specific plans, zoning ordinances, plan amendments and rezonings, and land development proposals. The real estate disclosure requirements in Area A also apply in Area B. For the purposes of this policy, parcels along the edge of the Area B Boundary that are split by the boundary shall be considered as fully being within Area B.

Portions of unincorporated San Mateo County and the following municipalities are located within Area B:

- Daly City – small part of the city in the Serramonte area
- Colma –the entire town
- Pacifica – north and northeast of the city
- South San Francisco – all but north and west sides of the city
- San Bruno – all but northwest corner of the city
- Millbrae – the entire city
- Burlingame – the entire city
- Hillsborough – the northern part of the town, north of Chateau Drive
- San Mateo – a few blocks in the City of San Mateo
- Foster City – the northern part of the City
- Unincorporated San Mateo County: California Golf Club, Country Club Park, Burlingame Hills, and San Francisco International Airport

The following special districts are located within Area B of the AIA:

- North San Mateo County Sanitation District
- Peninsula Health Care District
- San Mateo County Flood Control District
- San Mateo County Harbor District
- San Mateo County Mosquito & Vector Control District
- Westborough County Water District

The following school districts and community college district are located within Area B:

- Bayshore Elementary School District
- Brisbane Elementary School District
- Burlingame Elementary School District

- Hillsborough City Elementary School District
- Jefferson Elementary School District
- Jefferson Union High School District
- Millbrae Elementary School District
- Pacifica School District
- San Bruno Park Elementary School District
- San Mateo County Community College District
- San Mateo Foster City Elementary School District
- San Mateo Union High School District
- South San Francisco Elementary School District

4.3 Noise Compatibility Policies

The airport noise compatibility policies described in this section have a two-fold purpose:

1. To protect the public health, safety, and welfare by minimizing the exposure of residents and occupants of future noise-sensitive development to excessive noise.
2. To protect the public interest in providing for the orderly development of SFO by ensuring that new development in the Airport environs complies with all requirements necessary to ensure compatibility with aircraft noise in the area. The intent is to avoid the introduction of new incompatible land uses into the Airport's "noise impact area" so that the Airport will continue to be in compliance with the State Noise Standards for airports (California Code of Regulations, Title 21, Sections 5012 and 5014).³

The following noise compatibility policies (NP) shall apply to the ALUCP.

NP-1 NOISE COMPATIBILITY ZONES

For the purposes of this ALUCP, the projected 2020 CNEL noise contour map from the Draft Environmental Assessment for the Proposed Runway Safety Area Program shall define the boundaries within which noise compatibility policies described in this Section shall apply.⁴ **Exhibit IV-5** depicts the noise compatibility zones. More detail is provided on **Exhibit IV-6**. The zones are defined by the CNEL 65, 70 and 75 dB contours.

³ In 2002, the San Mateo County Board of Supervisors declared that the Airport had eliminated its "noise impact area," as defined under state law -- California Code of Regulations, Title 21, Sections 5012 and 5014.

⁴ URS Corporation and BridgeNet International. *Draft Environmental Assessment, Proposed Runway Safety Area Program, San Francisco International Airport*, June 2011.

Attachment C
SFO ALUCP Airspace Protection Policies

and associated with human disease of varying severity.

- b. Biosafety Level 3 practices, safety equipment, and facility design and construction are applicable to clinical, diagnostic, teaching, research, or production facilities in which work is done with indigenous or exotic agents with a potential for respiratory transmission, and which may cause serious and potentially lethal infection.
- c. Biosafety Level 4 practices, safety equipment, and facility design and construction are applicable for work with dangerous and exotic agents that pose a high individual risk of life-threatening disease, which may be transmitted via the aerosol route and for which there is no available vaccine or therapy.

4.5 Airspace Protection

The compatibility of proposed land uses with respect to airspace protection shall be evaluated in accordance with the policies set forth in this section. These policies are established with a twofold purpose:

1. To protect the public health, safety, and welfare by minimizing the public's exposure to potential safety hazards that could be created through the construction of tall structures.
2. To protect the public interest in providing for the orderly development of SFO by ensuring that new development in the Airport environs avoids compromising the airspace in the Airport vicinity. This avoids the degradation in the safety, utility, efficiency, and air service capability of the Airport that could be caused by the attendant need to raise visibility minimums, increase minimum rates of climb, or cancel, restrict, or redesign flight procedures.

4.5.1 FEDERAL REGULATIONS REGARDING TALL STRUCTURES

14 Code of Federal Regulations (CFR) Part 77, *Safe, Efficient Use and Preservation of the Navigable Airspace*, governs the FAA's review of proposed construction exceeding certain height limits, defines airspace obstruction criteria, and provides for FAA aeronautical studies of proposed construction. **Appendix F** describes the FAA airspace review process and the extent of FAA authority related to airspace protection.

4.5.2 PART 77, SUBPART B, NOTIFICATION PROCESS

Federal regulations require any person proposing to build a new structure or alter an existing structure with a height that would exceed the elevations described in CFR Part 77, Subpart B, Section 77.9, to prepare an FAA Form 7460-1, *Notice of Proposed Construction or Alteration*, and submit the notice to the FAA. The regulations apply to buildings and other structures or portions of structures, such as mechanical equipment, flag poles, and other projections that may exceed the aforementioned elevations.

Exhibit IV-10 depicts the approximate elevations at which the 14 CFR Part 77 notification requirements would be triggered; see **Exhibit IV-11** for a close-up view of the northern half and **Exhibit IV-12** for a close-up view of the southern half of the area. These exhibits are provided for informational purposes only. Official determinations of the areas and elevations within which the federal notification requirements apply are subject to the authority of the FAA. The FAA is empowered to require the filing of notices for proposed construction based on considerations other than height. For example, in some areas of complex airspace and high air traffic volumes, the FAA may be concerned about the potential for new construction of any height to interfere with electronic navigation aids. In these areas, the FAA will want to review all proposed construction projects.

The FAA has developed an on-line tool for project sponsors to use in determining whether they are required to file a Notice of Proposed Construction or Alteration. Sponsors of proposed projects are urged to refer to this website to determine whether they are required to file Form 7460-1 with the FAA:

<https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm>

4.5.3 AIRSPACE MAPPING

Part 77, Subpart C, establishes obstruction standards for the airspace around airports including approach zones, conical zones, transitional zones, and horizontal zones known as “imaginary surfaces.” **Exhibit IV-13** depicts the Part 77 Civil Airport Imaginary Surfaces at SFO. The imaginary surfaces rise from the primary surface, which is at ground level immediately around the runways. The surfaces rise gradually along the approach slopes associated with each runway end and somewhat more steeply off the sides of the runways. The FAA considers any objects penetrating these surfaces, whether buildings, trees or vehicles travelling on roads and railroads, as obstructions to air navigation. Obstructions may occur without compromising safe air navigation, but they must be marked, lighted, and noted on aeronautical publications to ensure that pilots can see and avoid them.

Close-up views of the north and south sides of the Part 77 surfaces are provided in **Exhibit IV-14** and **Exhibit IV-15**, respectively. Additionally, **Exhibit IV-16** provides an illustration of the outer approach and transitional surfaces located on the southeast side of the Part 77 surfaces.

Together with its tenant airlines, SFO has undertaken a mapping effort to illustrate the critical aeronautical surfaces that protect the airspace required for multiple types of flight procedures such as those typically factored into FAA aeronautical studies, as shown on **Exhibit IV-17** and **Exhibit IV-18**. These aeronautical surfaces include those established in accordance with FAA Order 8260.3B, *U.S. Standard for Terminal Instrument Procedures (TERPS)*, and a surface representing the airspace required for One-Engine Inoperative (OEI) departures from Runway 28L (to the west through the San Bruno Gap).¹⁶ The exhibits depict the lowest elevations from the combination of the OEI procedure surface and all TERPS surfaces. The surfaces are defined with Required Obstacle Clearance (ROC) criteria to ensure safe separation of aircraft using the procedures from the underlying obstacles. Any proposed structures penetrating these surfaces are likely to receive Determinations of Hazard (DOH) from the FAA through the 7460-1 aeronautical study process. These surfaces indicate the maximum height at which structures can be considered compatible with Airport operations.

¹⁶ See Appendix F, Section F.3.2 for a discussion of one-engine inoperative procedures.

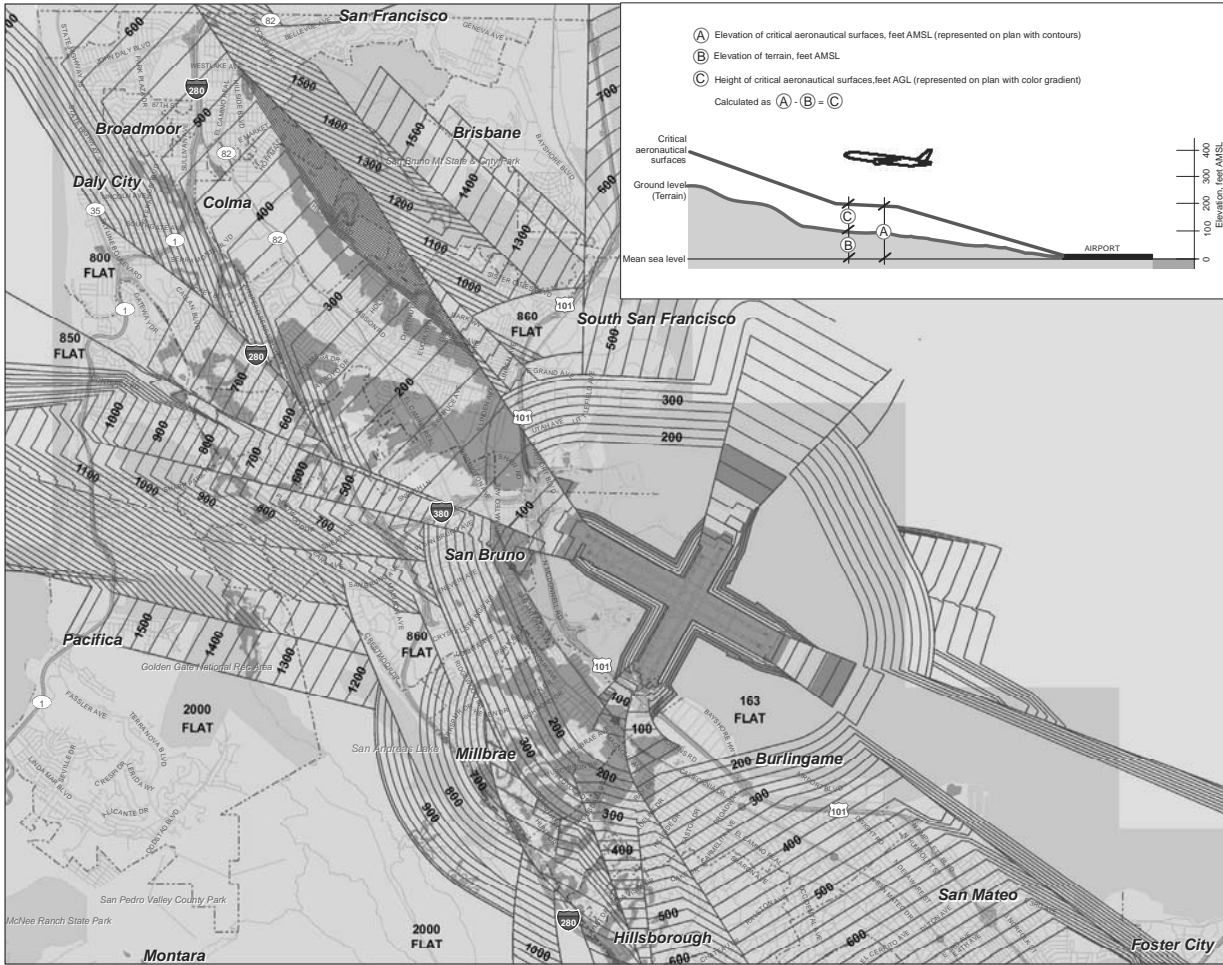


Exhibit IV-17
CRITICAL AERONAUTICAL SURFACES - NORTHWEST SIDE
 Comprehensive Airport Land Use Plan
 for the Environs of San Francisco International Airport
C/CAG
 City/County Association of Governments
 of San Mateo County, California

Exhibit IV-19, which is provided for information purposes only, depicts a profile view of the lowest critical airspace surfaces along the extended centerline of Runway 10L-28R – the TERPS Obstacle Departure Procedure (ODP) surface, representing standard all-engines departures, and the approximate OEI surface developed by SFO through independent study in consultation with the airlines serving SFO. The exhibit also shows the terrain elevation beneath the airspace surfaces and various aircraft approach and departure profiles, based on varying operating assumptions. The exhibit illustrates a fundamental principle related to the design of airspace protection surfaces. The surfaces are always designed below the actual aircraft flight profile which they are designed to protect, thus providing a margin of safety. Note that the ODP climb profile is above the ODP airspace surface, and the OEI climb profile is above the OEI airspace surface.

4.5.4 AIRSPACE PROTECTION POLICIES

The following airspace protection policies (AP) shall apply to the ALUCP.

AP-1 COMPLIANCE WITH 14 CFR PART 77, SUBPART B, NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION

AP-1.1 Local Government Responsibility to Notify Project Sponsors

Local governments should notify sponsors of proposed projects at the earliest opportunity to file Form 7460-1, *Notice of Proposed Construction or Alteration*, with the FAA for any proposed project that would exceed the FAA notification heights, as shown approximately on Exhibit IV-10. Under Federal law, it is the responsibility of the project sponsor to comply with all notification and other requirements described in 14 CFR Part 77. This requirement applies independent of this ALUCP.

AP-1.2 FAA Aeronautical Study Findings Required Before Processing Development Application

The sponsor of a proposed project that would exceed the FAA notification heights, as shown approximately on Exhibit IV-10, shall present to the local government permitting agency with his or her application for a development permit, a copy of the findings of the FAA's aeronautical study, or evidence demonstrating that he or she is exempt from having to file an FAA Form 7460-1. It is the responsibility of the local agency to consider the FAA determination study findings as part of its review and decision on the proposed project.

AP-2 COMPLIANCE WITH FINDINGS OF FAA AERONAUTICAL STUDIES

Project sponsors shall be required to comply with the findings of FAA aeronautical studies with respect to any recommended alterations in the building design and height and any recommended marking and lighting of their structures for their proposed projects to be deemed consistent with this ALUCP.

AP-3 MAXIMUM COMPATIBLE BUILDING HEIGHT

In order to be deemed consistent with the ALUCP, the maximum height of a new building must be the lower of (1) the height shown on the SFO critical aeronautical surfaces map (Exhibits IV-17 and IV-18), or (2) the maximum height determined not to be a “hazard to air navigation” by the FAA in an aeronautical study prepared pursuant to the filing of Form 7460-1.

For the vast majority of parcels, the height limits established in local zoning ordinances are lower than the critical airspace surfaces. In those cases, the zoning district height regulations will control. Compliance with the zoning district height and the SFO critical aeronautical surfaces map, however, does not relieve the construction sponsor of the obligation to file a FAA Form 7460-1 *Notice of Proposed Construction or Alteration*, if required, and to comply with the determinations resulting from the FAA’s aeronautical study.

For a project to be consistent with this ALUCP, no local agency development permits shall be issued for any proposed structure that would penetrate the aeronautical surfaces shown on Exhibits IV-17 and IV-18 or the construction of which **has not** received a Determination of No Hazard from the FAA, or which would cause the FAA to increase the minimum visibility requirements for any instrument approach or departure procedure at the Airport.

AP-4 OTHER FLIGHT HAZARDS ARE INCOMPATIBLE

Proposed land uses with characteristics that may cause visual, electronic, or wildlife hazards, particularly bird strike hazards, to aircraft taking off or landing at the Airport or in flight are incompatible in Area B of the Airport Influence Area. They may be permitted only if the uses are consistent with FAA rules and regulations. Proof of consistency with FAA rules and regulations and with any performance standards cited below must be provided to the Airport Land Use Commission (C/CAG Board) by the sponsor of the proposed land use action.

Specific characteristics that may create hazards to aircraft in flight and which are incompatible include:

- (a) Sources of glare, such as highly reflective buildings or building features, or bright lights, including search lights or laser displays, which would interfere with the vision of pilots making approaches to the Airport.
- (b) Distracting lights that that could be mistaken by pilots on approach to the Airport for airport identification lighting, runway edge lighting, runway end identification lighting, or runway approach lighting.
- (c) Sources of dust, smoke, or water vapor that may impair the vision of pilots making approaches to the Airport.
- (d) Sources of electrical interference with aircraft or air traffic control communications or navigation equipment, including radar.
- (e) Land uses that, as a regular byproduct of their operations, produce thermal plumes with the potential to rise high enough and at sufficient velocities to interfere with the control of aircraft in

flight. Upward velocities of 4.3 meters (14.1 feet) per second at altitudes above 200 feet above the ground shall be considered as potentially interfering with the control of aircraft in flight.¹⁷

(f) Any use that creates an increased attraction for wildlife, particularly large flocks of birds, that is inconsistent with FAA rules and regulations, including, but not limited to, FAA Order 5200.5A, *Waste Disposal Sites On or Near Airports*, FAA Advisory Circular 150/5200-33B, *Hazardous Wildlife Attractants On or Near Airports*, and any successor or replacement orders or advisory circulars. Exceptions to this policy are acceptable for wetlands or other environmental mitigation projects required by ordinance, statute, court order, or Record of Decision issued by a federal agency under the National Environmental Policy Act.

4.5.5 iALP AIRSPACE TOOL

In consultation with C/CAG, SFO developed the iALP Airspace Tool, a web-based, interactive tool to evaluate the relationship of proposed buildings with the Airport's critical airspace surfaces. The iALP Airspace Tool is designed to assist planners, developers, and other interested persons with the implementation of the airspace protection policies of the SFO ALUCP. The tool helps users determine: (1) the maximum allowable building height at a given site, and/or (2) whether a building penetrates a critical airspace surface, and by how much, given the proposed building height.

A more detailed description of the iALP Airspace Tool and a tutorial explaining how to use it is presented in **Appendix J**. Use of this tool, however, does not relieve a project sponsor of the duty to comply with all federal regulations, including the obligation to file Form 7460-1, Notice of Proposed Construction or Alteration, with the FAA.

¹⁷ This is a threshold established by the California Energy Commission in its review of power plant licensing applications. See *Blythe Solar Power Project: Supplemental Staff Assessment, Part 2*, CEC-700-2010-004-REVI-SUP-PT2, July 2010. California Energy Commission. Docket Number 09-AFC-6, p. 25. This criterion is based on guidance established by the Australian Government Civil Aviation Authority (Advisory Circular AC 139-05(0), June 2004). The FAA's Airport Obstructions Standards Committee (AOSC) is studying this matter but has not yet issued specific guidance.