

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

APPLICANT INFORMATION									
Agency: City of Daly City									
Project Name: 455 Hickey Boulevard – Office Building and Parking Structure									
Address: 455 Hickey Boulevard		APN: 091-341-140							
City: Daly City	State: California		ZIP Code: 94015						
Staff Contact: Sam Fielding	Phone: 650-991-8156		Email: sfielding@dalycity.org						
PROJECT DESCRIPTION									
The proposed project would demolish an existing office building, 65' height, and parking garage and build a new eight-story, 130' max.									
building height, office with three-story parking structure that faces Hickey Boulevard, on a 3.2-acre site (APN 091-341-140).									
There will be a total of 900 on-site parking spaces for the new 280,000 square feet office building.									
Parking entrance and vehicular access will be from both Hickey Boulevard and Serravista Avenue.									
REQUIRED PROJECT INFORMATION									

- **1. Noise:** The project is located north-west of the nearest noise contour CNEL 65 dB. The project site is under 65 dB and not located within the noise contours of the applicable ALUCP.
- 2. Safety: Location of project/ plan area in relation to the safety zoned identified in the applicable ALUCP. The project located at 455 Hickey Boulevard is located in Airport Influence Area B. The project site is not located within a safety zone identified in the applicable ALUCP. The nearest Zone is Zone 4, the boundary of which is located 2.74 miles south-east of the project site.
- 3. Airspace Protection.

The applicants were notified by email of the need to submit Form 7460-1, Notice of Proposed/Construction or Alteration with the FAA.

- 4. Real Estate Disclosure requirements related to airport proximity: Not applicable.
- 5. **Any related environmental documentation (electronic copy preferred)**: Daly City Planning staff anticipate an EIR will be prepared for the proposed project.
- 6. **Latitude and longitude of development site:** Lat. 37 degrees, 39 minutes, 48.4090 seconds North and Long. 122 degrees, 28 minutes, 2.1715 seconds West.
- 7. **Building Height:** Building heights relative to mean sea level (MSL): Building height is 130 feet. Site Elevation is 353.36 feet, Overall Height is 483.37 feet, and Maximum Height is 573.74 feet. The project is Under By 90.37 feet.

Attachments:

- A. Vicinity Map
- B. ALUCP Safety Compatibility Zones
- C. ALUCP Noise Compatibility Zones
- D. Project Description
- E. Plans
- F. Surface Intersection Analysis Report

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.

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

Attachment A: Vicinity Map

VICINITY MAP







PROJECT DESCRIPTION

October 17, 2022





The project site is located immediately to the south of the Gellert / Hickey Boulevard intersection. Further to the north is the Gellert Boulevard commercial area, including the Serramonte Shopping Center. This crescent-shaped parcel bends towards I-280 with much of the street frontage behind tall, mature vegetation along the freeway on-ramp. Its southwest property line follows Serravista Avenue, with a +/- 30 feet elevation difference from the north to the south at street level. The Daly City 2030 General Plan assigned Commercial Office (C-O) and Commercial Neighborhood (C-N) designation to this property. This project is applying for a new Planned Development (P-D) rezone, Design Review with Concurrent Entitlement, Lot Merger, and Fire Department Site Plan Review.

The 3.2 acres site is comprised of three parcels, APN: 091341140. It was previously developed as the Serramonte Business Center in 1982. Currently, there is a 3-level parking garage and a 5-story office building tucked into the hillside on Serravista Avenue. The existing office building is +/- 80,652 sq. ft with a total of 293 existing parking stalls 091341100 on site. The lowest level of the garage adjoins a single-aisle surface parking lot that runs parallel to the office building, and the south end continues as a steep driveway up to the street. The parking garage can be accessed from both Hickey and Serravista. There is a dedicated left turn lane at west-bound Hickey Boulevard, for vehicles coming from both I-280 and the east side of the city.

Project Scope

This project proposes to demolish the existing office building and parking garage for a new office development. A new 8-story office building will be built at the north end of the site, sitting above a new 3-level parking podium that faces Hickey Boulevard. The east end of the garage will have 2 additional above-grade parking decks. There will be a total of 900 on-site parking spaces for the new 280,000 square feet office building, at 3/1000 parking ratio. Parking entrance and vehicular access will be maintained on both Hickey and Serravista. The project has a 2.0 FAR.

Site Planning

The project takes advantage of the unique hillside and elevation difference between Hickey and Serravista to "tuck in" a 3-level parking garage as the base of the new building. About one-third of this garage will interface with Hickey Boulevard while the rest of the structure is screened by existing mature trees and vegetation. Vehicles will enter and exit the parking garage from Hickey Boulevard and onto I-280, and, also through parking garage entry on Serravista.

As opposed to the existing building, which is located at the middle of the site, the new office building will be placed at the farthest north-east end. This will make it closer to the commercial corner of Hickey and Gellert and away from the residential neighborhood on the south side. A fire lane between the new structure and the adjacent building will serve as a buffer. A curbside drop-off space will be added on Serravista, which connects the sidewalk and the new entry plaza leading to the building's

455 Hickey | 10071.003 Project Description October 17, 2022 Page 2 of 5

main lobby. A landscaped pathway also links the lobby to the elevator/stair of the parking structure to the south. On-site trash enclosure and service parking is located between the new office building and parking garage will be screened from the street with "green" walls and landscaping.

A 20 feet wide service driveway will be built on the north side of the lowest parking level and can be accessed from Hickey garage entry and through a sloped driveway to Serravitsa. It will be hidden behind existing mature vegetation and tucked under upper parking levels. The driveway will be reserved for city's access to the re-aligned underground sewer lines and storm drain. The south end of the site will be heavily landscaped and used as bio-retention areas for stormwater.

Building Design

The building's massing is articulated in different ways to reflect the unique hillside character and be respectful of the varied scales and massing of the mixed-used neighborhoods. A strong emphasis is placed on the vertical hierarchy of the building massing. Architectural expression evolved from the garage base to the body of the building and roofline. Appropriately expressed transparency of the glass facade is reinforced by skeletal frames of opaque finishes, aluminum, and solar-control elements. This animated face highlights the movement rhythm of the freeway and Hickey Blvd. Additionally, multi-level view decks are strategically placed and aligned with the glass building corners that provide belief to the building massing, but also create outdoor amenities within the building, on this tight site. The new office building will present itself as a visual maker of the neighborhood and for the vehicular traffic along the I-280 Freeway and from the west side of the city.

The dual-tone GFRC panels at the main building body form a solid frame, anchoring the building to the hillside. The building corners will be framed with metal panels and featured more glass panels for higher transparency, posting an interesting juxtaposition with the main body and helping to break down the building scale. Two types of glazing are being proposed in this project - the main body glazing will have a grey-blue appearance, creating a sophisticated feel to the overall building design; the corners will have a silver-blue appearance, creating a series of lighter volumes around the building. Sunshade devices are being applied at west and south-facing elevations to improve building daylight quality and energy performance. A double-story lobby will be placed on the southeast corner where the building meets grade at Serravista Avenue; two corner entrances will be created to welcome people coming from both the street and the parking garage.

The parking garage will be largely screened by existing landscaping on Hickey Boulevard, perforated metal panels will be placed strategically to dress up the garage, this design also forms a strong base for the office building above. Two additional levels of parking structure will be built east of the office building, large street trees will be placed along Serravista Avenue to minimize pretenses in the area. The stair tower will mimic the building design language and feature some glass panels facing Hickey Boulevard. The service yard will be located on the east side of the building, equipment and loading area will be screened with architectural and landscape elements to minimize the visual impact.

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The garage and office building will be of higher fire-resisting construction types. A 26-feet wide aerial fire apparatus will be maintained along Hickey Boulevard for the entire length of the building façade; a dedicated 20 feet-wide fire access road will be located along the west side of the building. Class I automatic-wet standpipe outlet connections will be provided at areas that exceed the 150 feet limit from the closest fire department access.

Landscape and Open Space

Nestled within the hills of Daly City, existing trees flank the site to the west within the 280 corridor. Large existing evergreen trees along the southwest edge of the site will remain and be protected. A tight site, care is taken with the plant palette to be drought tolerant, and work with the wind and fog common in this part of Daly City. Special attention is paid to native species such as Western Redbud, Ceanothus and Berkeley Sedge. Wind resistant species such as New Zealand Christmas Tree, Arbutus Marina and Holly Oak are used to create wind breaks and increase the amount of outdoor usable space. Color is added into the palette with species such as Pink Muhly Grass, New Zealand Flax and Star Jasmine.

Irregular shapes creating triangulated tilted planes are used to create identity within the Urban Plaza which also serves as a vehicular drop off. Useable space is created with large triangular mounds with seating carved within the mound for a protected and calming lunch time/ collaborative experience. Smaller seating areas are created from the parking and public access areas into the building lobbies, creating a hierarchy of spaces when combined with the larger seating areas within the mounds. Attention is paid to differing paving materials to create interest in the paving and provide visual queues when approaching the plaza itself, and aid in wayfinding from parking/ public access areas.

Site Grading

The proposed project will include grading and excavation to construct the proposed building, parking structure, access roadway, and site improvements. Preliminary earthwork quantities for the project includes 40,200 CY of cut, 1,600 CY of fill, with a net export of 38,600 CY.

Stormwater Treatment

The project is required to implement permanent post-construction stormwater Best Management Practices (BMPs) in accordance with the National Pollution Discharge Elimination System (NPDES) regulations, San Mateo Countywide Water Pollution Prevention Program requirements, and the Municipal Regional permit (MRP).

Stormwater treatment measures such as bioretention areas and flow-through planters shall be incorporated to capture and treat stormwater runoff generated from impervious surfaces in accordance with the City's stormwater management requirements.

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It is anticipated the post-development stormwater peak flow rate will be comparable with the preproject conditions. If required and to limit the impact to the downstream existing storm drainage system, stormwater detention measures in the form of storage within the ponding depth of bioretention areas and flow-through planters will be provided to detain the increase in postdevelopment 10-year stormwater peak runoff from the project area. Release of the peak flow to the City storm drain system will be controlled at a rate that is equal to the pre-project 10-year storm event flow level.

Drought tolerant planting species within the treatment areas are taken from the San Mateo County C3 manual, and are used elsewhere on-site to unify the treatment areas with the overall landscape experience. Representative species include Small Cape Rush and natives such as Berkeley Sedge and Common Yarrow.

Utilities

Existing site utilities will be removed as required for new utilities to serve the development. The proposed project includes relocation of a 12-inch private storm drain main and a 12-inch public sanitary sewer main that serves the project site as well as upstream private properties. These relocated utilities will be located within a new 20 foot wide access roadway with utility easement along the project site property line adjacent to Caltrans right-of-way and along Hickey Boulevard. Maintenance vehicles will enter the access roadway from Hickey Boulevard and exit onto Serravista Avenue, and a minimum of 21 feet of vertical clearance will be maintained for the entirety of the access roadway. Per discussion with the city of Daly City Department of Water and Wastewater Resources, the project team will plan for a subterranean zone to be free of foundations, grade beams, or other obstructions as such, and can be excavated at any time for accessing and maintaining the relocated sanitary sewer main without impacting the proposed building structure. This zone would match the full width of the roadway and easement, and extend three feet below the bottom of the proposed sanitary sewer main. Additional proposed site utility improvements include site storm drainage, sanitary sewer, and water services to support the proposed project.

Parcelization

The project site is comprised of three parcels, a Lot Merger Application is submitted simultaneously with the planning design review application. Final map application will be listed as a condition of approval. It will be prepared by a licensed surveyor hired by the owner for recordation, prior to issuance of the building permit.

C/CAG Airport Land Use Committee (ALUC) approval

455 Hickey | 10071.003 Project Description October 17, 2022 Page 5 of 5

We understand that when the formal application for the project is received, the City will submit an application to the ALUC for review. Once the application is deemed complete, public hearings will be scheduled by the city officials.

Alternative Development Scenario and Traffic Studies

To allow for use flexibility, two sets of traffic studies will be submitted separately for Engineering Department's review; one for the tech office development as described above, and one for a potential medical office development. In the medical office scenario, a smaller 5-story building with a total of 180,000 square feet will be placed within the same tech office building footprint. The parking count and parking structure footprint will remain the same - 900 spaces at 1/200 parking ratio.



455 HICKEY

455 HICKEY BLVD DALY CITY, CA

PLANNING SUBMITTAL 10.17.2022





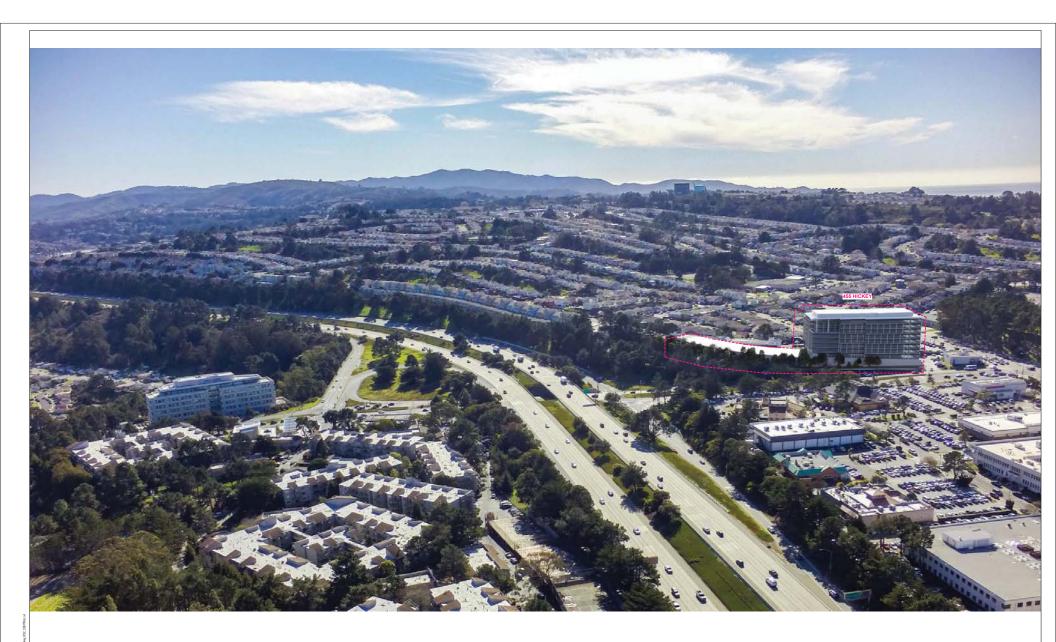






455 HICKEY, DALY CITY, CA
PLANNING SUBMITTAL 10.17.2022

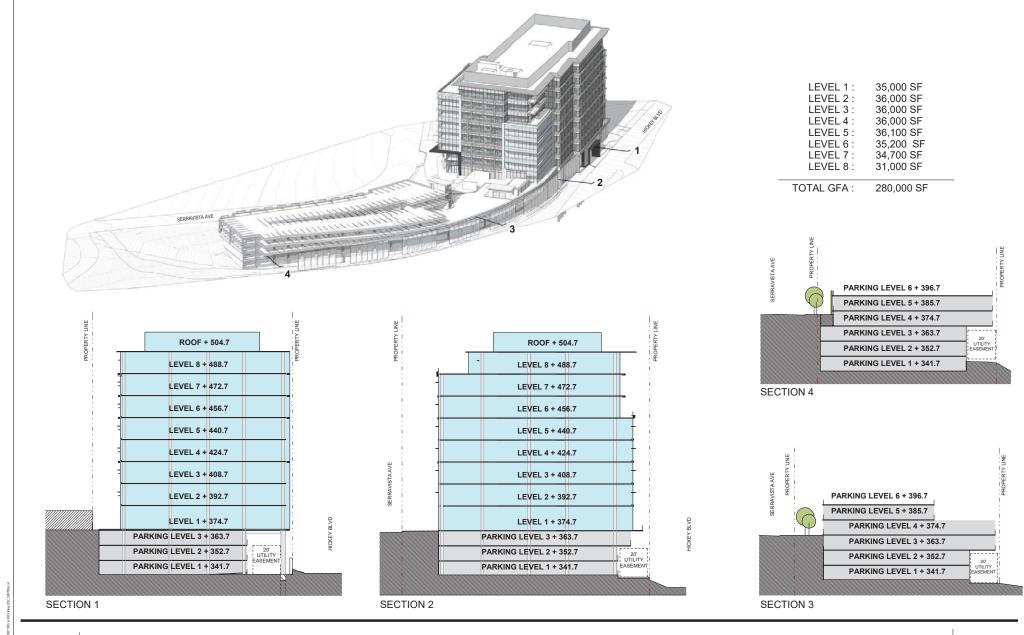
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RENDERING - AERIAL VIEW







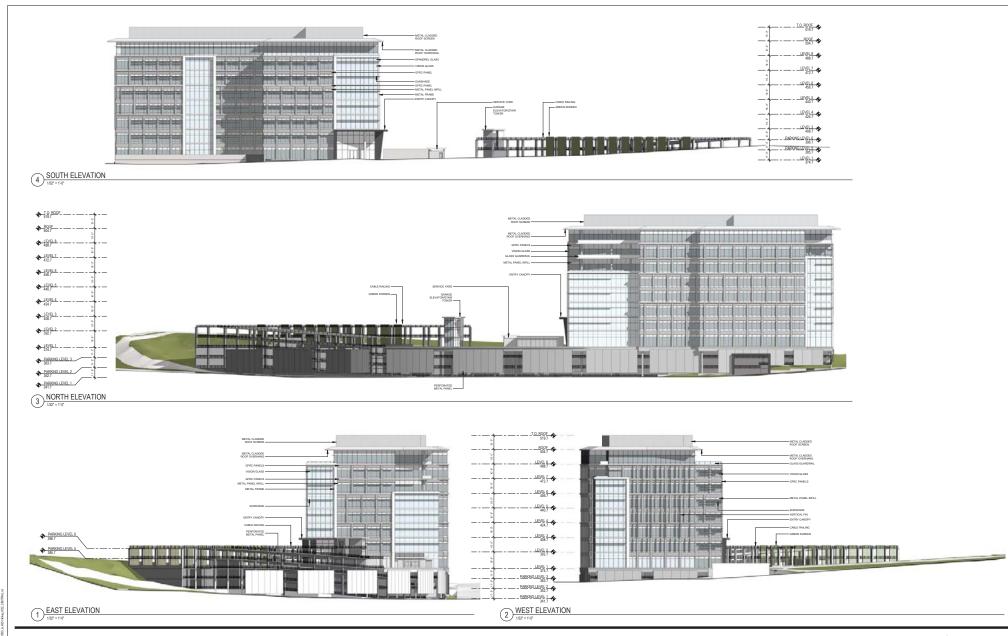




455 HICKEY, DALY CITY, CA

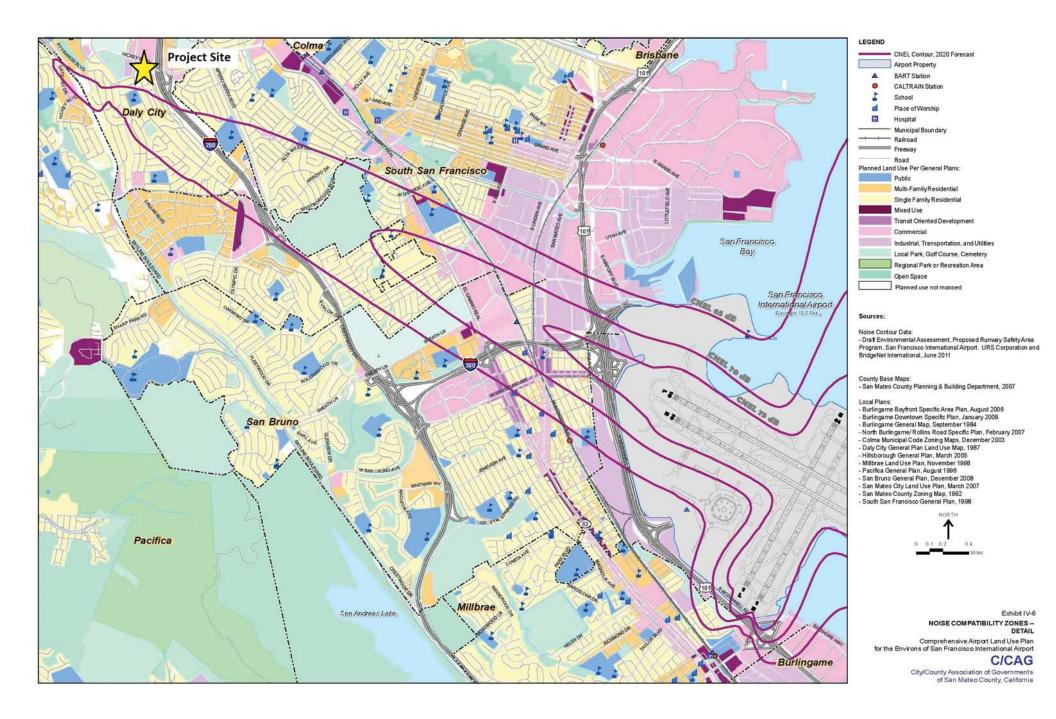
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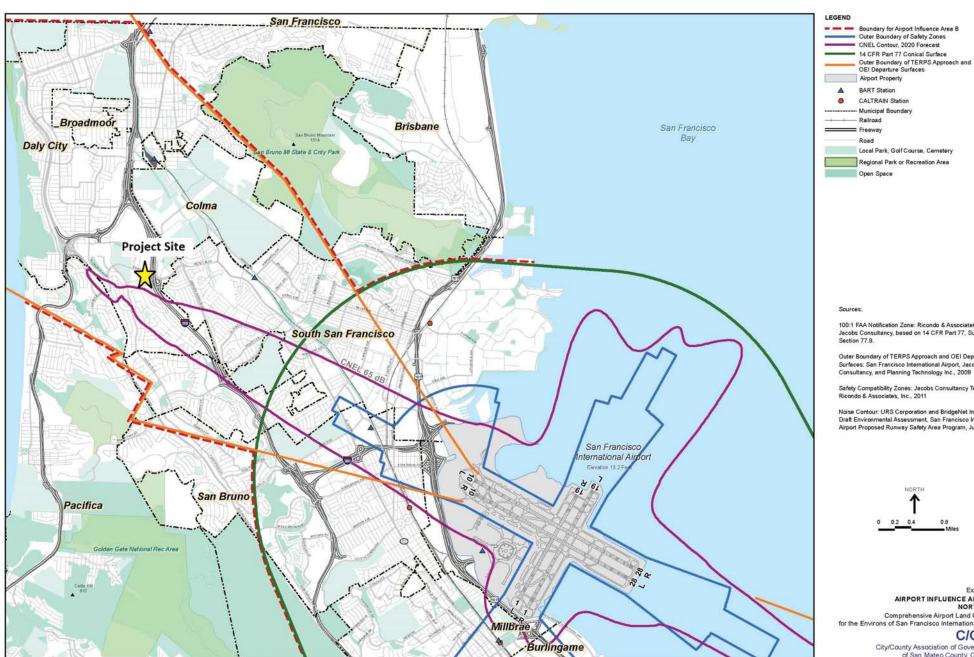




Attachment 3



Attachment 4



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

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;

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

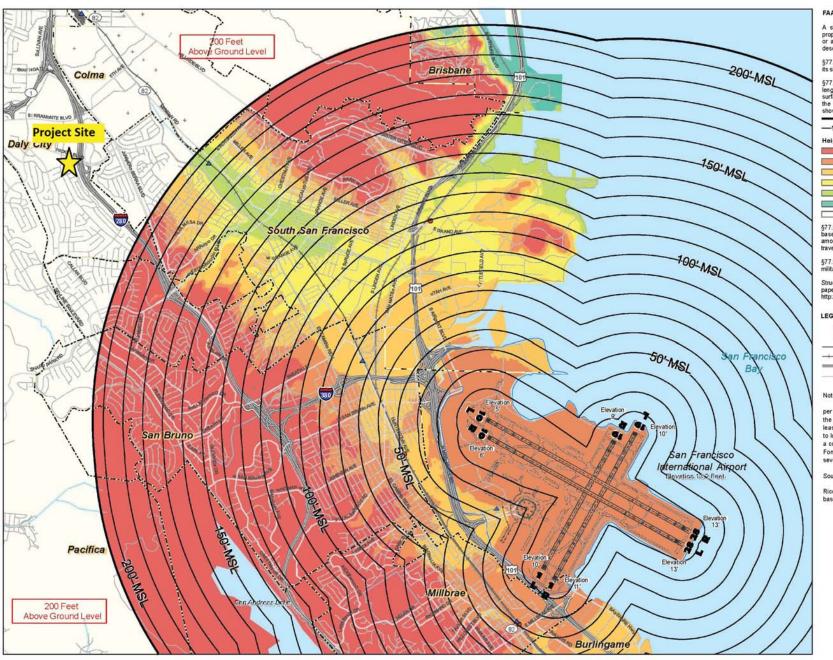


Exhibit IV-3 AIRPORT INFLUENCE AREA B --NORTH SIDE Comprehensive Airport Land Use Plan for the Environs of San Francisco International Airport C/CAG

City/County Association of Governments of San Mateo County, California

SURFACE INTERSECTION ANALYSIS INFORMATION - AIRPORT CODE "SFOP"									
Coordinate System: WGS84 Date:		Date: 11/22/22)ate: 11/22/22		Model: SFO_Composite_2012_11DEC12_R2				
Latitude	Longitude	Site El.(AMSL)	Ht.(AGL)	Overall Ht.(AMSL)	Max Ht. (AMSL)	Exceeds By	Under By	Surface	
37° 39' 49.8066"	122° 28' 3.9176"	348.73	180	528.73	579.43		50.7	SFO_RW28LR_OEI_Corridor_09030	
Total penetrations above surfaces: 0									
Total penetrations below surfaces: 1									
	Zone A	nalysis							
Х	Υ	Range	Safety Zones						
5992134.237	2070167.655	Under 65 db	None						

Attachment 6



FAANOTIFICATION REQUIREMENTS

A structure proponent must file FAA Form 7460-1, Notice of proposed Construction or Alteration, for any proposed construction or alteration that meets any of the following Notification Criteria described in 14 CFR part 77.9;

§77.9(a) - A height more than 200 feet above ground level (AGL) at

§77.9(b) - within 20.000 feet of a runway more than 3.200 feet in length, and exceeding a 100:1 slope imaginary surface (i.e., a surface rising 1 foot vertically for every 100 feet horizontally) from the nearest point of the nearest runway. The 100:1 surface is shown as follows:

20,000 Feet Limit From Nearest Runway -100- Elevation Above Mean Sea Level

Heights of 100:1 Surface Above Ground (AGL)

Terrain penetrations of Airspace Surface

Less than 30

30-65

65-100

100-150

150-200

200 and more

§77.9(c) - Roadways, railroads, and waterways are evaluated based on heights above surface providing for vehicles; by specified amounts or by the height of the highest mobile object normally traversing the transportation corridor;

§77.9(d) - Any construction or alteration on any public-use or military airport (or heliport).

Structure proponents or their representatives may file via traditional paper forms via uS mail, or online at the FAA's oE/AAA website, http://oeaaa.faa.gov

LEGEND

A BART Station CALTRAIN Station 0 MunicipalBoundary - Railroad Freeway Road

Note:

per 14 CFR part 77, developers proposing structures taller than the indicated elevations must file Form 7460-1 with the FAA at least 30 days before the proposed construction. However, due to local requirements for a favorable FAA determination as a contingency for project approval, it is advisable to file the Form 7460-1 as soon as possible because the FAA can take several months to undertake aeronautical reviews.

Ricondo & Associates, Inc. and Jacobs Consultancy, based on 14 CFR part 77, Subpart B, Section 77.9.



Exhibit IV-11 FAA NOTIFICATION FORM 7460-1 FILING REQUIREMENTS - 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



San Francisco International Airport

November 28, 2022

TRANSMITTED VIA E-MAIL kkalkin@smcgov.org

Susy Kalkin **ALUC Staff** City/County Association of Governments of San Mateo County 555 County Center, 5th Floor Redwood City, California 94063

Application for Land Use Consistency Determination for New Office Building and Parking Structure at 455 Hickey Boulevard, Daly City

Thank you for notifying San Francisco International Airport (SFO or the Airport) regarding the Airport Land Use Commission's (ALUC) land use consistency determination for the proposed construction of an office building and parking structure at 455 Hickey Boulevard (the Proposed Project) within the City of Daly City (the City). We appreciate this opportunity to coordinate with ALUC in considering and evaluating potential land use compatibility issues for the Project.

According to the Application for Land Use Consistency Determination, the Proposed Project is located on a 3.2-acre site at 455 Hickey Boulevard (Assessor's Parcel Number 091-341-140), in the City. The Proposed Project would demolish an existing office building and parking garage, and construct a new 8-story office building, with a maximum building height at 130 feet above ground level. The Proposed Project also includes an associated 3-story parking structure that would front Hickey Boulevard. There would be a total of 900 on-site parking spaces for the new 280,000 square foot (SF) office building. The parking entrance and vehicular access would be from both Hickey Boulevard and Serravista Avenue.

The Proposed Project site is inside Airport Influence Area B as defined by the Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport (SFO ALUCP). The Proposed Project site would be located outside the 65 decibel Community Noise Equivalent Level (dBA CNEL) contour and the safety compatibility zones, and therefore would not appear to be inconsistent with the Noise and Safety Compatibility policies adopted in the SFO ALUCP. However, many airport departure procedures currently are designed to ascend over or near the Proposed Project area, and residents may experience some noise disturbances from widebody aircraft departures.

As depicted on Exhibit IV-17 of the SFO ALUCP (see Attachment), the lowest critical aeronautical surfaces above the Proposed Project are at an elevation of approximately 573 feet above mean sea level (AMSL) as defined from the origin of the North American Vertical Datum of 1988 (NAVD88). Given that the ground elevation at the Proposed Project site is at 353 feet AMSL (NAVD88), the maximum height of the building, as currently defined (at 130 feet above ground level or 483 feet AMSL), would be below the critical aeronautical surfaces and the Proposed Project would not appear to be incompatible with the Airspace Compatibility Policies of the SFO ALUCP, subject to the issuance of a "Determination of No Hazard" from the Federal Aviation Administration (FAA) for any proposed structures (see below), and determinations from the City/County Association of Governments of San Mateo County as the designated ALUC. The Airport notes that the applicant has been advised of the need to submit to the FAA the Form 7460-1, Notice of Proposed Construction or Alteration.

AIRPORT COMMISSION CITY AND COUNTY OF SAN FRANCISCO

Susy Kalkin November 28, 2022 Page 2 of 2

This determination does not negate the requirement for the Proposed Project sponsor to undergo FAA review as described in 14 Code of Federal Regulations Part 77 for both (1) the permanent structures and (2) any temporary cranes or other equipment taller than the permanent buildings which would be required to construct those structures.

Due to the proximity of the Proposed Project to the Airport, Airspace Protection Policies (AP-1 through AP-4) from the SFO ALUCP are enclosed as reminders of incompatible site characteristics, especially as it pertains to wildlife attractants, particularly large flocks of birds, that pose threats to safe aircraft operations, and building materials or features that reflect and create bright lights or glare.

* * *

The Airport appreciates your consideration of these comments. If I can be of assistance, please do not hesitate to contact me at (650) 821-6678 or at nupur.sinha@flysfo.com.

Sincerely,

DocuSigned by:

Nupur Sinha

--- 7D552AE6A4CE495...

Nupur Sinha Director of Planning and Environmental Affairs San Francisco International Airport

Attachment

cc: Sean Charpentier, C/CAG Audrey Park, SFO 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:

- I. 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 I4 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=showNoNoticeRequiredToolFormiting the property of the pro

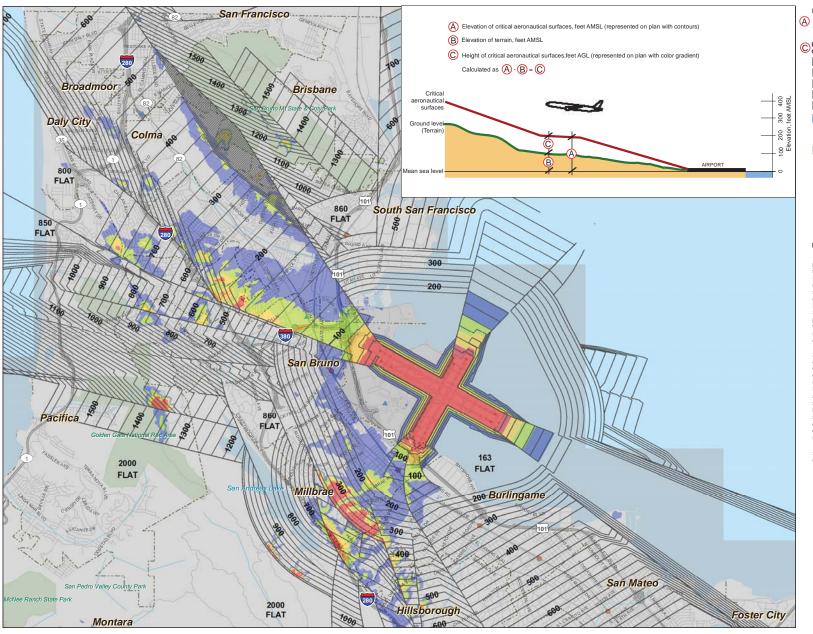
4.5.3 AIRSPACE MAPPING

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). 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.



LEGEND

Elevation of critical aeronautical surfaces, feet
 Above Mean Sea Level (AMSL), North American
 Vertical Datum of 1988 (NAVD88)

C Height of Critical Aeronautical Surfaces, Feet Above Ground Level (AGL)

35 and lower 35- 65 65 - 100

150 and more

Airport Property

BART Station

CALTRAIN Station

Regional Park or Recreation Area

Municipal Boundary

Road Road

Notes

- 1. This map is intended for informational and conceptual planning purposes, generally representing the aeronautical surfaces considered most critical by San Francisco International Airport (SFO) and its constituent airlines. It does not represent actual survey data, nor should it be used as the sole source of information regarding compatibility with airspace clearance requirements in the development of data for an FAA Form 7450-1, Notice of Proposed Construction or Alteration. SFO does make any warrants of any kind, express or implied, in fact or by law, with respect to boundaries, easements, restrictions, claims, overlaps, or other encumbrances affecting such properties.
- 2. This map does not replace the FAA's obstruction evaluation, aliport airspace analysis (CE/AA) review process. Proposing construction at elevations and heights that are lower than the critical aeronautical surfaces shown on this map, (a) does not relieve the construction sponsor of the obligation to file an FAA Form 7460-1, and (b) does not ensure that the proposal will be acceptable to the FAA, SFO, air carriers, or other agencies or stakeholders. SFO, San Mateo County, and local authorities having jurisdiction reserve the right to re-assess, review, and seek modifications to projects that may be consistent with this critical aeronautical surfaces map but that through the FAA OE/AAA process are found to have unexpected impacts to the safety or efficiency of operations at SFO.

Sources: San Francisco International Airport, Jacobs Consultancy, and Planning Technology Inc., 2009



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 I0L-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-I COMPLIANCE WITH 14 CFR PART 77, SUBPART B, NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION

AP-I.I 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 (I) the height shown on the SFO critical aeronautical surfaces map (Exhibits IV-I7 and IV-I8), 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-I.

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: (I) 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.

Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport Airport/Land Use Compatibility Policies

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.