Initial Study/Mitigated Negative Declaration

Topgolf Burlingame



Prepared by

THE CITY OF BURLINGAME CALIFORNIA INCORPORATED 1908

In Consultation with

DAVID J. POWERS & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS & PLANNERS

February 2020

MITIGATED NEGATIVE DECLARATION

Pursuant to the California Environmental Quality Act (CEQA)
Division 13, Public Resources Code

City of Burlingame
501 Primrose Road
Burlingame, CA 94010
(650) 558-7250

1. Project Title

Topgolf Burlingame

2. Project Location

The proposed project is located at 250 Anza Boulevard, Burlingame, County of San Mateo. Regional, vicinity, and aerial maps of the project site are shown in the attached Initial Study on Figures 2.0-1, 2.0-2, and 2.0-3, respectively.

3. Project Proponent

Topgolf USA
8750 N. Central Expressway, Suite 1200
Dallas, TX 75231

4. Project Description

The project proposes to redevelop an approximately 13-acre site with a Topgolf entertainment complex that includes a three-level, approximately 71,074 square-foot main building reaching up to 46 feet in height, outdoor patio, and an approximately five-acre outdoor driving range outfield. The driving range would be bordered by net poles up to 205 feet in height. All existing improvements on the site would be removed to accommodate the proposed development. In addition to the internal building areas, an approximately 20,000 square-foot external mini-golf area is being proposed adjacent to the outdoor patio area. Vehicular access to the project site would be provided by Anza Boulevard as well as a proposed driveway connection to Airport Boulevard. The proposed project includes a monitoring and adaptive management plan, to be implemented upon opening of the facility, to address potential bird collisions with the proposed netting.

5. Determination

An MND, City File No. ND-605-P, is proposed by the City of Burlingame for the project. An Initial Study and supporting documents have been prepared to determine if the project would result in potentially significant or significant impacts to the environment. The 10 mitigation measures that have been identified are listed in Table 1 below. The supporting technical reports that constitute the record of proceedings upon which a determination is made are available for public review at the City of Burlingame Planning Division at 501 Primrose Road, Burlingame, CA 94010, between 8:00 a.m. and 5:00 p.m., Monday through Friday.

Table 1
Summary of Mitigation Measures

Environmental Factor	***Mitigation Measures***	***Level of Environmental Impact***
Air Quality	**Mitigation Measure AIR-3.1:** All diesel-powered off-road equipment, larger than 25 horsepower, operating on the site for more than two days continuously shall, at a minimum, meet U.S. EPA particulate matter emissions standards for Tier 4 Interim engines or equivalent. When Tier 4 Interim engines are not available, it would be acceptable to use Tier 3 engines with CARB-certified Level 3 Diesel Particulate Filters. Alternatively, the use of equipment that includes electric or alternatively-fueled equipment (i.e., non-diesel) would meet this requirement.	Less than Significant with Mitigation Incorporated
Air Quality	**Mitigation Measure AIR-3.2** The project shall implement the following standard BAAQMD dust control measures during all phases of construction on the project site: • All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. • All haul trucks transporting soil, sand, or other loose material off-site shall be covered. • All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. • All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).	Less than Significant with Mitigation Incorporated

Table 1 Summary of Mitigation Measures		
Environmental Factor	***Mitigation Measures***	***Level of Environmental Impact***
	• All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. • Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes [as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California Code of Regulations (CCR)]. Clear signage shall be provided for construction workers at all access points. • All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. • A publicly visible sign shall be posted with the telephone number and person to contact at the City of Burlingame regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Bay Area Air Quality Management Air District's phone number shall also be visible to ensure compliance with applicable regulations.	
Biological Resources	**Mitigation Measure BIO-1.1** The project applicant shall be responsible for conducting preconstruction surveys by a qualified biologist to ensure the absence of American peregrine falcon. The following measures shall be implemented for construction work during the nesting season (February 1 through August 31): • If construction or tree removal is proposed during the nesting season for migratory birds (typically February 1 through August 31), a qualified biologist shall conduct pre-construction surveys for American peregrine falcon and other nesting birds within the construction area, including a 300-foot survey	Less than Significant with Mitigation Incorporated

Table 1 Summary of Mitigation Measures		
Environmental Factor	***Mitigation Measures***	***Level of Environmental Impact***
	buffer for raptors such as the American peregrine falcon and a 100-foot buffer for non-raptors. The survey will be conducted no more than three (3) days prior to the start of ground disturbing activities in the construction area. • If an active nest is located during pre-construction surveys, construction activities shall be restricted as necessary to avoid disturbance of the nest until it is abandoned or a qualified biologist deems disturbance potential to be minimal. Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment) around an active nest (typically 300-foot buffer for raptors and 100-foot for non-raptors) or alteration of the construction schedule. • A qualified biologist shall delineate the buffer using nest buffer signs, Environmentally Sensitive Area (ESA) fencing, pin flags, and/or flagging tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently.	
Biological Resources	**Mitigation Measure BIO-5.1** *Design Guidelines* • A Tree Protection Zone (TPZ) is necessary to restrict or confine the following activities to help achieve a reasonable assurance of a tree's vigor, longevity and anchoring capacity: trenching, soil scraping, compaction, mass and finish-grading, overexcavation, subexcavation, tilling, ripping, swalkes, bioswales, storm drains, dissipators, equipment cleaning, removal of underground utilities and vaults, altering existing water/drainage flows, stockpiling and dumping of materials, and equipment and vehicle operation. An ideal TPZ should have a linear distance from a trunk of 10 times its diameter (i.e. an 18-inch diameter tree would have a setback of 15 feet in all directions); for multi-trunk	Less than Significant with Mitigation Incorporated

Table 1 Summary of Mitigation Measures		
Environmental Factor	***Mitigation Measures***	***Level of Environmental Impact***
	measurements, use the combined diameter. In the event an impact encroaches slightly within a setback, it can be reviewed on a case-by-case basis by the project arborist to determine whether measures can sufficiently mitigate the impacts to less-than-significant levels. • All site-related plans should contain notes referencing the arborist report for tree protection measures. • All final landscape plans and TPZs shall be reviewed by a qualified arborist. • Where within 10 feet from a TPZ, confine grading (cut and fill), overexcavation, subexcavation, trenching, compaction, and other ground disturbance to within 12 to 24 inches from any foundation, footing, curb, gutter, pavement, driveway or retaining wall. • Irrigation and lighting features (i.e. main line, lateral lines, valve boxes, wiring and controllers) should be established so that no trenching occurs within a TPZ. In the event this is not feasible, they may require being installed in a radial direction to a tree's trunk, and terminate a specific distance from a trunk (versus crossing past it). • Tilling, ripping and compaction within TPZs should be avoided. *Before Demolition, Grading and Construction* • Where within a TPZ, the removal of plant material and groundcover must be manually performed versus using heavy equipment operating and traveling on unpaved ground. Additionally, the removal of stumps shall only be performed using a stump grinder (versus excavating into the ground and inadvertently damaging roots). • Begin applying supplemental irrigation during the dry months of the year (i.e. May through October), at a rate of approximately 10 gallons per inch of trunk diameter every two to three weeks via flooding the inside of a 12-inch tall berm established around the canopy	

Table 1 Summary of Mitigation Measures		
Environmental Factor	***Mitigation Measures***	***Level of Environmental Impact***
	perimeters (or as close to the perimeters as possible). Alternatives include using soaker hoses or through deep-root injection. Note, ultimately, the methodology, amount and frequency of irrigation can be best outlined closer to construction commencing, and any applicable dewatering may require a more intensive supplemental watering program than otherwise needed. • Install tree protection fencing prior to demolition or other site work for the purpose of restricting access into unpaved sections of ground within a TPZ. Fencing does not need to enclose any pavement remaining within a TPZ (in effect, the pavement allows access within a TPZ, while serving as a superior root zone buffer). Fencing should consist of five- to six-foot tall chain link mounted on two-inch diameter steel posts, which are driven into the ground for vertical alignment. Fencing shall remain in place throughout site development, and will need to be installed, as needed, in various phases. Removing hardscape within a TPZ may trigger fencing being modified to capture the newly exposed area.	
Cultural Resources	**Mitigation Measure CUL-2.1** *Undiscovered Archaeological Resources.* If evidence of an archaeological site or other suspected cultural resource as defined by CEQA Guideline Section 15064.5, including darkened soil representing past human activity ("midden"), that could conceal material remains (e.g., worked stone, worked bone, fired clay vessels, faunal bone, hearths, storage pits, or burials) is discovered during construction related earth-moving activities, all ground-disturbing activity within 100 feet of the resources shall be halted and the City's Community Development Director shall be notified. The project sponsor shall hire a qualified archaeologist to conduct a field investigation. The City's Community Development Director shall consult with the	Less than Significant with Mitigation Incorporated

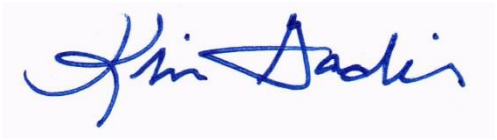
Table 1 Summary of Mitigation Measures		
Environmental Factor	***Mitigation Measures***	***Level of Environmental Impact***
	archaeologist to assess the significance of the find. Impacts to any significant resources shall be mitigated to a less-than-significant level through data recovery or other methods determined adequate by a qualified archaeologist and that are consistent with the Secretary of the Interior's Standards for Archaeological documentation. Any identified cultural resources shall be recorded on the appropriate DPR 523 (A-J) form and filed with the NWIC.	
Cultural Resources	**Mitigation Measure CUL-2.2** *Report of Archaeological Resources.* If archaeological resources are identified, a final report summarizing the discovery of cultural materials shall be submitted to the City's Community Development Director prior to issuance of building permits. This report shall contain a description of the mitigation program that was implemented and its results, including a description of the monitoring and testing program, a list of the resources found and conclusion, and a description of the disposition/curation of the resources.	Less than Significant with Mitigation Incorporated

Table 1 Summary of Mitigation Measures		
Environmental Factor	***Mitigation Measures***	***Level of Environmental Impact***
Cultural Resources	**Mitigation Measure CUL-2.3** *Human Remains.* If human remains are discovered at any project construction site during any phase of construction, all ground-disturbing activity within 100 feet of the resources shall be halted and the City's Community Development Director and the San Mateo County Coroner shall be notified immediately, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. If the remains are determined by the County coroner to be Native American, the Native American Heritage Commission (NAHC) shall be notified within 24 hours, and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. The project sponsor shall also retain a professional archaeologist with Native American burial experience to conduct a field investigation of the specific site and consult with the Most Likely Descendant, if any, identified by the NAHC. As necessary, the archaeologist may provide professional assistance to the Most Likely Descendant, including the excavation and removal of the human remains. The City of Burlingame shall be responsible for approval of recommended mitigation as it deems appropriate, taking account of the provisions of State law, as set forth in CEQA Guidelines section 15064.5(e) and Public Resources Code section 5097.98. The project sponsor shall implement approved mitigation, to be verified by the City of Burlingame, before the resumption of ground-disturbing activities within 100 feet of where the remains were discovered.	Less than Significant with Mitigation Incorporated
Geology and Soils	**Mitigation Measure GEO-6.1** *Unique Paleontological and/or Geologic Features and Reporting*. Should a unique paleontological resource or site or unique geological feature be identified at the project site during any phase of construction, all ground disturbing activities within 25 feet shall cease and the City's Community Development Director notified immediately. A	Less than Significant with Mitigation Incorporated

Table 1 Summary of Mitigation Measures		
Environmental Factor	***Mitigation Measures***	***Level of Environmental Impact***
	qualified paleontologist shall evaluate the find and prescribe mitigation measures to reduce impacts to a less than significant level. Work may proceed on other parts of the project site while mitigation for paleontological resources or geologic features is implemented. Upon completion of the paleontological assessment, a report shall be submitted to the City and, if paleontological materials are recovered, a paleontological repository, such as the University of California Museum of Paleontology.	
Hazards and Hazardous Materials	**Mitigation Measure HAZ-5.1** In accordance with FAR Part 77, an aeronautical study shall be completed by the FAA for the proposed project which analyzes the final maximum height of the proposed net poles. The project shall obtain clearance from the FAA in the form of an issuance of Determination of No Hazard prior to the commencement of construction. Any conditions set forth in the FAA Determination of No Hazard shall be incorporated into the project. The aeronautical study and Determination of No Hazard shall be submitted to the Community Development Director.	Less than Significant with Mitigation Incorporated
Noise	**Mitigation Measure NOI-1.1** The project shall implement a noise control plan including, but not limited to, the following measures: • Noise-generating construction operations shall be limited to the hours between 8 a.m. and 7 p.m. Monday through Friday, and between 9 a.m. and 6 p.m. on Saturdays, with no construction on Sundays or holidays, per BMC 13.04.100. • All construction equipment and equipment staging areas shall be located as far as possible from nearby noise-sensitive land uses. • All construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine	Less than Significant with Mitigation Incorporated

Table 1 Summary of Mitigation Measures		
Environmental Factor	***Mitigation Measures***	***Level of Environmental Impact***
	shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds shall be closed during equipment operation. • All motorized construction equipment shall be shut down when not in use to prevent idling. • The primary contractor shall prepare and implement a construction noise management plan. This plan shall identify specific measures to ensure compliance with the noise control measures specified above. The noise control plan shall be submitted to the City of Burlingame before any noise-generating construction activity begins.	
Tribal Cultural Resources	See **Mitigation Measures CUL-2.1 through CUL-2.3.**	Less than Significant with Mitigation Incorporated

I, Kevin Gardiner, hereby certify that this Mitigated Negative Declaration was prepared in accordance with the provisions of the California Environmental Quality Act of 1970, as amended, and all applicable State and City Guidelines.



February 7, 2020

Kevin Gardiner, City of Burlingame
Community Development Director

Date

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Appendix B Air Quality and Greenhouse Gas Emissions Assessment
Appendix C Biological Resources Report and Arborist Report
Appendix D Geotechnical Reports
Appendix E Phase I Environmental Site Assessment
Appendix F Noise Assessment
Appendix G Transportation Impact Assessment

SECTION 1.0 INTRODUCTION AND PURPOSE

1.1 PURPOSE OF THE INITIAL STUDY

The City of Burlingame, as the Lead Agency, has prepared this Initial Study for the Topgolf Burlingame Facility in compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations §15000 et. seq.) and the regulations and policies of the City of Burlingame, California.

The project proposes to redevelop the site with a Topgolf entertainment complex that includes a three-level, approximately 71,074 square-foot main building, outdoor patio, and an approximately five-acre outdoor driving range outfield. All existing improvements on the site would be removed to accommodate the proposed development. This Initial Study evaluates the environmental impacts that might reasonably be anticipated to result from implementation of the proposed project.

1.2 PUBLIC REVIEW PERIOD

Publication of this Initial Study marks the beginning of a 30-day public review and comment period. During this period, the Initial Study will be available to local, state, and federal agencies and to interested organizations and individuals for review. Written comments concerning the environmental review contained in this Initial Study during the 30-day public review period should be sent to:

Catherine Keylon, Senior Planner
City of Burlingame
Community Development Department – Planning Division
501 Primrose Road, Burlingame, CA 94010
ckeylon@burlingame.org
650-558-7252

1.3 CONSIDERATION OF THE INITIAL STUDY AND PROJECT

Following the conclusion of the public review period, the City of Burlingame will consider the adoption of the Initial Study/Mitigated Negative Declaration (MND) for the project at a regularly scheduled meeting. The City shall consider the Initial Study/MND together with any comments received during the public review process. Upon adoption of the MND, the City may proceed with project approval actions.

1.4 NOTICE OF DETERMINATION

If the project is approved, the City of Burlingame will file a Notice of Determination (NOD), which will be available for public inspection and posted within 24 hours of receipt at the County Clerk's Office for 30 days. The filing of the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA (CEQA Guidelines Section 15075(g)).

SECTION 2.0 PROJECT INFORMATION

2.1 PROJECT TITLE

Topgolf Burlingame (City File No. ND-605-P)

2.2 LEAD AGENCY CONTACT

Catherine Keylon, Senior Planner
City of Burlingame
Community Development Department – Planning Division
501 Primrose Road
Burlingame, CA 94010

2.3 PROJECT APPLICANT

Topgolf USA
8750 N. Central Expressway, Suite 1200
Dallas, TX 75231

2.4 PROJECT LOCATION

The approximately 13-acre project site is located at 250 Anza Boulevard in the Bayfront area of Burlingame, adjacent to the Burlingame Soccer Complex and Burlingame Dog Exercise Park. The property is bordered by Airport Boulevard to the north, DoubleTree Hotel to the east, Sanchez Lagoon to the south, and the City of Burlingame Wastewater Treatment Plant to the west. Regional and vicinity maps of the site are shown on Figures 2.0-1 and 2.0-2, and an aerial photograph of the project site and surrounding area is shown on Figure 2.0-3.

2.5 ASSESSOR'S PARCEL NUMBER

026-290-380

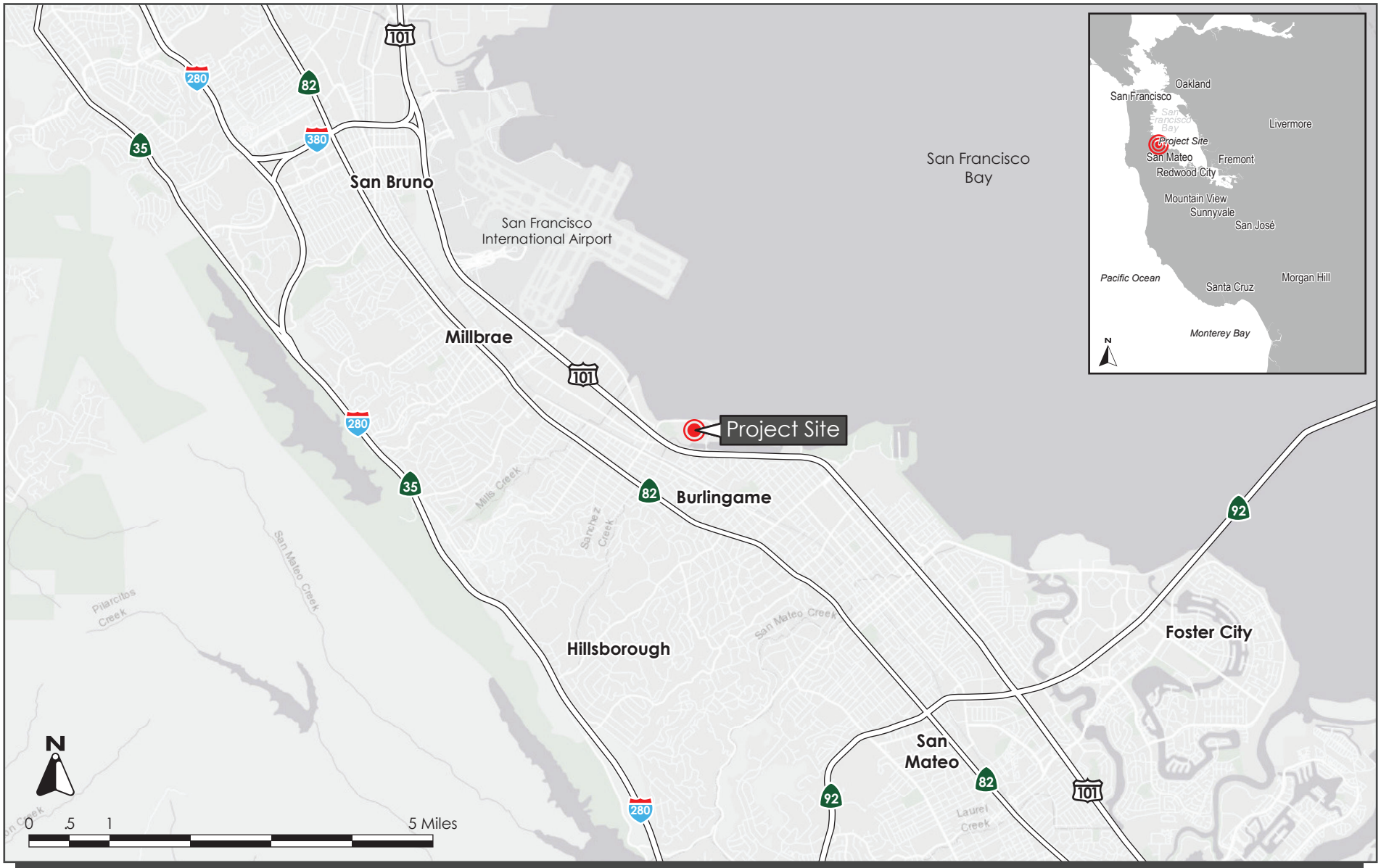
2.6 GENERAL PLAN DESIGNATION AND ZONING DISTRICT

General Plan Designation: The project site is designated *Parks and Recreation (PR)* in the City of Burlingame 2040 General Plan. This designation applies to regional parks, community and neighborhood parks, and special use facilities such as community centers, golf courses, and trails that accommodate active recreation activities. The project site is located within the Anza Extension area and designated *Community Park* in the Bayfront Specific Plan.

Zoning: The project site is zoned as *Unclassified* in the City's Zoning Ordinance.

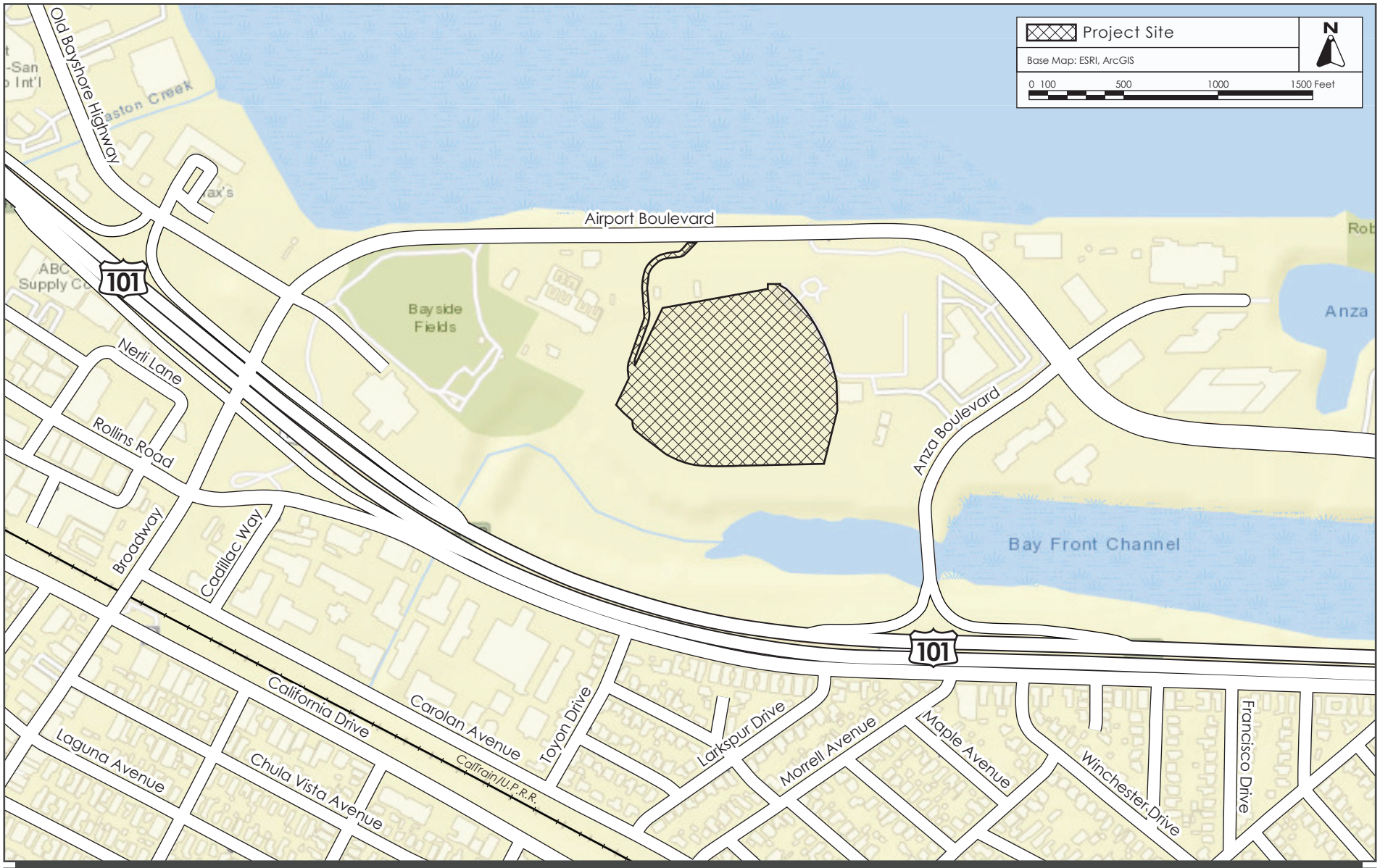
2.7 PROJECT-RELATED APPROVALS, AGREEMENTS, AND PERMITS

- Conditional Use Permit
- Environmental Review
- Commercial Design Review
- Tree Removal Permit
- Grading Permit
- Building Permit



REGIONAL MAP

FIGURE 2.0-1



VICINITY MAP

FIGURE 2.0-2



AERIAL PHOTOGRAPH AND SURROUNDING LAND USES | FIGURE 2.0-3

SECTION 3.0 PROJECT DESCRIPTION

3.1 EXISTING SETTING

The approximately 13-acre project site is located at 250 Anza Boulevard in the Bayfront area of Burlingame, adjacent to the Burlingame Soccer Complex. The property was a former landfill that has been closed since 2002, and has been repurposed for a variety of recreational uses including a soccer field, clubhouse, off-street parking, and a driving range. Currently, the property operates as the Burlingame Golf Center, which has 45 hitting bays and 40-foot tall net poles. The driving range operates until 9:00 PM on the weekdays and until 8:30 PM on the weekends.

3.2 PROPOSED DEVELOPMENT

The project proposes to redevelop the site with a Topgolf entertainment complex that includes a three-level, approximately 71,074 square-foot main building reaching up to 46 feet in height, outdoor patio, and an approximately five-acre outdoor driving range outfield. All existing improvements on the site would be removed to accommodate the proposed development (refer to Figures 3.0-1, 3.0-2, and 3.0-3).

The proposed building features 120 hitting bays which would face northeast toward the five-acre artificial turf outfield enclosed by poles and netting that would reach up to 205 feet in height. Net poles range from 90 feet in height near the building and crest to 205 feet at the end of the outfield. Patrons would hit golf balls from the hitting bays toward lighted target areas in the outfield area. Each hitting bay can accommodate up to six players at a time but it is not unusual to have one or two players in some bays. Hitting bays include seating, television screens to monitor sporting events and track Topgolf scoring, and include overhead speakers providing amplified music.

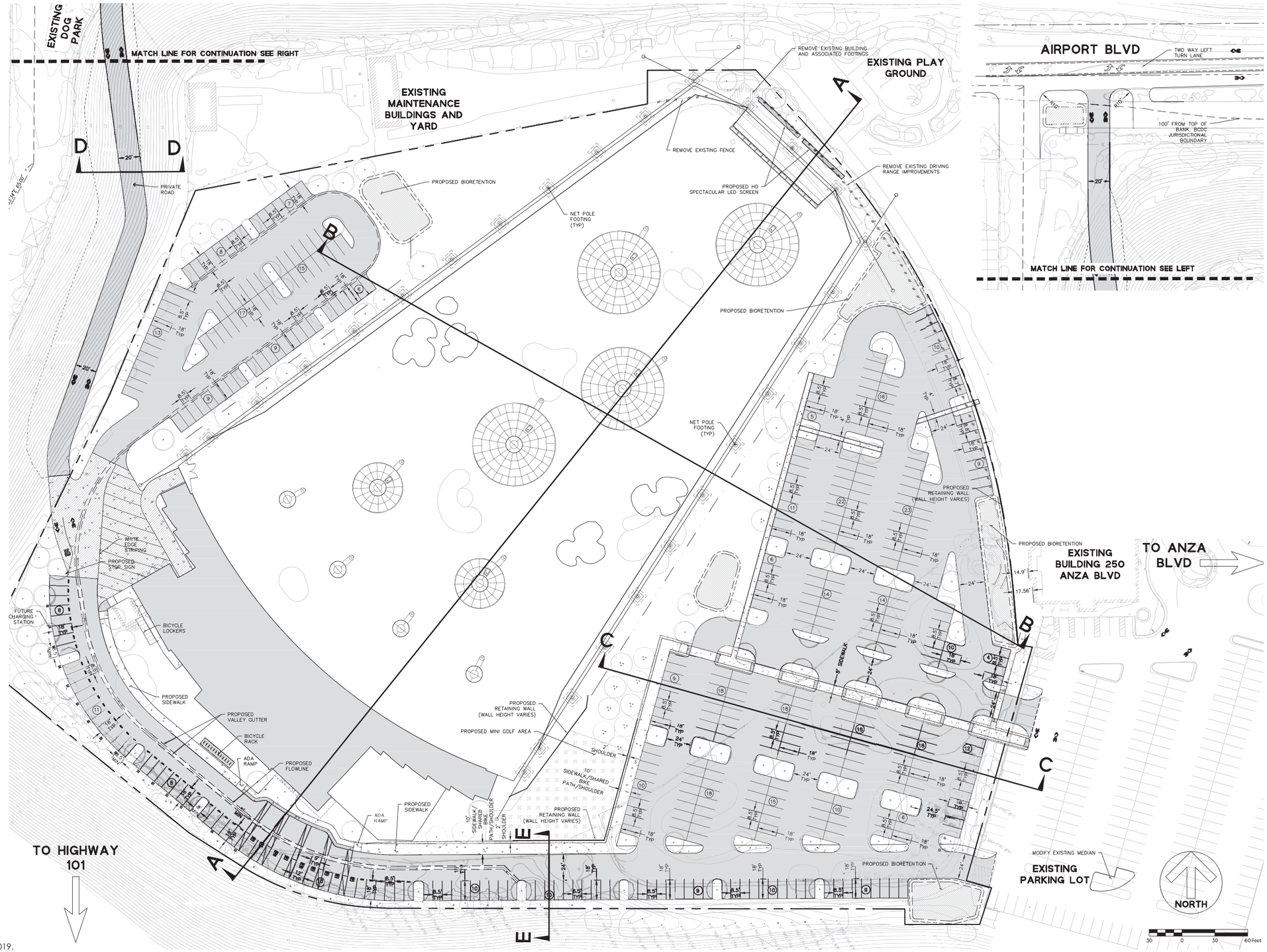
In addition to the internal building areas, an approximately 20,000 square-foot external mini-golf area is being proposed adjacent to the outdoor patio area.

First Level. The lower level features approximately 40 hitting bays including bays designated for golf instruction and team practice. The lower level also contains a maintenance and sales office and a pro shop. This level is at grade on the tee line (refer to Figure 3.0-4).

Second Level. The second level features approximately 40 hitting bays, a full-service restaurant/bar, a family lounge area, and a corporate/event meeting space and lobby area (refer to Figure 3.0-5).

Third Level. The third level features approximately 40 hitting bays and an open-air rooftop terrace. The rooftop terrace would be furnished with tables, couches and fire pits. Restaurant food service is available on the roof top terrace. The terrace can accommodate live music for events (refer to Figure 3.0-6).

Operations. Proposed operating hours are 9:00 AM to 12:00 AM Sunday through Thursday and 9:00 AM to 2:00 AM, Friday and Saturday. Live and DJ-generated music on the outdoor terrace on the third level would begin at 6:00 PM and end at 12:00 AM on weekdays, and would begin at 12:00 PM and end at 1:00 AM on weekends.

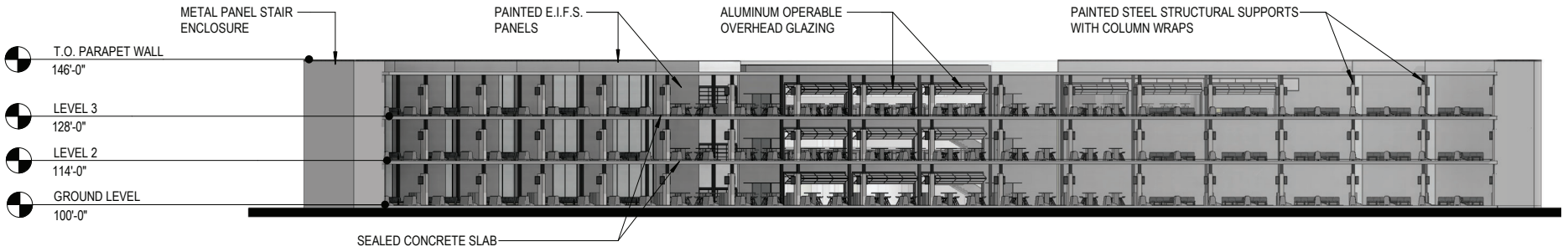


Source: BKF Engineers, Feb. 2019.

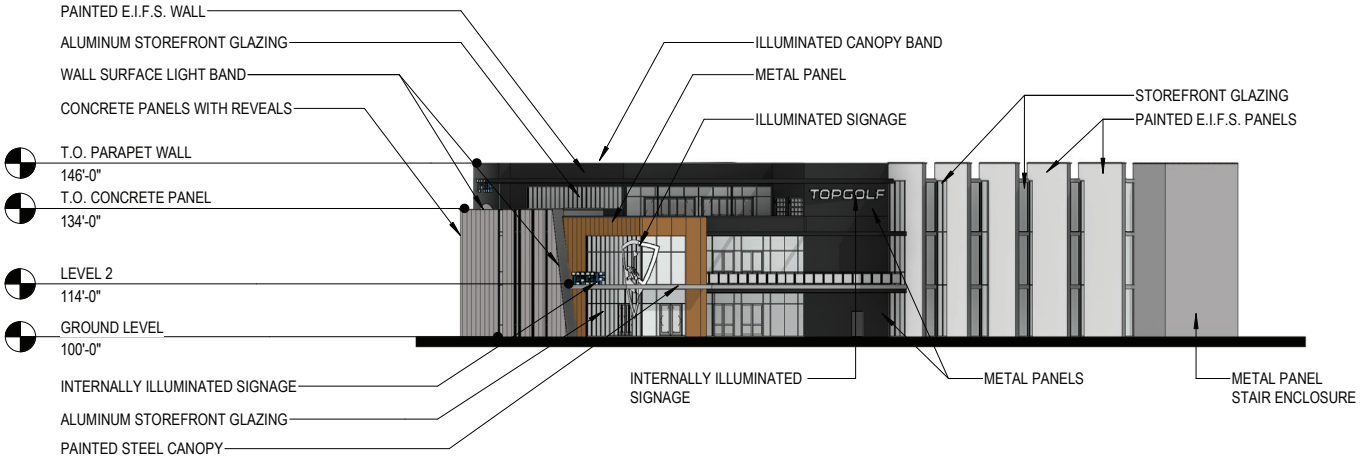
CONCEPTUAL SITE PLAN

FIGURE 3.0-1

North Elevation



East Elevation

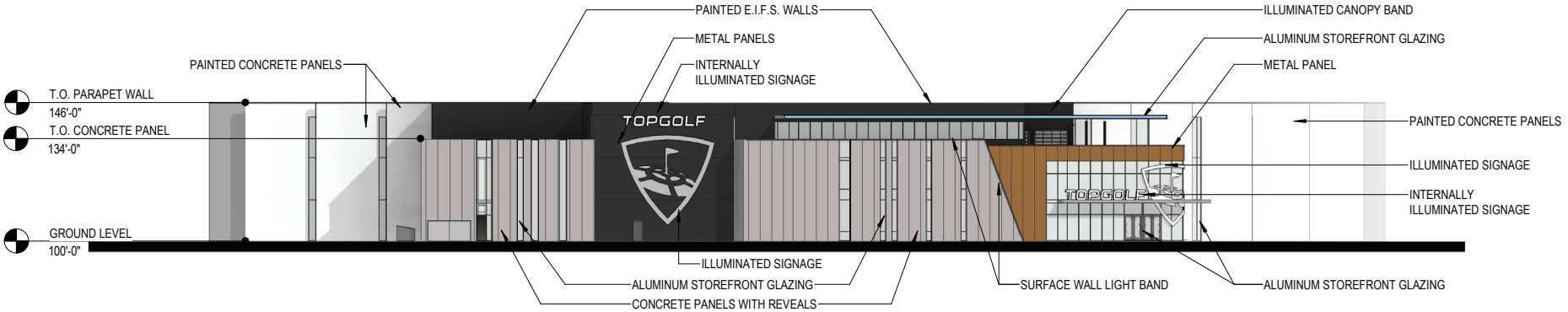


Source: Kip W. Daniel Architect, Jan. 2019.

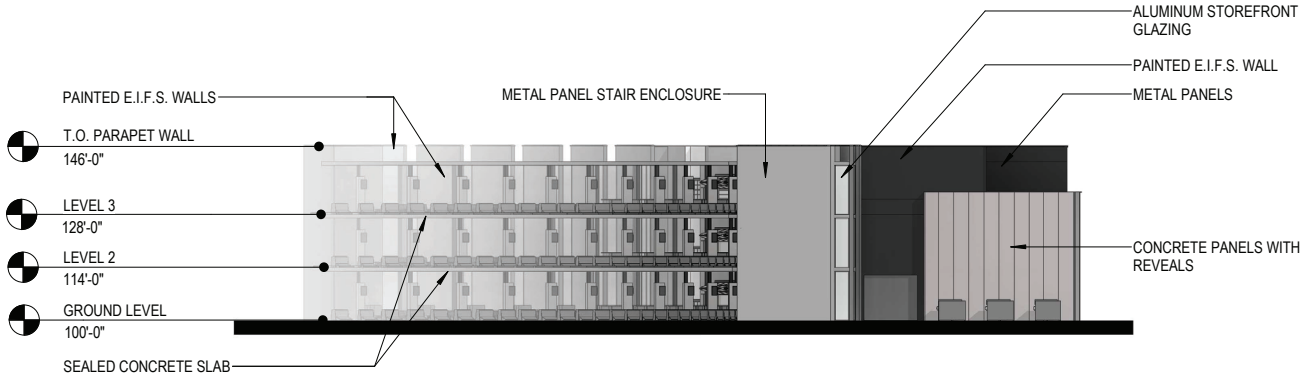
NORTH AND EAST ELEVATIONS

FIGURE 3.0-2

South Elevation



West Elevation

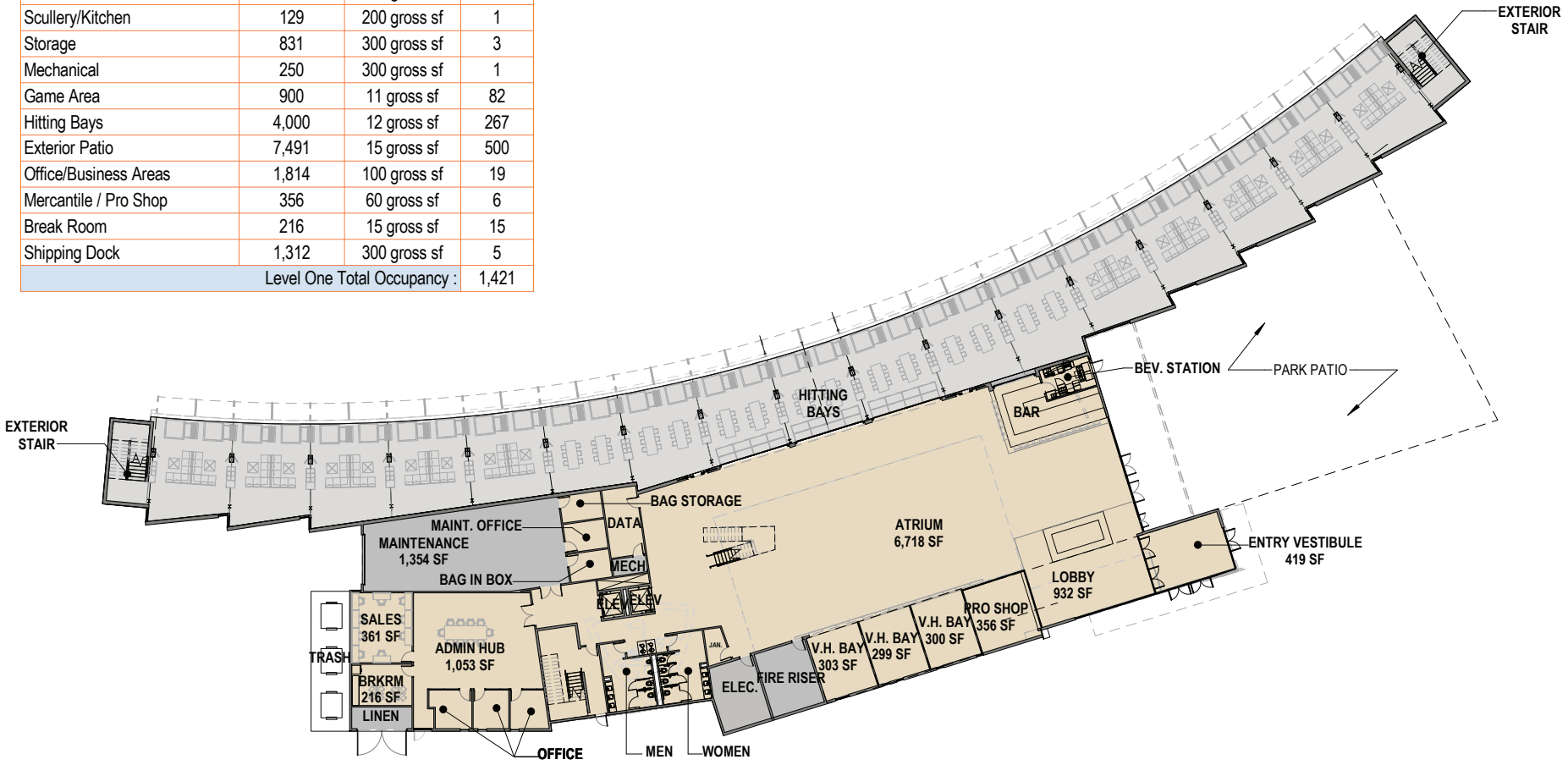


Source: Kip W. Daniel Architect, Jan. 2019.

SOUTH AND WEST ELEVATIONS | FIGURE 3.0-3

Level One - Occupancy Calculations			
Room Name	Area (sq. ft.)	Factor	Load
Lobby (standing only)	2,261	5 net sf	453
Event (Table & Chairs)	982	15 net sf	66
Concessions / Back of Bar	445	200 gross sf	3
Scullery/Kitchen	129	200 gross sf	1
Storage	831	300 gross sf	3
Mechanical	250	300 gross sf	1
Game Area	900	11 gross sf	82
Hitting Bays	4,000	12 gross sf	267
Exterior Patio	7,491	15 gross sf	500
Office/Business Areas	1,814	100 gross sf	19
Mercantile / Pro Shop	356	60 gross sf	6
Break Room	216	15 gross sf	15
Shipping Dock	1,312	300 gross sf	5
		Level One Total Occupancy :	1,421

Level One Building Area (Square Feet) :	27,632
Total Building Area (Square Feet) :	71,024



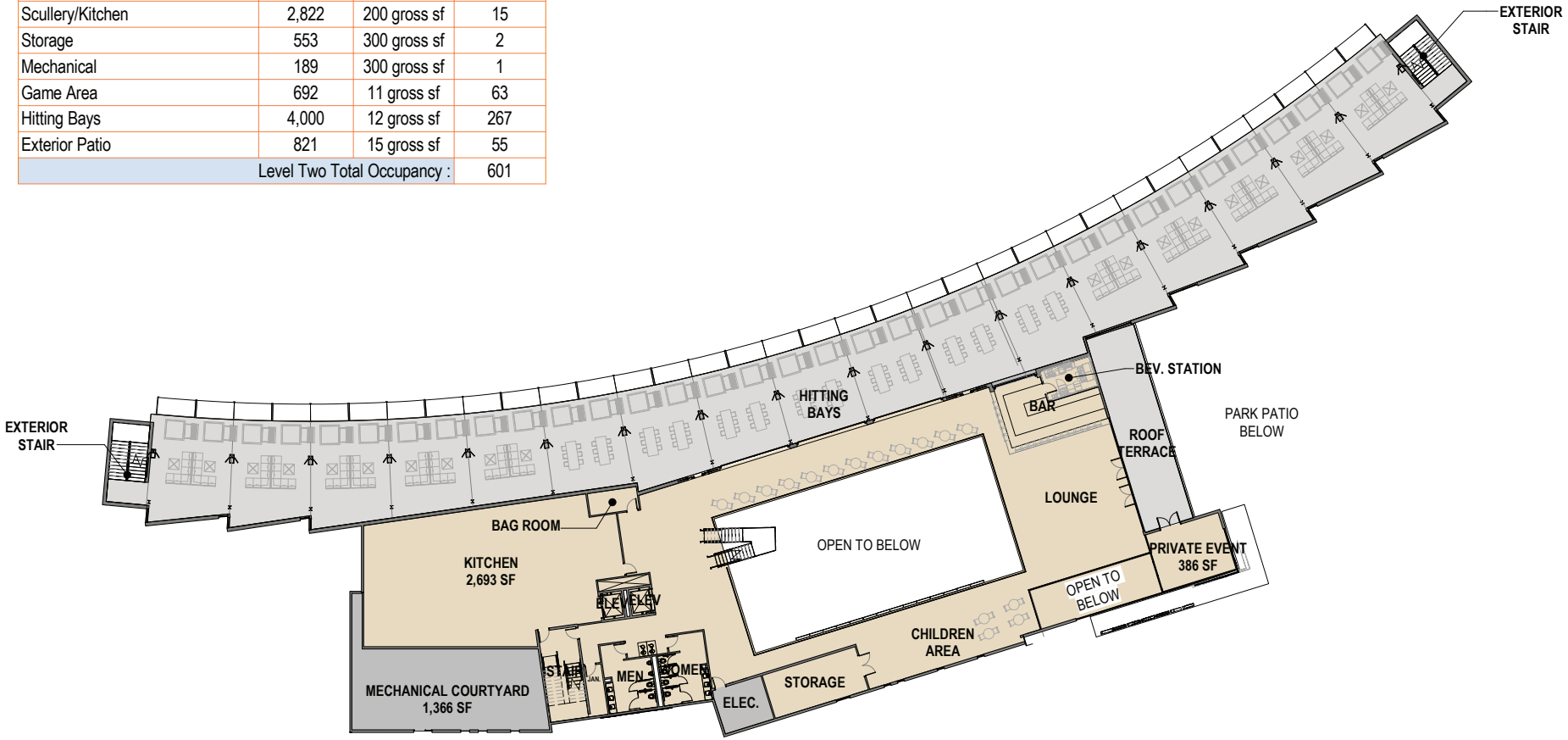
Source: Kip W. Daniel Architect, Jan. 2019.

FIRST FLOOR BUILDING SITE PLAN

FIGURE 3.0-4

Level Two - Occupancy Calculations			
Room Name	Area (sq. ft.)	Factor	Load
Lobby (standing only)	386	5 net sf	78
Event (Table & Chairs)	1,751	15 net sf	117
Concessions / Back of Bar	445	200 gross sf	3
Scullery/Kitchen	2,822	200 gross sf	15
Storage	553	300 gross sf	2
Mechanical	189	300 gross sf	1
Game Area	692	11 gross sf	63
Hitting Bays	4,000	12 gross sf	267
Exterior Patio	821	15 gross sf	55
Level Two Total Occupancy :			601

Level Two Building Area (Square Feet) :	22,590
Total Building Area (Square Feet) :	71,024



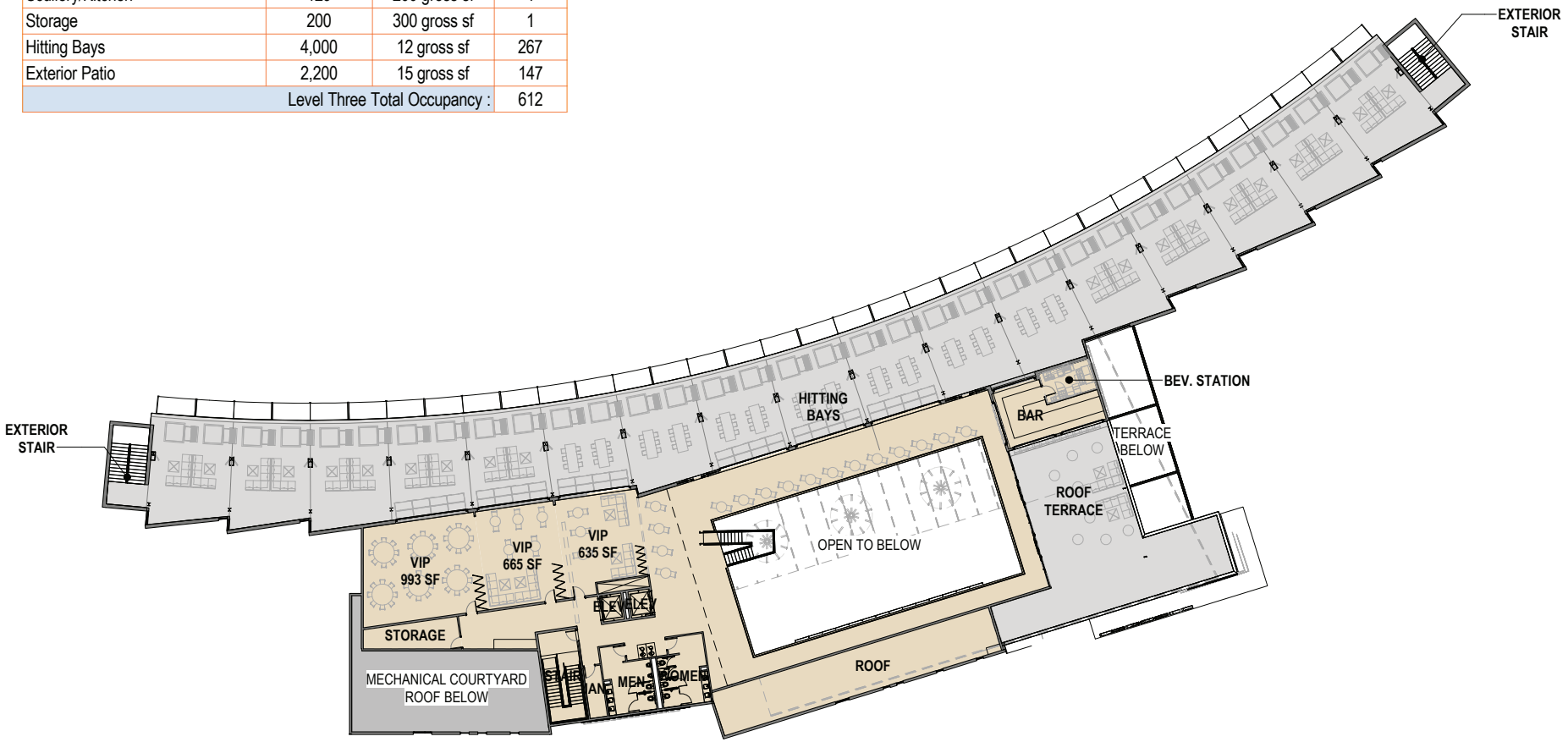
Source: Kip W. Daniel Architect, Jan. 2019.

SECOND FLOOR BUILDING SITE PLAN

FIGURE 3.0-5

Level Three - Occupancy Calculations			
Room Name	Area (sq. ft.)	Factor	Load
Event (Table & Chairs)	2,890	15 net sf	193
Concessions / Back of Bar	445	200 gross sf	3
Scullery/Kitchen	129	200 gross sf	1
Storage	200	300 gross sf	1
Hitting Bays	4,000	12 gross sf	267
Exterior Patio	2,200	15 gross sf	147
Level Three Total Occupancy :			612

Level Three Building Area (Square Feet) :	20,852
Total Building Area (Square Feet) :	71,024



Source: Kip W. Daniel Architect, Jan. 2019.

THIRD FLOOR BUILDING SITE PLAN

FIGURE 3.0-6

The project proposes to install 16 sports lighting standard LED strips beneath the second and third level ceilings of the Topgolf building that would illuminate the back of golf balls as they come off the tee line, allowing the players to track their balls. The sports lighting standards would be lower than the roof of the building at mounting heights of 28 feet and 42 feet above the finished floor elevation of the building. Each light standard would consist of one 500-watt LED strip with dimensions of 25 inches wide by 6 inches tall. The fixtures would be directed downward toward the playing field and mounted beneath the roofline to direct light onto the field and reduce the amount of spill light. No lighting fixtures would be located on the proposed net poles. The outfield would include target areas that are dimly lit from below in the evening for easier visibility, with colors denoting level of difficulty. The targets are internally illuminated with colored LED lighting and no light would spill outside of the outfield area from these targets. At the edge of the range there would be two (2) 50-foot by 30-foot high definition digital screens. The screens would be used to broadcast live sports content, alert players of game play objectives and connect game-integration messaging, as well as provide space for partner brand messaging and to provide Topgolf's internal programs and events.

3.2.1 Site Access and Circulation

Vehicular access to the project site would be provided by Anza Boulevard as well as a proposed driveway connection to Airport Boulevard. The Anza Boulevard full-movement driveway measures approximately 34 feet wide, which includes painted, on-street bicycle lanes on both sides, one inbound lane, and one outbound lane. The proposed driveway connecting to Airport Boulevard will measure approximately 24 feet wide and provide one inbound lane and one outbound lane. The new roadway would connect to the existing parallel parking facility east of the Burlingame Wastewater Treatment facility. Traffic control will remain as a side-street with stop controls. Westbound to southbound left-turn vehicles will utilize the existing dedicated left-turn lane on Airport Boulevard.

The proposed site plan will provide vehicle traffic with adequate connectivity through the parking areas. The interior roadway aisles accommodate two-way traffic and provide 90-degree parking spaces. The design of these aisles meets the City's standard minimum width for two-way drive aisles. The site layout also provides continuous circulation through all the parking areas with no dead-end aisles. The parking lot design includes 475 parking stalls including nine ADA parking stalls.

Pedestrian circulation is provided throughout the site, as well as between the site and surrounding pedestrian facilities. The project proposes a new eight-foot sidewalk which provides pedestrian access to the main building from the proposed parking lot at the southern boundary of the site. The eight-foot sidewalk would connect to a new five-foot sidewalk crossing the proposed parking lot and connecting to the existing parking lot east of the site. Four-foot sidewalks would also be provided at the northern end of the proposed parking lot. Due to the existing grade of the site, sidewalks are not proposed along the access drive to Airport Boulevard. However, pedestrians and bicyclists can access Airport Boulevard via the trail along the west side of Anza Boulevard that connects to Airport Boulevard.

3.2.2 Utilities

The project would connect to an existing 16-inch water main in Airport Boulevard, and a 12-inch water main in Anza Boulevard. The proposed project would create additional impervious area and

stormwater runoff within the proposed development would be collected and treated on-site. Based on the 50 percent rule requirements of the Municipal Regional Permit (MRP), the project would need to provide treatment measures. The project proposes five bioretention basins at various locations throughout the site to treat stormwater runoff from the increased impervious surfaces.

The water line service would come off of Airport Boulevard with a 10-inch line that would be encased through landfill in a 16-inch sleeve. The water meter size is still being determined as it does not need to be the same as the line size. At the top of the new access road the 10-inch line would split into three lines for domestic water service, irrigation and fire. Each water line would have their own (sub) meter.

3.2.3 Green Building Measures

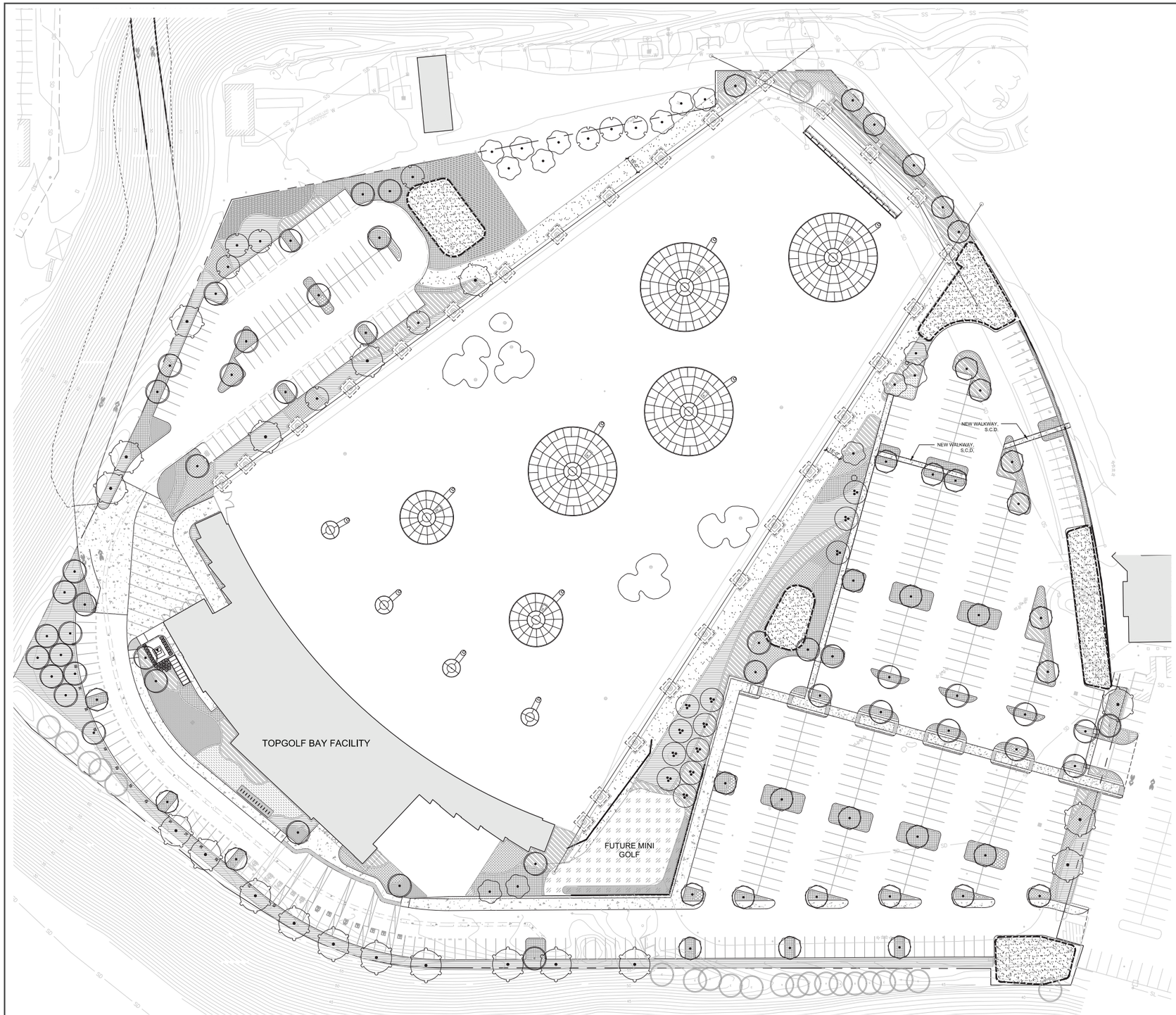
The proposed project would be designed to achieve, at minimum, Leadership in Energy and Environmental Design (LEED) Certification. The project proposes green building and design features such as rooftop solar panels, electric vehicle charging stations, drought resistant landscaping, high-efficiency HVAC systems, and low VOC-emitting building materials.

3.2.4 Landscaping

The proposed project would plant various species including California buckeye, Maidenhair trees, Chinese Pistache, and Chinese Elm trees throughout the property. The project would remove a total of 59 trees from the site, including three trees which meet the City's definition of "protected trees". The project would plant 142 new trees throughout the site. The proposed landscape plan for the project is shown on Figure 3.0-7.

3.2.5 Site Grading and Construction Duration

The targets will be up to 75 feet in diameter and would be at ground level around the perimeter and depressed about six feet below the ground surface at the center. The project would include cuts as deep as approximately five feet below existing grade and fills that are up to eight feet thick. There would be approximately 11,000 cubic yards of cut and 18,000 cubic yards of fill. The proposed project construction activities would include pile driving. A total of approximately 360 piles will be used and it estimated that a 95-foot pile length will be needed for the project site. The duration of pile driving activities are anticipated to take approximately 60 days. The overall construction of the project would last approximately 17 months. Construction would be limited to 8:00 AM to 7:00 PM Monday through Friday, 9:00 AM to 6:00 PM Saturday with no construction permitted on Sundays or holidays, as permitted by Municipal Code Section 13.04.100.



PLANT SCHEDULE L-2.01

TREES	QTY	BOTANICAL / COMMON NAME	CONT
	14	Aesculus californica / California Buckeye	24" BOX MIN.
	12	Arbutus x `Marina` / Arbutus Multi-trunk	24" BOX MIN.
	9	Ginkgo biloba `Fairmont` / Maidenhair Tree	24" BOX MIN.
	35	Melaleuca linariifolia / Flaxleaf Paperbark Multi-trunk	24" BOX MIN.
	42	Pistacia chinensis / Chinese Pistache	24" BOX MIN.
	30	Podocarpus elongatus `Icee Blue` TM / Icee Blue Yellow Wood	24" BOX MIN.
	20	Ulmus parvifolia / Chinese Elm	24" BOX MIN.

SHRUB AREAS	QTY	BOTANICAL / COMMON NAME	CONT	SPACING
	230	Bouteloua gracilis `Blonde Ambition` / Blue Grama	1 GAL MIN.	30" o.c.
	410	Calamagrostis x acutiflora `Karl Foerster` / Feather Reed Grass	1 GAL MIN.	30" o.c.
	407	Carex divulsa / Berkeley Sedge	1 GAL MIN.	30" o.c.
	890	Helictotrichon sempervirens / Blue Oat Grass	1 GAL MIN.	30" o.c.
	3,149	Lomandra longifolia `Tanika` / Dwarf Mat Rush or Berkeley Sedge	1 GAL MIN.	20" o.c.
	564	Muhlenbergia rigens / Deer Grass	1 GAL MIN.	20" o.c.
	297	Stipa arundinacea / New Zealand Wind Grass	1 GAL MIN.	30" o.c.
	13,049	Hydroseed Mix - To compy with county/ city standards		
	11,810	Decomposed Granite		

STORMWATER BMP	BOTANICAL NAME / COMMON NAME
	Chondropetalum elephantinum / Large Cape Rush Carex divulsa (C. tumulicola) / Berkeley Sedge Stipa arundinacea / New Zealand Wind Grass

N

0 50 100 Feet

LANDSCAPE PLAN

FIGURE 3.0-7

3.2.6 Monitoring and Adaptive Management/Remedial Measures Plan

Given the location of the project site near the San Francisco Bay and the potential for bird collisions with the proposed netting, Topgolf proposes to implement the following monitoring and adaptive management plan upon opening the Burlingame facility. New hires would be trained in accordance with the following guidelines for the preservation and safety of the species identified in the biological assessments conducted for the project site prior to construction.

The project shall implement a monitoring and adaptive management plan that incorporates the components outlined below.

Personnel and Schedule:

- Bird-netting collision surveys shall be performed seven (7) days/week for two (2) years by Topgolf facility personnel who have received training in such monitoring by a qualified biologist (or Topgolf may have a biologist conduct such surveys, if desired).
- Bird-netting interaction monitoring shall be performed for two (2) consecutive days, twice/month in April, September, and either December or January (i.e., during spring and fall migration and winter), for a total of 12 survey days/year, for two (2) years. This monitoring will be performed by a qualified biologist hired by Topgolf.
- The two-year survey period shall begin once all netting has been installed.

Personnel Qualifications, Training, and Materials:

- Topgolf facility personnel that are selected as monitors for bird-netting collision surveys shall receive the training described under "Education" below. At a minimum, these facility personnel shall have an adequate understanding of bird/carcass detection and good observation skills. Monitors without previous experience conducting carcass surveys shall receive the following training from a qualified individual:
    - How to search for dead birds along the edges of the facility.
    - Provided with example pictures of bird carcasses on the ground and on various types of ground cover.
    - How to record data on data sheets in the field.
    - How to organize and secure data sheets so that the data collected are not lost.
    - Procedures to follow if a dead or injured bird is detected during surveys (e.g., contacting an authorized biologist or bird rehabilitation organization, as described below).
- Each monitor shall be provided with the following equipment to help with data collection:
    - Flashlight, camera, and data sheet. In addition, a ruler, gloves, small and large zip lock bags, and field guides to bird identification shall be kept on the site for use by an authorized biologist or bird rehabilitation organization, in the event a dead or injured bird is detected (see below).

Education:

- A qualified biologist shall develop a brief training curriculum for Topgolf on-site facilities personnel and other pertinent personnel on how to conduct daily perimeter surveys, the protocols for collecting data, and procedures to follow if a dead or injured bird is detected during surveys (e.g., contacting an authorized biologist or bird rehabilitation organization).

Bird-Netting Collision Survey Procedures:

- The monitor shall divide the survey area into sectors to identify the location of specimens (described below) and a map of the survey area; sectors shall be created prior to the initiation of surveys.
- The survey shall begin within two hours of sunrise (and preferably earlier, to minimize the potential for dead or injured birds to be removed by predators or scavengers). The monitor shall first scan the interior of the site, using binoculars (and a spotting scope if necessary), for any conspicuous birds that are injured, dead, or trapped within the facility's netting. This scan can occur from one of the facility's golf-driving bays. The monitor shall then walk around the outside of the facility's netting perimeter.
- Looking for dead or injured birds (including "feather spots" where dead or injured birds may have been predated or scavenged) both inside the facility (i.e., looking through the netting) and within a 20-foot wide strip on the outside of the netting. The monitor may need to walk a zigzag route to adequately cover the 20-foot wide strip. If, during the study, the monitors notice dead or injured birds that are more than 20 feet from the edge of the netting, and it appears that the injury/fatality resulted from collision with the netting, the width of this exterior survey area shall be increased accordingly, the specific extent based on the determination of the qualified biologist, for all future surveys.
- All whole birds and feather spots shall be considered injuries or fatalities. Feather spots consist of groups of feathers composed of at least two or more primary flight feathers, five or more tail feathers, or 10 or more feathers of any type concentrated together in an area one (1) square meter or smaller; feathers with significant skin or flesh, or any bone attached shall be considered fatalities. The monitor shall divide the survey area into sectors to identify the location of the specimen, which will assist with identifying any collision "hotspots" as discussed below. A map of the survey area and sectors shall be created prior to the initiation of surveys. The locations of any dead or injured birds shall be marked on the map during each survey. If a dead or injured bird is located and the monitor is not a biologist with permits to handle dead or injured birds, the monitor shall contact a qualified biologist such as the San Francisco Bay Bird Observatory, Point Blue Conservation Science, or other organization having a biologist permitted to handle such birds ("authorized biologist"). The authorized biologist shall follow collection protocols outlined in the permits to handle dead or injured birds. The authorized biologist shall identify the bird to species and, if possible and if relevant for the issue of determining whether the bird is of a special-status taxon, to subspecies. The authorized biologist shall photograph the head, body profile, and feet of the bird, as well as any other features useful in determining the cause of injury or death. If the bird is dead, then using gloves, the authorized biologist shall place specimens in sealable plastic bags; write the date of collection, species involved, and time of day in permanent marker on the outside of the bag; and store all specimens in a freezer. A spreadsheet for data collection shall be created with the following columns – Date, Time, Monitor, Location, # of Dead Birds, # of Injured Birds, and Disposition of Bird. Because the survey area outside the netting will include vegetation too tall and dense to allow dead or injured birds to be readily found by monitors, carcass detection trials would need to be conducted to estimate the proportion of carcasses present that are actually detected (vs. overlooked) by monitors. Detection trials would be conducted four times/year, and they would be overseen by a biologist. The biologist would place at least five carcasses of non-protected species (e.g., nonnative birds such as rock pigeons [Columba livia], house sparrows [Passer domesticus],

or European starlings [Sturnus vulgaris]) in randomly selected locations (though at least two such locations would be within vegetation in the exterior survey area). The personnel conducting the regular monitoring surveys (i.e., which may be Topgolf staff or a biologist hired by Topgolf) cannot know any details regarding the detection trial, such as when the trial is being conducted, how many specimens are used in the trial, or where those specimens are located; the monitors would only be told at the beginning of the study that a detection trial may be conducted, and that if such a trial is conducted, the birds used in the detection trial would be marked with an inconspicuous marker (e.g., a small piece of clear tape on a leg) so that the monitors would know to report and collect those individuals as "trial carcasses", but without collecting detailed data or including them in the survey results.

Procedures if Injured Bird is Observed:

- If an injured bird is found, the monitor or facility personnel shall contact the local Animal Control and the Peninsula Humane Society & SPCA (650-340-7022) or other organization qualified to handle injured birds ("bird rehabilitation organization") and follow any instructions given. For a bird that is easily accessible, the monitor or facility personnel shall use gloves and a towel or cloth to collect the bird, place the injured bird into a carrier or box with cloth at the bottom and slats for air circulation, cover the box or carrier with a towel, and keep it in a cool dry area until a bird rehabilitation organization provides instructions or picks up the injured bird.
- If a bird is stuck high in the net, facility personnel shall work with crane operators to access the area of the net where the bird is trapped, then work with the bird rehabilitation organization to remove the injured animal and give it to the bird rehabilitation organization for examination and rehabilitation, as needed.
- If a bird is trapped within the interior of the facility, facility personnel shall stop play, contact a bird rehabilitation organization, and follow provided instructions. Based on the determination of a qualified biologist, if appropriate, a long-handled net may be used by trained staff to attempt to capture the trapped bird.

Bird-Netting Interaction Monitoring:

- During the period identified above for bird-netting interaction monitoring, one or more qualified biologists shall monitor how birds interact with the netting. Using binoculars and spotting scopes, and scanning from one of the facility's upper bays or other suitable vantage points, the qualified biologist(s) shall: (1) observe birds flying in the vicinity of the site to determine whether their behavior (such as flight path) is affected by the netting; (2) determine whether flight paths over and around netting are modified well in advance (indicating that birds see the netting far ahead) or suddenly (indicating that birds see the netting only at close range); (3) look for birds that run into the netting; (4) determine whether birds within the facility have difficulty escaping; and (5) otherwise record any information that can inform impact assessment or mitigation strategies for the Topgolf Burlingame facility or similar projects. All relevant information shall be recorded in writing or electronically.

Reporting:

- A report on the results of monitoring shall be prepared by Topgolf every three (3) months and provided to a qualified biologist for review. The report shall include information on

monitoring (e.g., who conducted the surveys, dates, and maps); a summary of detections of trapped, injured, or dead birds; and an estimate of the number of injuries/fatalities during that period. If detection trials are needed due to vegetation height, the estimated number of injuries/fatalities shall be adjusted based on the proportion of detection trial carcasses that were detected by monitors. The quarterly report shall also include summaries of observations during bird-netting interaction monitoring. Once the qualified biologist confirms the findings in the report, the biologist shall submit the report to the City of Burlingame Community Development Director for review and inclusion in the records.

Adaptive Management/Remedial Measures:

- If one individual of a state or federally listed species is injured or killed as a result of netting interactions, Topgolf shall hire a qualified biologist to begin the process of identifying and implementing remedial measures to reduce collisions. Otherwise, upon receipt of the monitoring report every three (3) months, the qualified biologist hired by Topgolf shall review the bird-netting collision data to determine whether injuries or fatalities indicate that remedial measures are necessary to reduce collisions. Examples of metrics that would necessitate remedial measures include injury or fatality of:
  - More than one individual per every three months of the white-tailed kite [Elanus leucurus] (a California fully protected species);
  - More than one individual per every two months of a California species of special concern; or
  - More than five individuals/per month of any native bird species.

- Remedial measures may include, but are not limited to, installing deterrence devices to make the netting more conspicuous to birds or deter birds from flying in that area. If Topgolf proposes an alternative deterrence device (i.e. other than flight diverters), Topgolf will hire a qualified biologist to prepare a report documenting why the alternative deterrence device is equivalently effective. The report shall be submitted to the City of Burlingame Community Development Director for review and approval.
- The locations of the deterrence devices may be informed by review of monitoring data to determine whether any collision "hotspots" (i.e., where collisions seem to be occurring more frequently) are present. For example, if the majority of injuries/fatalities are concentrated in a few areas, then only those hotspots would need to be treated with deterrence devices. The extent of installation, and the type of deterrence devices would be determined by the qualified biologist, with approval by the City, based on a review of the monitoring data. If the remedial measures involve spacing of deterrence devices at a density less than 15 feet, the two-year monitoring period shall restart for each treated hotspot area. Monitoring for each treated hotspot area(s) shall be completed when two (2) years of monitoring have indicated that collisions are below the metrics defined above, or the netting is entirely treated with net marking devices along all sections of the netting perimeter rope and rib lines at a distance of be 15 feet, as described above, or using alternative deterrence devices as recommended by the qualified biologist and approved by the City.

SECTION 4.0 ENVIRONMENTAL SETTING, CHECKLIST, AND IMPACT DISCUSSION

This section presents the discussion of impacts related to the following environmental subjects in their respective subsections:

4.1	Aesthetics	4.12	Mineral Resources
4.2	Agriculture and Forestry Resources	4.13	Noise
4.3	Air Quality	4.14	Population and Housing
4.4	Biological Resources	4.15	Public Services
4.5	Cultural Resources	4.16	Recreation
4.6	Energy	4.17	Transportation
4.7	Geology and Soils	4.18	Tribal Cultural Resources
4.8	Greenhouse Gas Emissions	4.19	Utilities and Service Systems
4.9	Hazards and Hazardous Materials	4.20	Wildfire
4.10	Hydrology and Water Quality	4.21	Mandatory Findings of Significance
4.11	Land Use and Planning		

The discussion for each environmental subject includes the following subsections:

- **Environmental Setting** – This subsection 1) provides a brief overview of relevant plans, policies, and regulations that compose the regulatory framework for the project and 2) describes the existing, physical environmental conditions at the project site and in the surrounding area, as relevant.
- **Impact Discussion** – This subsection 1) includes the recommended checklist questions from Appendix G of the CEQA Guidelines to assess impacts and 2) discusses the project's impact on the environmental subject as related to the checklist questions. For significant impacts, feasible mitigation measures are identified. "Mitigation measures" are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines Section 15370). Each impact is numbered to correspond to the checklist question being answered. For example, Impact BIO-1 answers the first checklist question in the Biological Resources section. Mitigation measures are also numbered to correspond to the impact they address. For example, MM BIO-1.1 refers to the first mitigation measure for the first impact in the Biological Resources section.

4.1 AESTHETICS

The following discussion is based in part on a peer review of visual simulations of the project completed by *Digital Imaging Studio* in August 2019. The visual simulations are incorporated into the impact discussion in this section and the peer review is attached as Appendix A to this Initial Study.

4.1.1 Environmental Setting

4.1.1.1 *Regulatory Framework*

State

Senate Bill 743

Senate Bill (SB) 743 was adopted in 2013 and requires lead agencies to use alternatives to level of service (LOS) for evaluating transportation impacts, specifically vehicle miles traveled (VMT). SB 743 also included changes to CEQA that apply to transit-oriented developments, as related to aesthetics and parking impacts. Under SB 743, a project's aesthetic impacts will no longer be considered significant impacts on the environment if:

- The project is a residential, mixed-use residential, or employment center project, and
- The project is located on an infill site within a transit priority area.[1]

SB 743 also states that aesthetic impacts do not include impacts on historical or cultural resources. Further, it clarifies that local governments retain their ability to regulate a project's transportation, aesthetics, and parking impacts outside of the CEQA process. The project would not be assumed to have a less than significant aesthetics impact because it would not qualify as an employment center project.[2]

Streets and Highway Code Sections 260 through 263

The California Scenic Highway Program (Streets and Highway Code, Sections 260 through 263) is managed by the California Department of Transportation (Caltrans). The program is intended to protect and enhance the natural scenic beauty of California highways and adjacent corridors through

[1] An "infill site" is defined as "a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses."
A "transit priority area" is defined as "an area within 0.5 mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations."
A "major transit stop" means "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods." Source: Office of Planning and Research. "Changes to CEQA for Transit Oriented Development – FAQ." October 14, 2014. Accessed April 26, 2019. http://www.opr.ca.gov/ceqa/updates/sb-743/transit-oriented.html.

[2] An employment center project is a project located on property zoned for commercial uses with a floor area ratio of no less than 0.75 and that is located within a transit priority area.

special conservation treatment. Interstate 280, located just west of Burlingame, is officially designated as a State Scenic Highway.[3]

Local

Envision Burlingame 2040 General Plan

The 2040 General Plan Environmental Impact Report (EIR) identifies locally designated scenic roadways, which include Bayshore Freeway, Canyon Road, Easton Drive, El Camino Real, Skyline Boulevard, Ralston Avenue, Hillside Drive, Trousdale Drive, Airport Boulevard, Occidental Avenue, Ray Drive, Bellevue Avenue, Burlingame Avenue, and California Drive.

The 2040 General Plan includes policies aimed at reducing the visual impacts of new development and ensuring compatibility with surrounding land uses. General Plan aesthetic policies applicable to the proposed project are listed below.

Policy	Description
HP-7.3	Protect local scenic roadways by preserving mature trees wherever possible, maintaining landscaping along roadways, and ensuring that development and land uses do not detract from the aesthetics of the corridor. Consider establishing specific design guidelines for residential development, commercial development, and roadway signage along scenic corridors.
HP-7.7	Protect views to the Bay shoreline by identifying viewsheds to the Bay from key locations and restricting the height of buildings within these viewsheds. Ensure that new Bayfront development does not detract from the scenic qualities of the area, and consider adopting commercial and hotel design guidelines specific to the Bayfront.
CC-4.2	Emphasize attractive building and site design by paying careful attention to building scale, mass, placement, architecture, materials, landscaping, screening of equipment, loading areas, signage and other design considerations.

Bayfront Specific Plan – Design Guidelines

The Bayfront planning area includes all of the area in Burlingame that is located east of Highway 101[4] to San Francisco Bay, from the northern border shared with the City of Millbrae at El Portal Creek, south to the Coyote Point County Park, a San Mateo County recreational area. This specific plan includes design guidelines for building/street relationships, Bayshore Highway interface, parking, landscaping, view corridors, signage, gateways, Highway 101 frontage, street design, and building design. The project site is included in the Bayfront Specific Plan area and would be subject to the development policies of the Specific Plan, including the following:

[3] California Department of Transportation. "Scenic Highways." Accessed August 16, 2019. http://www.dot.ca.gov/design/lap/livability/scenic-highways/index.html.

[4] Highway 101 is also referred to as U.S. 101 in this Initial Study.

Policies	Description
F-2	Site development should emphasize attractive public improvements including access to San Francisco Bay waters, appropriate site and parking lot landscaping, and create a harmonious visual environment, which is consistent within each sub-planning area and combines into a whole Bayfront Area which is consistent with the tree city image of Burlingame.
F-3	All development should respect and value the views and sense of open space provided by San Francisco Bay and the coastal hills, and should consider appropriate protection of the views from existing development.
F-5	In order to achieve the aesthetic goals of the plan and implement the Bayfront Design Guidelines, extend the requirement for commercial design review to include all properties within the Bayfront Area.

4.1.1.2 *Existing Conditions*

The City of Burlingame provides scenic views of the city and San Francisco Bay from the hillside areas in the southern and western portions of the city. The hills can also be seen from the shoreline area on streets perpendicular to the shoreline. Airport Boulevard, just north of the project site, affords unrestricted views of the bay along much of its route, as well as views of the Anza Lagoon. As previously mentioned, I-280 is an officially designated State Scenic Highway which runs adjacent to Burlingame's western border; the project site is approximately 2.5 miles northeast of this segment.

The project site itself does not contain any designated scenic resources. The site is used as the Burlingame Golf Center and includes an artificial turf driving range with 40-foot tall net poles bordering the site. The project site can be viewed from many of the surrounding parcels and roadways, due to its location on top of an elevated landfill and the lack of intervening structures. The net poles can be seen from as far away as the neighborhoods on the west side of the U.S. 101. From the project site, there are expansive views of the San Francisco Bay to the north and limited views of the City's hillside areas to the south.

The area surrounding the project site has a diverse visual appearance. The project site is generally bordered by vegetated open space areas to the north, west, and south. To the east of the site there is a turf soccer field with pole-mounted lights and approximately 20-foot tall net poles on the perimeter. A single-story clubhouse building and paved parking areas are located south of the soccer field and to the southeast of the existing driving range. Further east of the soccer field is a seven-story hotel with a paved surface parking lot. The area south of the site is characterized by vegetated open space, electrical transmission towers, and the Sanchez Lagoon, which separates the site from U.S. 101. The Wastewater Treatment Plant is located to the west, separated from the site by a dog park. A 10-story hotel is located further west of the plant. Sources of light and glare in areas surrounding the project site are typical of developed urban areas, including headlights, streetlights, parking lot lights and security lights. Views of the project site are shown in photo exhibits on the following pages.



Photo 1: View of the project site from the southeast, along the US 101 corridor.



Photo 2: View of the project site from the east, along Anza Boulevard.

PHOTOS 1 & 2



Photo 3: View of the project site from the north, along Airport Boulevard.



Photo 4: View of the project site along its eastern boundary.

PHOTOS 3 & 4



Photo 5: View of the adjacent soccer field and hotel to the east of the site from the north side of the clubhouse.



Photo 6: View of the parking lot and clubhouse from the south.

4.1.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
3) In non-urbanized areas, substantially degrade the existing visual character or quality of public views[5] of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Impact AES-1: The project would not have a substantial adverse effect on a scenic vista. **(No Impact)**

The project site does not contain any designated scenic vistas. Scenic views are abundant in the surrounding area, consisting primarily of views of the San Francisco Bay along Airport Boulevard. The proposed project would not interrupt views of the Bay because the scenic viewshed is located directly alongside the Bayfront and the project does not propose any improvements in this area. The project would expand on the existing recreational use of the site. No adverse effect on a scenic vista would occur. **(No Impact)**

Impact AES-2: The project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. **(No Impact)**

The project is not located within, or visible from, a designated state scenic highway. The project site is visible from U.S. 101 but is not recognized for its scenic qualities; no scenic resources are present on the site. The project would not substantially damage scenic resources. **(No Impact)**

[5] Public views are those that are experienced from publicly accessible vantage points.

Impact AES-3:	The project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. The project would not conflict with applicable zoning and other regulations governing scenic quality. **(Less than Significant Impact)**

The proposed project would modify the existing visual character of the site and its surroundings. Although the project would replace the existing driving range with another driving range, the project would increase the scale of development on-site. The project would construct a 71,074 square-foot main building reaching up to 46 feet in height and install net poles ranging from 90 feet in height near the building to 205 feet at the end of the outfield. This would be a departure from the single-story building servicing the existing driving range and the 40-foot net poles present on the site. Visual simulations have been prepared that demonstrate the change in appearance of the site from various angles and roadways in the project area. Figure 4.1-1 on the following page shows the viewpoint locations used by *Digital Imaging Studio* to prepare visual simulations; Figures 4.1-2 through 4.1-7 show visual simulations of the proposed Topgolf facility. For photos of the existing condition of the site, refer to *Section 4.1.1.2, Existing Conditions*.

As seen in the visual simulations, the proposed project would be visually prominent from the surrounding areas. The main building would be three-stories tall and would increase the height and building mass on-site in relation to the existing development. Figures 4.1-2 through 4.1-4 and Figure 4.1-7 show that the building would be visible from U.S. 101, Anza Boulevard, and southbound Airport Boulevard. The building would not interrupt views of the San Francisco Bay along Airport Boulevard or views of the hills from Anza Boulevard. The proposed building would be subject to the City's commercial design review process to ensure it is in substantial conformance with the Bayfront Specific Plan Design Guidelines. This review process would allow for modifications to the project design, if necessary, to meet the City's standards for the Bayfront Planning Area regarding U.S. 101 interface, parking, landscaping, view corridors, signage, street design, and building design. Additionally, the visual simulations show that the proposed building would not differ substantially in appearance from the 10-story hotel to the west of the site and the seven-story hotel to the east of the site. The building would be generally compatible with development in the surrounding area.

The project would install new net poles on-site to prevent golf balls from leaving the site. The net poles would be substantially taller than the existing net poles on the site. As shown in the visual simulations, the net poles would be the primary component of the project affecting public views of the site. While the net poles would alter the visual character of the site, no scenic views would be obstructed. Further, Figures 4.1-2 and 4.1-3 show that the net poles would not be entirely out of character with the electrical transmission towers just south of the site or the pole-mounted lights at the soccer field to the east of the site. The net poles would not be visually obtrusive to any residences or sensitive viewpoints in the project area. While the net poles would be visible from a select amount of residences across U.S. 101, private views are not protected scenic resources under CEQA. For the reasons described above, the proposed project would not degrade the visual character of the site or surrounding areas, nor would it conflict with any zoning or regulation governing scenic quality. **(Less than Significant Impact)**



VISUAL SIMULATION LOCATIONS | FIGURE 4.1-1



VIEW 1 – US 101 NORTHBOUND

FIGURE 4.1-2



Source: Digital Imaging Studio, August 13, 2019.

VIEW 2 – US 101 SOUTHBOUND

FIGURE 4.1-3



VIEW 3 - ANZA BOULEVARD

FIGURE 4.1-4



VIEW 4 – AIRPORT BOULEVARD

FIGURE 4.1-5



Source: Digital Imaging Studio, August 13, 2019.

VIEW 5 – AIRPORT BOULEVARD | FIGURE 4.1-6



Source: Digital Imaging Studio, August 13, 2019.

VIEW 6 – AIRPORT BOULEVARD AT WASTEWATER TREATMENT PLANT | FIGURE 4.1-7

Impact AES-4:	The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. **(Less than Significant Impact)**

The project proposes to install 16 sports lighting standard LED strips beneath the second and third level ceilings of the Topgolf building. Each light standard would consist of one 500-watt LED strip with dimensions of 25 inches wide by six inches tall. The fixtures would be directed downward toward the playing field and mounted beneath the roofline to direct light onto the field and reduce the amount of spill light. No lighting fixtures would be located on the proposed net poles. The outfield would include target areas that would be dimly lit from below in the evening for easier visibility. The targets would be internally illuminated with colored LED lighting and no light would spill outside of the outfield area from these targets. At the edge of the range there would be two (2) 50-foot by 30-foot high definition digital screens. The screens would be used to broadcast live sports content, alert players of game play objectives and connect game-integration messaging, as well as provide space for partner brand messaging and to provide Topgolf's internal programs and events. Given the downslope of the range, with the screens located at the bottom, the screens would only be visible from within the facility. The project would also include parking lot light fixtures and lighting of the pedestrian walkways. While the project would introduce new sources of nighttime light, negligible amounts of spill light would occur at the property boundaries. The exterior of the proposed building would not be dominated by glass or other highly reflective materials. Therefore, the project would not create a new source of substantial light or glare which would adversely day or nighttime views in the area. **(Less than Significant Impact)**

4.2 AGRICULTURE AND FORESTRY RESOURCES

4.2.1 Environmental Setting

The project site is zoned as *Unclassified* and has a General Plan designation of *Parks and Recreation*. According to the San Mateo County Important Farmland 2018 map, the project site is designated as *Urban and Built-Up Land*, meaning that the land contains a building density of at least six units per 10-acre parcel or is used for industrial or commercial purposes, golf courses, landfills, airports, or other utilities.[6]

The project site is currently developed as a driving range and does not contain any forest land and no forest or timberland is located in the vicinity of the project site.

4.2.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
2) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
3) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
4) Result in a loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
5) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

[6] California Department of Conservation, Division of Land Resource Protection. *San Mateo County Important Farmland 2018.* Published September 2019. Available at: https://www.conservation.ca.gov/dlrp/fmmp/Pages/SanMateo.aspx. Accessed December 13, 2019.

Impact AG-1:	The project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. **(No Impact)**

The project site is not designated, used, or zoned for agricultural purposes. The proposed project, therefore, would not result in impacts to agricultural resources. **(No Impact)**

Impact AG-2:	The project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. **(No Impact)**

The project site and surrounding area are not used or zoned for agriculture. The project site is not part of a Williamson Act contract. The project would not conflict with the existing zoning for the property or a Williamson Act contract. **(No Impact)**

Impact AG-3:	The project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. **(No Impact)**

The project site is an existing golf driving range and not zoned as forest or timberland. The project, therefore, would not impact timberland or forest land. **(No Impact)**

Impact AG-4:	The project would not result in a loss of forest land or conversion of forest land to non-forest use. **(No Impact)**

See discussion for Impact AG-3, above. **(No Impact)**

Impact AG-5:	The project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. **(No Impact)**

According to the San Mateo County Important Farmland 2016 map, the project site and surrounding area are designated as *Urban and Built-Up Land*. The development of the project site would not result in conversion of any forest or farmlands. **(No Impact)**

4.3 AIR QUALITY

The following discussion is based upon an Air Quality Assessment prepared by Illingworth & Rodkin in July 2019. A copy of this report is included in Appendix B of this Initial Study.

4.3.1 Environmental Setting

4.3.1.1 *Background Information*

Criteria Pollutants

Air quality in the Bay Area is assessed related to six common air pollutants (referred to as criteria pollutants), including ground-level ozone (O_3), nitrogen oxides (NO_x), particulate matter (PM), carbon monoxide (CO), sulfur oxides (SO_x), and lead.[7] Criteria pollutants are regulated because they result in health effects. An overview of the sources of criteria pollutants and their associated health are summarized in Table 4.3-1. The most commonly regulated criteria pollutants in the Bay Area are discussed further below.

Table 4.3-1: Health Effects of Air Pollutants

Pollutants	Sources	Primary Effects
O_3	Atmospheric reaction of organic gases with nitrogen oxides in sunlight	• Aggravation of respiratory and cardiovascular diseases • Irritation of eyes • Cardiopulmonary function impairment
Nitrogen Dioxide (NO_2)	Motor vehicle exhaust, high temperature stationary combustion, atmospheric reactions	• Aggravation of respiratory illness • Reduced visibility
Fine Particulate Matter ($PM_{2.5}$) and Coarse Particulate Matter (PM_{10})	Stationary combustion of solid fuels, construction activities, industrial processes, atmospheric chemical reactions	• Reduced lung function, especially in children • Aggravation of respiratory and cardiorespiratory diseases • Increased cough and chest discomfort • Reduced visibility
Toxic Air Contaminants (TACs)	Cars and trucks, especially diesel-fueled; industrial sources, such as chrome platers; dry cleaners and service stations; building materials and products	• Cancer • Chronic eye, lung, or skin irritation • Neurological and reproductive disorders

High O_3 levels are caused by the cumulative emissions of reactive organic gases (ROG) and NO_x. These precursor pollutants react under certain meteorological conditions to form high O_3 levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to

[7] The area has attained both state and federal ambient air quality standards for CO. The project does not include substantial new emissions of sulfur dioxide or lead. These criteria pollutants are not discussed further.

reduce O_3 levels. The highest O_3 levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources.

PM is a problematic air pollutant of the Bay Area. PM is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM_{10}) and fine particulate matter where particles have a diameter of 2.5 micrometers or less ($PM_{2.5}$). Elevated concentrations of PM_{10} and $PM_{2.5}$ are the result of both region-wide emissions and localized emissions.

Toxic Air Contaminants

TACs are a broad class of compounds known to have health effects. They include but are not limited to criteria pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, diesel fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway).

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs. Diesel exhaust is a complex mixture of gases, vapors, and fine particles. Medium- and heavy-duty diesel trucks represent the bulk of DPM emissions from California highways. The majority of DPM is small enough to be inhaled into the lungs. Most inhaled particles are subsequently exhaled, but some deposit on the lung surface or are deposited in the deepest regions of the lungs (most susceptible to injury).[8] Chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the California Air Resources Board (CARB).

Sensitive Receptors

Some groups of people are more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, and elementary schools.

4.3.1.2 *Regulatory Framework*

Federal and State

Clean Air Act

At the federal level, the United States Environmental Protection Agency (EPA) is responsible for overseeing implementation of the Clean Air Act and its subsequent amendments. The federal Clean Air Act requires the EPA to set national ambient air quality standards for the six common criteria pollutants (discussed previously), including PM, O_3, CO, SO_x, NO_x, and lead.

[8] California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed June 16, 2018. https://www.arb.ca.gov/research/diesel/diesel-health.htm.

CARB is the state agency that regulates mobile sources throughout the state and oversees implementation of the state air quality laws and regulations, including the California Clean Air Act. The EPA and the CARB have adopted ambient air quality standards establishing permissible levels of these pollutants to protect public health and the climate. Violations of ambient air quality standards are based on air pollutant monitoring data and are determined for each air pollutant. Attainment status for a pollutant means that a given air district meets the standard set by the EPA and/or CARB.

Risk Reduction Plan

To address the issue of diesel emissions in the state, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. In addition to requiring more stringent emission standards for new on-road and off-road mobile sources and stationary diesel-fueled engines to reduce particulate matter emissions by 90 percent, the plan involves application of emission control strategies to existing diesel vehicles and equipment to reduce DPM (in additional to other pollutants). Implementation of this plan, in conjunction with stringent federal and CARB-adopted emission limits for diesel fueled vehicles and equipment (including off-road equipment), will significantly reduce emissions of DPM and NO_X.

Regional

2017 Clean Air Plan

The Bay Area Air Quality Management District (BAAQMD) is the agency primarily responsible for assuring that the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state and federal air quality standards will be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two related BAAQMD goals: protecting public health and protecting the climate. To protect public health, the 2017 CAP describes how BAAQMD will continue its progress toward attaining state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the 2017 CAP includes control measures designed to reduce emissions of methane and other super-greenhouse gases (GHGs) that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.[9]

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. Jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing air quality impacts developed by BAAQMD within their CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

[9] BAAQMD. *Final 2017 Clean Air Plan.* April 19, 2017. http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans.

Local

Envision Burlingame 2040 General Plan

In January 2019, the City of Burlingame adopted their Envision Burlingame 2040 General Plan, which includes policies to reduce exposure of the City's sensitive population to exposure of air pollution, toxic air contaminants, and greenhouse gases. The following policies are applicable to the proposed project:

Policy	Description
HP-3.2	*Local Air Quality Standards.* Work with local business, industries, and developers to reduce the impact of stationary and mobile sources of pollution. Ensure that new development does not create cumulative net increases in air pollution, and require Transportation Demand Management Techniques when air quality impacts are unavoidable.
HP-3.3	*Indoor Air Quality Standards.* Require that developers mitigate impacts on indoor air quality for new residential and commercial developments, particularly along higher-density corridors, near industrial uses, and along the freeway and rail line, such as in North Burlingame, along Rollins Road, and in Downtown. Potential mitigation strategies include installing air filters (MERV 13 or higher), building sound walls, and planting vegetation and trees as pollution buffers.
HP-3.10	*Truck Routes.* Ensure projects that generate truck traffic and existing truck routes avoid sensitive land uses such as residences, schools, day care centers, senior facilities, and hospitals.
HP-3.11	*Dust Abatement.* Require dust abatement actions for all new construction and redevelopment projects.
HP-3.12	*Construction Best Practices.* Require construction projects to implement the Bay Area Air Quality Management District's Best Practices for Construction to reduce pollution from dust and exhaust as feasible.

4.3.1.3 *Existing Conditions*

Air quality and the amount of a given pollutant in the atmosphere are determined by the amount of a pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinants of transport and dilution are wind, atmospheric stability, terrain and for photochemical pollutants, sunshine.

The U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established ambient air quality standards for what are commonly referred to as "criteria pollutants," because they set the criteria for attainment of good air quality. Criteria pollutants, as described in *Section 4.3.1.1, Background Information* above, include carbon monoxide, ozone, nitrogen dioxide, sulfur dioxide, and particulate matter (PM). The Bay Area meets all ambient air quality standards with the exception of ground-level ozone, respirable particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$). The Bay Area is considered a non-attainment area for ground-level ozone and $PM_{2.5}$ under both the federal Clean Air Act and the California Clean Air Act. The area is also considered nonattainment for PM_{10} under the California Clean Air Act, but not the federal act. The area has attained both State and federal ambient air quality standards for carbon monoxide.

Climate and Topography

The project site is located in San Mateo County, which is part of the San Francisco Bay Area Air Basin. The project area's proximity to both the Pacific Ocean and the San Francisco Bay has a moderating influence on its climate.

Existing Uses

Existing criteria air pollutant emissions from the project site are primarily a result of vehicle trips to and from the Burlingame Golf Center. A landfill gas collection system operates on the site and directs landfill gas to the adjacent Wastewater Treatment Plant.

Sensitive Receptors

The closest sensitive receptors to the project site are the single- and multi-family residences to the south of the project site opposite U.S. 101.

4.3.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
2) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
3) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
4) Result in substantial emissions (such as odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

4.3.2.1 *Thresholds of Significance*

As discussed in CEQA Guidelines Section 15064(b), the determination of whether a project may have a significant effect on the environment calls for judgment on the part of the lead agency and must be based to the extent possible on scientific and factual data. The City of Burlingame has considered the air quality thresholds updated by BAAQMD in May 2017 and regards these thresholds to be based on the best information available for the San Francisco Bay Area Air Basin and conservative in terms of the assessment of health effects associated with TACs and $PM_{2.5}$. The BAAQMD CEQA Air Quality thresholds used in this analysis are identified in Table 4.3-2.

Table 4.3-2: BAAQMD Air Quality Significance Thresholds			
Pollutant	**Construction Thresholds**	**Operation Thresholds**	
	Average Daily Emissions (pounds/day)	**Annual Daily Emissions (pounds/year)**	**Annual Average Emissions (tons/year)**
Criteria Air Pollutants			
ROG, NO_x	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	10
CO	Not Applicable	9.0 ppm (eight-hour) or 20.0 ppm (one-hour)	
Fugitive Dust	Dust-Control Measures/Best Management Practices	Not Applicable	
Health Risks and Hazards for New Sources (within a 1,000-foot Zone of Influence)			
Health Hazard	**Single Source**	**Combined Cumulative Sources**	
Excess Cancer Risk	10 per one million	100 per one million	
Hazard Index	1.0	10.0	
Incremental Annual $PM_{2.5}$	0.3 µg/m^3	0.8 µg/m^3 (average)	
Notes: ROG = reactive organic gases, NO_x = nitrogen oxides, PM_{10} = course particulate matter with a diameter of 10 micrometers (µm) or less, and $PM_{2.5}$ = fine particulate matter with a diameter of 2.5 µm or less.			

Impact AIR-1: The project would not conflict with or obstruct implementation of the applicable air quality plan. **(Less than Significant Impact)**

The proposed project will not conflict with the latest Clean Air planning efforts since: (1) the project's operational emissions would be below the BAAQMD thresholds of significance for air pollutants as discussed below in Impact AIR-2, and; (2) development of the project site would be considered urban infill. **(Less than Significant Impact)**

Impact AIR-2: The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. **(Less than Significant Impact)**

As part of an effort to attain and maintain ambient air quality standards for ozone and PM_{10}, the BAAQMD has established thresholds of significance for these air pollutants and their precursors. These thresholds are for ozone precursor pollutants (ROG and NOX), PM_{10}, and $PM_{2.5}$ and apply to both construction period and operational period impacts.

The California Emissions Estimator Model (CalEEMod) Version 2016.3.2 was used to estimate emissions from construction and operation of the proposed project. The project land use types and size, and anticipated construction schedule were input to CalEEMod.

Construction Criteria Pollutants

CalEEMod provided annual emissions for construction and estimated emissions for both on-site and off-site construction activities. On-site activities are primarily made up of construction equipment emissions, while off-site activity includes worker, hauling, and vendor traffic. A construction build-out scenario, including equipment list and schedule, was based on CalEEMod default information for a project of this type and size, as well as additional equipment identified by the applicant. Approximately 7,025 cubic yards (cy) of soil import and two one-way daily water truck trips during the grading phase were assumed.

The project is assumed to be constructed over a period of approximately 17 months, or. 360 construction workdays. Average daily emissions were calculated and the total construction emissions were divided by the number of construction days. Table 4.3-3 shows average daily construction emissions of ROG, NOX, PM_{10} exhaust, and $PM_{2.5}$ exhaust during construction of the project. As indicated in Table 4.3-3, the construction period emissions would not exceed the BAAQMD significance thresholds.

Table 4.3-3: Construction Criteria Pollutant Emissions

Scenario	ROG	NO_x	PM_{10}	$PM_{2.5}$
Total project construction emissions (tons)	1.3	8.0	0.3	0.3
Average daily emissions[1] (pounds per day)	7.0	44.6	1.8	1.7
BAAQMD Thresholds (pounds per day)	*54*	*54*	*82*	*54*
Exceed Threshold?	**No**	**No**	**No**	**No**

[1] Assumes 360 workdays.

Operational Criteria Pollutants

Operational air emissions from the project would be generated primarily from vehicles driven by future customers and employees. CalEEMod was also used to estimate emissions from operation of the proposed project. Based on the vehicle trip generation included in the Transportation Impact Analysis (refer to Appendix G), approximately 263 weekday trips and 307 weekend trips were assumed for the project. The proposed project would be in operation beginning in 2022. The operational criteria pollutant emissions resulting from the project are shown in Table 4.3-4, below.

Table 4.3-4: Operational Criteria Pollutant Emissions

Scenario	ROG	NO_x	PM_{10}	$PM_{2.5}$
2022 Project Operational Emissions (tons per year)	0.8	1.5	1.5	0.4
2022 Existing Use Emissions (tons per year)	0.1	0.4	0.4	0.1

Table 4.3-4: Operational Criteria Pollutant Emissions				
Net Annual Emissions (tons per year)	0.7	1.1	1.1	0.3
BAAQMD Thresholds (tons per year)	*10*	*10*	*15*	*10*
Exceed Threshold?	**No**	**No**	**No**	**No**
2022 Project Operational Emissions[1] (pounds per day)	3.8	5.9	6.0	1.7
BAAQMD Threshold (pounds per day)	*54*	*54*	*82*	*54*
Exceed Threshold?	**No**	**No**	**No**	**No**
[1] Assumes 365 days of operation.				

As shown in Table 4.3-4, operational criteria pollutant emissions would not exceed the BAAQMD significance thresholds. **(Less than Significant Impact)**

Impact AIR-3: The project would not expose sensitive receptors to substantial pollutant concentrations. **(Less than Significant Impact with Mitigation Incorporated)**

Temporary project construction activity would generate dust and equipment exhaust on a temporary basis that could affect nearby sensitive receptors. A construction health risk assessment was prepared to address the impacts the project would have on surrounding sensitive receptors. These two types of emissions (criteria toxic air pollutant emissions and fugitive dust) are discussed below.

Construction Toxic Air Contaminants

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known TAC. Construction exhaust emissions may pose health risks for sensitive receptors such as nearby residents. The primary community risk impact issues associated with construction emissions are cancer risk and exposure to $PM_{2.5.}$ Diesel exhaust poses both a potential health and nuisance impact to nearby receptors. A health risk assessment of the project construction activities was conducted that evaluated potential health effects to nearby sensitive receptors from construction emissions of DPM and $PM_{2.5}$. This assessment included dispersion modeling to predict the offsite and onsite concentrations resulting from project construction, so that lifetime cancer risks and non-cancer health effects could be evaluated.

The maximum-modeled annual DPM and $PM_{2.5}$ concentrations, which includes both the DPM and fugitive $PM_{2.5}$ concentrations, were identified at nearby sensitive receptors (as shown in Figure 4.3-1) to find the maximally exposed individuals (MEIs). Using the maximum annual modeled DPM concentrations, the maximum increased cancer risks were calculated using BAAQMD recommended methods and exposure parameters described in Appendix B. Non-cancer health hazards and maximum $PM_{2.5}$ concentrations were also calculated and identified. Results of this assessment indicated that the residential and construction MEI was located on the first floor (1.5 meters) of a multi-family apartment building to the south of the project site, opposite U.S. 101. The maximum excess residential cancer risk for infant exposure, the annual maximum $PM_{2.5}$ concentration, and the

health HI at this location would not exceed the BAAQMD single-source thresholds of 10 in one million for cancer risk, 0.3 $\mu g/m^3$ for $PM_{2.5}$ concentration, and 1.0 for HI. Table 4.3-5 summarizes the maximum cancer risks, $PM_{2.5}$ concentrations, and health hazard indexes for project related construction activities affecting the construction MEI. Appendix B to this report includes the emission calculations used for the construction area source modeling and the cancer risk calculations.

Cumulative Construction TAC Impacts

Community health risk assessments typically look at all substantial sources of TACs located within 1,000 feet of project site and at new TAC sources that would be introduced by the project. A review of the project area indicates that traffic on U.S. 101 has average daily traffic (ADT) volumes over 10,000 vehicles, which are sources of TACs. All other roadways within the area are assumed to have ADT volumes of less than 10,000 vehicles. Two stationary sources were identified within the 1,000-foot influence area using the BAAQMD's stationary source website map and Google Earth map. This project would not introduce any new TAC sources, such as substantial truck traffic or generators powered by diesel engines.

The project would not have a significant impact with respect to community risk caused by project construction activities, since the cancer risk, $PM_{2.5}$ concentration, and HI do not exceed the single-source thresholds. However, as shown in Table 4.3-5, the combined unmitigated cancer risk would exceed the cumulative threshold of 100 in a million. The cumulative $PM_{2.5}$ concentrations and hazard risk values would not exceed the cumulative thresholds.

Table 4.3-5: Cumulative Impacts from Combined TAC Sources

Source	Maximum Cancer Risk (per million)	Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)	Non-Cancer Hazard Index
Project Construction			
Unmitigated	6.2 (infant)	0.04	0.01
Mitigated	1.5 (infant)	0.01	<0.01
BAAQMD Single-source Threshold	**10 in one million**	**0.3**	**0.1**
Significant?			
Unmitigated	*No*	*No*	*No*
Mitigated	*No*	*No*	*No*
U.S. 101	94.1	0.64	0.07
Plant #1351	3.5	<0.01	0.02
Plant #13079 (Generators)	<0.1	<0.01	<0.01
Cumulative Total			
Unmitigated	**<103.9**	<0.70	<0.11
Mitigated	<99.2	<0.67	<0.11
BAAQMD Cumulative Source Threshold	**100 in one million**	**0.8 $\mu g/m^3$**	**10.0**
Significant?			
Unmitigated	***Yes***	*No*	*No*
Mitigated	*No*	*No*	*No*

Mitigation Measures: The project shall implement the following mitigation measures during construction on the project site:

MM AIR-3.1: All diesel-powered off-road equipment, larger than 25 horsepower, operating on the site for more than two days continuously shall, at a minimum, meet U.S. EPA particulate matter emissions standards for Tier 4 Interim engines or equivalent. When Tier 4 Interim engines are not available, it would be acceptable to use Tier 3 engines with CARB-certified Level 3 Diesel Particulate Filters. Alternatively, the use of equipment that includes electric or alternatively-fueled equipment (i.e., non-diesel) would meet this requirement.

With the implementation of MM AIR-3.1, residential cancer risks would be reduced to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**



OFF-SITE RECEPTORS TO TACs | FIGURE 4.3-1

Construction Fugitive Dust

Construction activities, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of PM_{10} and $PM_{2.5}$. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. The BAAQMD CEQA Air Quality Guidelines consider these impacts to be less-than-significant if best management practices are implemented to reduce these emissions.

Mitigation Measures

MM AIR-3.2: The project shall implement the following standard BAAQMD dust control measures during all phases of construction on the project site:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes [as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California Code of Regulations (CCR)]. Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- A publicly visible sign shall be posted with the telephone number and person to contact at the City of Burlingame regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Bay Area Air Quality Management Air District's phone number shall also

be visible to ensure compliance with applicable regulations. **(Less than Significant with Mitigation Incorporated)**

Impact AIR-4:	The project would not result in substantial emissions (such as odors) adversely affecting a substantial number of people. **(Less than Significant Impact)**

The project does not include any odor-causing operations, and any odors emitted during construction would be temporary and localized. **(Less than Significant Impact)**

4.4 BIOLOGICAL RESOURCES

The discussion in this section is based in part on a Biological Resources Report completed by First Carbon Solutions, a peer review of the Biological Resources Report and additional avian monitoring surveys completed by H.T. Harvey & Associates, and an Arborist Report completed by Arbor Resources. The Biological Resources Report and peer review were completed in April 2019 and July 2019, respectively. The additional avian monitoring survey was completed in August 2019. The Biological Resources Report was subsequently revised in September 2019. The Arborist Report was completed in September 2019. The reports are attached as Appendices C-1, C-2, C-3 and C-4 of this Initial Study.

4.4.1 Environmental Setting

The project site is located in the City of Burlingame and is surrounded by several bodies of water including the San Francisco Bay to the north, the Anza Lagoon to the east, and the Sanchez Lagoon to the south. The project site is currently used as an active driving range, putting green, and associated walkways. There are several small pockets of undeveloped area throughout the site. The project site is bounded by a large parking lot, an outdoor sports complex (Murray Soccer Field), Sanchez Lagoon with U.S. 101 beyond, the Wastewater Treatment Plant, and Airport Boulevard. Adjacent to the eastern boundary of the site is a building that currently houses the driving range pro shop and a small restaurant.

4.4.1.1 *Regulatory Framework*

Federal and State

Endangered Species Act

Individual plant and animal species listed as rare, threatened, or endangered under state and federal Endangered Species Acts are considered special-status species. Federal and state endangered species legislation has provided the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Permits may be required from both the USFWS and CDFW if activities associated with a proposed project would result in the take of a species listed as threatened or endangered. To "take" a listed species, as defined by the State of California, is "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" these species. Take is more broadly defined by the federal Endangered Species Act to include harm of a listed species.

In addition to species listed under state and federal Endangered Species Acts, Sections 15380(b) and (c) of the CEQA Guidelines provide that all potential rare or sensitive species, or habitats capable of supporting rare species, must be considered as part of the environmental review process. These may include plant species listed by the California Native Plant Society and CDFW-listed Species of Special Concern.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) prohibits killing, capture, possession, or trade of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. Hunting and poaching are also prohibited. The taking and killing of birds resulting from an activity is not prohibited by the MBTA when the underlying purpose of that activity is not to take birds.[10] Nesting birds are considered special-status species and are protected by the USFWS. The CDFW also protects migratory and nesting birds under California Fish and Game Code Sections 3503, 3503.5, and 3800. The CDFW defines taking as causing abandonment and/or loss of reproductive efforts through disturbance.

Sensitive Habitat Regulations

Wetland and riparian habitats are considered sensitive habitats under CEQA. They are also afforded protection under applicable federal, state, and local regulations, and are generally subject to regulation by the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), CDFW, and/or the USFWS under provisions of the federal Clean Water Act (e.g., Sections 303, 304, 404) and State of California Porter-Cologne Water Quality Control Act.

Fish and Game Code Section 1602

Streambeds and banks, as well as associated riparian habitat, are regulated by the CDFW per Section 1602 of the Fish and Game Code. Work within the bed or banks of a stream or the adjacent riparian habitat requires a Streambed Alteration Agreement from the CDFW.

California Native Plant Society

The California Native Plant Society (CNPS) maintains a rank of plant species native to California that has low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Potential impacts to populations of CNPS ranked plants receive consideration under CEQA review. The following identifies the definitions of the CNPS ranks:

- Rank 1A: Plants presumed Extinct in California
- Rank 1B: Plants Rare, Threatened, or Endangered in California and elsewhere
- Rank 2: Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere
- Rank 3: Plants about which we need more information—A Review List
- Rank 4: Plants of limited distribution—A Watch List

All plants appearing on CNPS List 1 or 2 are considered to meet the CEQA Guidelines Section 15380 criteria. While only some of the plants ranked 3 and 4 meet the definitions of threatened or endangered species, the CNPS recommends that all Rank 3 and Rank 4 plants be evaluated for consideration under CEQA.

[10] United States Department of the Interior. "Memorandum M-37050. The Migratory Bird Treaty Act Does Not Prohibit Incidental Take." Accessed March 28, 2019. https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf.

Regional and Local

San Francisco Bay Conservation and Development Commission

The San Francisco Bay Conservation and Development Commission (BCDC) is tasked with regulating all development within the San Francisco Bay, the Bay's shoreline band, and the Suisun Marsh. BCDC is guided in its decisions by the McAteer-Petris Act, the San Francisco Bay Plan, and other plans for specific areas around the Bay.

Envision Burlingame 2040 General Plan

The City adopted the Envision Burlingame 2040 General Plan in January 2019. The following General Plan policies pertaining to biological resources are applicable to the proposed project:

Policy	Description
HP-5.1	Preserve critical habitat areas and sensitive species within riparian corridors, hillsides, canyon areas, tree canopies, and wetlands that are within the City's control. Consult with the California Department of Fish and Wildlife to identify and map significant habitat areas, and focus protection measures on habitats with special status species. Protect declining or vulnerable habitat areas from disturbance during design and construction of new development.
HP-5.2	Identify and protect habitats that contribute to the healthy propagation of migratory birds, including trees and natural corridors that serve as stopovers and nesting places. Avoid construction activities that involve tree removal between March and June unless a bird survey has been conducted to determine that the tree is unused during breeding season by avian species protected under California Fish and Game Codes 3503, 3503.5, and 3511.
HP-5.5	Continue to preserve and protect valuable native trees and introduced species that contribute to the urban forest, but allow for the gradual replacement of trees for on-going natural renewal. Promote replacement with native species. Use zoning and building requirements to ensure that existing trees are integrated into new developments and that existing trees are well protected during construction activity.
HP-5.6	Continue to adhere to the Burlingame Tree Preservation Ordinance (Burlingame Municipal Code Title 11), ensure the preservation of protected trees as designated by the ordinance and continue to be acknowledged by the Arbor Day Foundation as a Tree City USA.
HP-5.7	Continue to update and use the Burlingame Urban Forest Management Plan for guidance on best management practices related to tree planting, removal, and maintenance.
HP-5.10	Maintain and improve the quality of Burlingame's shoreline, and support regulatory programs that protect Bayfront open space. Control shoreline uses to minimize erosion, and use a combination of human-made and natural elements to establish flood barriers.
HP-5.14	Through environmental review, ensure that all projects affecting resources of regional concern satisfy regional, State, and federal laws.
HP-5.15	Ensure public access to natural resources, particularly along the Bayfront and in Mills Canyon. Require new development in the Bayfront Area to provide public access to the waterfront, and work with property owners to connect gaps in the Bay Trail.

In addition to the policies included in the table above, the General Plan contains the following Objectives and Actions pertaining to biological resources:

Objectives

(A): To initiate, develop, and implement programs for the conservation of natural resources giving particular attention to critical resource conditions.

(B): To prevent or eliminate damage to the environment and stimulate the health and welfare of the citizens of Burlingame.

(C): To restore, where found to be feasible, natural features of vegetative cover, streams, marsh and bay where areas have been unduly disturbed by man.

(D): To initiate, develop, and implement programs for the conservation of the built environment.

(E): To foster public educational programs on local conservation needs.

(F): To participate in regional conservation programs of direct concern to the City.

(G): To promote economic growth which is consistent with an improvement in the quality of the environment.

Actions

(1): The City should act to protect valuable vegetative cover and encourage planting additional vegetation, giving preference to indigenous materials.

(2): The City should initiate a study by the Planning Commission of the remaining natural areas to determine the effect of development on or near these areas.

(3): Because projects being developed outside the corporate limits can adversely affect the City environment, Burlingame should monitor all major developments through the EIR process and other procedures.

(4): The City should protect the creeks flowing through private and public lands by regulation and acquisition of conservation easements where found to be necessary.

(5): The City should acquire development rights where found to be necessary to protect areas that are of outstanding value in their natural condition.

(6): To protect existing urban areas and structures from deterioration, Burlingame should ensure that private places are properly maintained.

(7): In order to develop a stronger conservation awareness in the people of Burlingame, the City should help to develop conservation education programs in the schools and in the community.

(8): To develop an exchange of information, the City should maintain communication with conservation groups and conservation agencies in areas of direct concern to the City.

<u>City of Burlingame Tree Preservation Ordinance</u>

Burlingame Municipal Code Title 11 provides for the protection and preservation of significant trees. Title 11 designates what types of trees located on what types of development or properties are "protected" and would require a permit before removal or pruning (aside from routine maintenance), and determines when removed or disfigured trees would require replacement. Protected trees include:

- Street trees, which are any woody perennial plant with a single stem and commonly achieving ten feet or more in height.
- Any tree with a circumference of 48 inches or more when measured at a height 54 inches above natural grade;
- A tree or stand of trees so designated by the City Council; or
- A stand of trees in which the Parks and Recreation director has determined each tree is dependent on the others for survival.

The Municipal Code Title 11, Chapter 11.06 Urban Reforestation and Tree Protection includes measures and conditions that protect trees that are to remain, and requirements for replacement of trees that are removed. Section 11.06.090 requires permits for removal of protected tree(s) and the following replacement ratios:

- Replacement shall be three (3) fifteen (15)-gallon size, one twenty-four (24)-inch box size, or one thirty-six (36)-inch box size landscape tree(s) for each tree removed as determined below.
- Any tree removed without a valid permit shall be replaced by two (2) 24-inch box size, or two (2) 36-inch box size landscape trees for each tree so removed as determined below.
- Replacement of a tree can be waived by the director if a sufficient number of trees exists on the property to meet all other requirements of the Urban Reforestation and Tree Protection ordinance.
- Size and number of the replacement tree(s) shall be determined by the director and shall be based on the species, location and value of the tree(s) removed.
- If replacement trees, as designated above, cannot be planted on the property, payment of equal value shall be made to the City. Such payments shall be deposited in the tree planting fund to be drawn upon for public tree planting.

4.4.1.2 *Existing Conditions*

Biologists conducted field surveys on the site in February 2019 to ascertain general site conditions and identify potentially suitable habitat areas for various special-status species and wildlife species. Additionally, avian surveys were conducted on-site in January 2019 and at four other golf courses and driving ranges with similar environmental conditions. Supplemental avian monitoring surveys were conducted in May and August 2019 at the project site and an existing Topgolf facility in Roseville, California.

Special-Status Plants

According to the California Native Plant Society (CNPS), there are 24 special-status plant species and sensitive species that have been recorded to occur within the San Mateo topographic quadrangle. However, all special-status plant species have been determined unlikely to occur on-site, primarily based on the absence of suitable habitat, lack of quality soil, and high level of activity and disturbance within project boundaries in addition to the results of the species review and the reconnaissance-level field assessment.

Special-Status Wildlife Species

According to the CNDDB, there are 15 federal and state listed threatened and/or endangered wildlife species, and State Species of Special Concern that have been recorded to occur within the San Mateo topographic quadrangle. Of the 15 listed species, the Alameda song sparrow (*Melospiza melodia pusillula*) and American peregrine falcon (*Falco peregrinus anatum*) have the potential to occur on-site. The San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), burrowing owl (*Athene cunicularia*), western snowy plover (*Charadrius alexandrinus nivosus*), pallid bat (Antrozous pallidus), San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*), longfin smelt (*Spirinchus thaleichthys*), and California red-legged frog (*Rana draytonii*) are all unlikely to occur

on-site due to lack of suitable habitat as the majority of the site is highly disturbed and developed. The California black rail (*Laterallus jamaicensis coturniculus*), California ridgeways rail (*Rallus obsoletus obsoletus*) and salt-marsh harvest mouse (*Reithrodontomys raviventris*) have potential to occur in the near vicinity of the project site but due to the preferential habitat found offsite, it is unlikely they would enter or reside within project boundaries. The preferred habitat of the Alameda song sparrow and American peregrine falcon is further discussed below.

Alameda Song Sparrow

The Alameda song sparrow is a resident of salt marshes that occur in the vicinity of the project site. This species may occur in the understory vegetation found on-site but due to the high level of activity and development within the project boundaries, it has a low potential to occur.

American Peregrine Falcon

American peregrine falcons reside near wetlands, lakes, rivers, or other waters, on cliffs, banks, dunes, mounds, and on human-made structures. One individual was observed at the project site during the focused avian surveys. As such, this species has a high potential to occur on the project site.

Wildlife Movement Corridors

The project site does not contain any creeks, washes, or waterways, which provide significant wildlife movement corridors within the project's greater vicinity. The site also does not contain any vegetation communities expected to convey wildlife movement, as the vegetation within the site is composed of non-native/invasive species, including a golf driving range. Moreover, the site is located within a developed, urban area that does not provide suitable habitat for a wildlife movement corridor.

Additionally, movement across the current site is restricted by the large fences of protective netting surrounding the majority of the site. Several transmission lines cross Sanchez Lagoon directly south of the site. These barriers, in conjunction with the urban context of the project site and lack of surface waters and vegetative communities on the project site, further impede wildlife and fish species movement across the project site.

Trees

The project site contains 103 trees with 13 various species of mature trees. Table 4.4-1 includes the summary of trees that were surveyed in the Arborist Report.

Table 4.4-1: Tree Survey Summary

Name	Number of Trees (s)	Protected Trees
Arroyo willow	3	1
Blackwood acacia	18	2
Brazilian pepper tree	8	--
Brisbane box	4	--
Coast live oak	2	--
Fremont cottonwood	5	--

Table 4.4-1: Tree Survey Summary		
Lemon-scented gum	2	--
Nichol's willowleafed peppermint	9	3
Purple hopbush	12	--
Rive red gum	31	3
Spider gum	5	1
Western redbud	2	--
Wild plum	2	--

As illustrated in the table, the project area is populated predominantly by eucalyptus trees, accounting for the following four specific species (a combined 46 percent): lemon-scented gum, Nichol's willowleafed peppermint, red gum (the most encountered), and spider gum. Blackwood acacia trees were the second most encountered species (at 17 percent). Ten (10) trees are defined by City Code as protected. Of these, all are either eucalyptus or blackwood acacia formed by multiple trunks, the exception being for eucalyptus #35 and 37; #35 has a single trunk diameter of 16 inches (and is dead), and #37 has a single trunk diameter of 20 inches.

Each tree has been assigned either a "high," "moderate" or "low" suitability for preservation rating as a means to cumulatively measure its existing health (e.g. live crown ratio, vigor, shoot growth, foliage density and color, etc.); structural integrity (e.g. limb and trunk strength, taper, defects, root crown, etc.); anticipated life span; remaining life expectancy; prognosis; location; size; particular species; tolerance to construction impacts; growing space; and safety to property and persons within striking distance. Overall, the high category is comprised of one tree (or one percent), the moderate category is comprised of 32 trees (or 36 percent), and the low category is comprised of 55 trees (or 63 percent).

Jurisdictional Waters and Wetlands

An assessment of potentially jurisdictional features was conducted as part of the literature review and reconnaissance-level survey for the project site. There were several areas that appeared to be man-made water features that were limited in size and focused around the putting green area. No standing water was recorded but the presence of blackberry brambles and willows indicated the possible presence of wetland area. Upon further investigation, this area was determined to not be jurisdictional due to the lack of wetland criteria for determination of jurisdictional wetlands.

4.4.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?	☐	☒	☐	☐
2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?	☐	☐	☒	☐
3) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?	☐	☐	☒	☐
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Impact BIO-1: The project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. **(Less than Significant Impact with Mitigation Incorporated)**

As described previously, special-status plant and wildlife species could be present on the site. Impacts to individual species are discussed below.

Impacts to Nesting Birds (Alameda Song Sparrow and American Peregrine Falcon)

The two protected species that have a potential to occur within the project boundaries are the Alameda song sparrow (low potential) and American peregrine falcon (high potential). Of these, only the peregrine falcon may nest close enough to the site (i.e., within 300 feet) such that construction may result in disturbance of active nests due to noise and operation of construction equipment, which could result in the abandonment of eggs or young. This potential is very low due to the low density of nesting peregrine falcons in the Bay Area.

However, there is some potential for this species to use an old raven nest on electrical towers in Sanchez Lagoon, within 300 feet of the project site. Therefore, there is some potential for nesting peregrine falcons to be disturbed by construction activity to the point of nest abandonment. Given the scarcity of this species as a breeder in the region, the loss of an active nest would represent a significant impact.

Alameda song sparrows are not expected to nest close enough to the project site (within 100 feet) such that construction activities would result in physical disturbance or indirect disturbance of active nests to the point that eggs or young would be lost or abandoned due to construction or operation of the project. In the event that Alameda song sparrows do nest on the site, the following mitigation measures would be applicable.

Mitigation Measures: The project shall implement the following mitigation measure to reduce impacts to the Alameda song sparrow and American peregrine falcon:

MM BIO-1.1: The project applicant shall be responsible for conducting preconstruction surveys by a qualified biologist to ensure the absence of American peregrine falcon. The following measures shall be implemented for construction work during the nesting season (February 1 through August 31):

- If construction or tree removal is proposed during the nesting season for migratory birds (typically February 1 through August 31), a qualified biologist shall conduct pre-construction surveys for American peregrine falcon and other nesting birds within the construction area, including a 300-foot survey buffer for raptors such as the American peregrine falcon and a 100-foot buffer for non-raptors. The survey will be conducted no more than three (3) days prior to the start of ground disturbing activities in the construction area.

- If an active nest is located during pre-construction surveys, construction activities shall be restricted as necessary to avoid disturbance of the nest until it is abandoned or a qualified biologist deems disturbance potential to be minimal. Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment) around an active nest (typically 300-foot buffer for raptors and 100-foot for non-raptors) or alteration of the construction schedule.

- A qualified biologist shall delineate the buffer using nest buffer signs, Environmentally Sensitive Area (ESA) fencing, pin flags, and/or flagging tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently.

Implementation of mitigation measure MM BIO-1.1 would ensure impacts to nesting birds are reduced to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

Impact BIO-2:	The project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS. **(Less than Significant Impact)**

The project site does not contain riparian habitat or other special-status communities. Special-status plan species have been determined to have a low potential to occur on the property due to the absence of suitable habitat, lack of quality soil, and high level of activity and disturbance within the project boundaries. **(Less than Significant Impact)**

Impact BIO-3:	The project would not have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. **(Less than Significant Impact)**

An assessment of potentially jurisdictional features was conducted as part of the literature review and reconnaissance-level survey for the project site. There were several areas that appeared to be man-made water features that were limited in size and focused around the putting green area. No standing water was recorded but the presence of blackberry brambles and willows indicated the possible presence of wetland area. Upon further investigation, this area was determined to not be jurisdictional due to the lack of wetland criteria for determination of jurisdictional wetlands. **(Less than Significant Impact)**

Impact BIO-4:	The project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. **(Less than Significant Impact)**

Impacts from Building Collisions

Clear or reflective glass creates an illusion of clear airspace that birds do not see as a barrier, resulting in birds colliding with the glass. Birds also collide with glass because they see reflections of the landscape (e.g., clouds, sky, vegetation, or the ground) or they see through the glass to perceived habitat (including potted plants or vegetation inside buildings).

The majority of bird collisions with glass in buildings occur within the Bird Collision Zone, or within the first 60 feet above the ground, since this is where birds spend most of their time foraging,

defending territory, nesting, and roosting. In order to reduce bird collisions with building glass, the USFWS Division of Migratory Bird Management has compiled a list of best practices and best available technologies to avoid and minimize bird/glass collisions. These include integrating glass and window design options to create a visual signal or cue to help birds detect and avoid glass.

Specifically, they encourage the use of opaque, etched, or patterned glass that meets the suggested pattern dimensions. In addition, they suggest avoiding the over-use of glass by keeping the percentage of total glass below American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) standard of 40 percent of surface area. They also encourage building design measures such as the use of architectural features to reduce the amount, reflectivity, and transparency of glass. Another strategy is moving plants away from clear glass windows so that they cannot be seen from the outside.

The project avoids the over-use of glass by keeping the percentage of total glass below 40 percent of surface area: the north-facing and west-facing, side facades do not include any glazing and the south-facing, main façade includes less than 15 percent glazing. In addition, the project will not use reflective glass but rather will include patterned glass to help birds detect and avoid the windows. The project also includes multiple mullions (i.e., vertical and horizontal bars) on all windows that break up the transparent or reflective areas of the glass. Finally, no landscaping is proposed inside windows, and the landscaping provided outside the building on the site is interspersed to provide only limited foraging opportunities for birds. As a result, the project will have a less than significant impact from bird collisions with the building. **(Less than Significant Impact)**

Impacts from Netting Collisions

First Carbon Solutions (FCS) conducted bird surveys to understand bird movements near netting. H.T Harvey also conducted surveys on August 5, 2019, and August 19, 2019. During some portions of the year, large numbers of birds are present in the immediate vicinity of the project site, and many of these birds are migrants. In the project area migrant shorebirds and waterbirds are expected to move along the coastline and use high-quality habitat at locations such as the mudflats along the Bay edge, Sanchez Lagoon, and Coyote Point. Migrant birds, therefore, are expected to occur at low altitudes over the project site as they ascend from and descend to these locations.

Because of the unique location of this facility, there may be some bird collisions that occur with the project netting. Based upon the bird surveys conducted for the project, it appears that some birds become familiar with the netting and fly around it, even at 205 feet in height (the proposed height). The proposed netting could result in a substantial increase in the number of collisions between birds and netting, due to the increased heights of the proposed nets. Given the project's landscape position relative to important bird habitats such as the San Francisco Bay, Sanchez Lagoon, and Coyote Point, and the presence of large numbers of migrants moving through the general area, the flight paths of birds could result in collisions with the netting, potentially resulting in injury, mortality, or entanglement. Of those, not all will be injured or killed. Moreover, those birds that may be injured or killed would not all be special-status species or non-special-status migratory raptors and passerine bird species protected under the MBTA. Some injury or mortality of birds could occur without resulting in a significant impact. When determining whether impacts to a species are substantial, per the CEQA Guidelines, H. T. Harvey considers the impacts to the species' populations, rather than to single individuals of those species. Although measures to reduce collision risk, injury, and mortality

to birds would limit those effects, some low level of collision, injury, and mortality would occur with the project. The implementation of a monitoring plan and adaptive management program, as detailed in the project description, would adequately limit netting collision impacts to birds to less than significant levels.

Topgolf will be implementing a monitoring plan and adaptive management program at this facility, as detailed in the project description. Through this program, Topgolf will study the bird movements around the site to determine if certain thresholds regarding the number of bird injuries and mortalities, and types of species involved, are reached. If the thresholds are reached, Topgolf will implement remedial measures to ensure that the injuries/mortalities are addressed. These remedial measures may include installation of net marking devices, such as FireFlys or BirdMark BM-AG, which would be placed along all sections of the netting perimeter rope and rib lines to form vertical rows of flight diverters in the center of each area of netting between support poles. The maximum distance between such marking devices, and/or between such marking devices and support poles, would be 15 feet.

The Monitoring Plan and Adaptive Management/Remedial Measures, discussed in *Section 3.0, Project Description*, will ensure that the number of collisions, if they occur, are sufficiently low to avoid a significant impact. As a result, the project will have a less than significant impact from bird collisions with the netting. **(Less than Significant Impact)**

Impact BIO-5:	The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. **(Less than Significant Impact with Mitigation Incorporated)**

Tree Removal

As mentioned above in the existing setting section, 10 of the 103 surveyed trees are defined by the City Code as protected trees: #1, 22, 27, 29, 35, 37, 42, 49, 50 and 52. The proposed project would remove a total of 59 trees from the site, three of which are protected trees. As discussed in *Section 4.4.1.1, Regulatory Framework*, removal of a protected tree (with a valid permit) shall require replacement with three 15-gallon size trees, one 24-inch box size tree, or one 36-inch box size tree for each protected tree removed; replacement of a removed protected tree may also be waived by the Parks and Recreation director if a sufficient number of trees exist on the property to meet all other requirements of the Urban Forestry and Tree Protection Ordinance. The project would be required to obtain the necessary tree permit(s) and adhere to the tree plantings/replacement requirements specified in the City of Burlingame Municipal Code Section 11.06. Therefore, removal of the protected trees would not result in a significant impact.

Tree Protection

The proposed project would retain trees on-site that could be affected by project construction. The project shall implement the recommendations identified in the tree survey to protect on-site trees during project construction.

Mitigation Measures: The project shall implement the following mitigation measures to ensure project impacts to all retained trees are reduced to a less than significant level:

MM BIO – 5.1: *Design Guidelines*

- A Tree Protection Zone (TPZ) is necessary to restrict or confine the following activities to help achieve a reasonable assurance of a tree's vigor, longevity and anchoring capacity: trenching, soil scraping, compaction, mass and finish-grading, overexcavation, subexcavation, tilling, ripping, swalkes, bioswales, storm drains, dissipators, equipment cleaning, removal of underground utilities and vaults, altering existing water/drainage flows, stockpiling and dumping of materials, and equipment and vehicle operation. An ideal TPZ should have a linear distance from a trunk of 10 times its diameter (i.e. an 18-inch diameter tree would have a setback of 15 feet in all directions); for multi-trunk measurements, use the combined diameter. In the event an impact encroaches slightly within a setback, it can be reviewed on a case-by-case basis by the project arborist to determine whether measures can sufficiently mitigate the impacts to less-than-significant levels.
- All site-related plans should contain notes referencing the arborist report for tree protection measures.
- All final landscape plans and TPZs shall be reviewed by a qualified arborist.
- Where within 10 feet from a TPZ, confine grading (cut and fill), overexcavation, subexcavation, trenching, compaction, and other ground disturbance to within 12 to 24 inches from any foundation, footing, curb, gutter, pavement, driveway or retaining wall.
- Irrigation and lighting features (i.e. main line, lateral lines, valve boxes, wiring and controllers) should be established so that no trenching occurs within a TPZ. In the event this is not feasible, they may require being installed in a radial direction to a tree's trunk, and terminate a specific distance from a trunk (versus crossing past it).
- Tilling, ripping and compaction within TPZs should be avoided.

Before Demolition, Grading and Construction

- Where within a TPZ, the removal of plant material and groundcover must be manually performed versus using heavy equipment operating and traveling on unpaved ground. Additionally, the removal of stumps shall only be performed using a stump grinder (versus excavating into the ground and inadvertently damaging roots).
- Begin applying supplemental irrigation during the dry months of the year (i.e. May through October), at a rate of approximately 10 gallons per inch of trunk diameter every two to three weeks via flooding the inside of a 12-inch tall berm established around the canopy perimeters (or as close to the perimeters as possible). Alternatives include using soaker hoses or through deep-root injection. Note, ultimately, the methodology, amount and frequency of irrigation can be best outlined closer to construction

commencing, and any applicable dewatering may require a more intensive supplemental watering program than otherwise needed.

- Install tree protection fencing prior to demolition or other site work for the purpose of restricting access into unpaved sections of ground within a TPZ. Fencing does not need to enclose any pavement remaining within a TPZ (in effect, the pavement allows access within a TPZ, while serving as a superior root zone buffer). Fencing should consist of five- to six-foot tall chain link mounted on two-inch diameter steel posts, which are driven into the ground for vertical alignment. Fencing shall remain in place throughout site development, and will need to be installed, as needed, in various phases. Removing hardscape within a TPZ may trigger fencing being modified to capture the newly exposed area.

With implementation of the tree protection measures outlined above and in the project arborist report, the proposed project would not result in significant impacts to trees. **(Less than Significant Impact with Mitigation Incorporated)**

Impact BIO-6:	The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. **(No Impact)**

The project site is not subject to any adopted Habitat Conservation Plan and is therefore subject to regulation by local, state, and federal laws. As there is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan applicable to the project site, no impact would occur in this regard, and as such, no additional requirements or mitigation measures are recommended. **(No Impact)**

4.5 CULTURAL RESOURCES

4.5.1 Environmental Setting

Cultural resources are evidence of past human occupation and activity and include both historical and archaeological resources. These resources may be located above ground or underground and have significance in the history, prehistory, architecture, architecture of culture of the nation, State of California, or local or tribal communities.

Prehistoric resources are resources that have significance in prehistory, which is defined as events of the past occurring prior to advent of written records. Historic resources are generally 50 years or older in age and include, but are not limited to, buildings, districts, structures, sites, objects and areas. Archaeological resources are resources associated with human activity in the past and encompass both prehistoric and historic resources.

4.5.1.1 *Regulatory Framework*

Federal

National Historic Preservation Act

Federal protection is legislated by the National Historic Preservation Act (NHPA) of 1966 and the Archaeological Resource Protection Act of 1979. These laws maintain processes for determination of the effects on historical properties eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA and related regulations (36 Code of Federal Regulations Part 800) constitute the primary federal regulatory framework guiding cultural resources investigations and require consideration of effects on properties that are listed or eligible for listing in the NRHP. Impacts to properties listed in the NRHP must be evaluated under CEQA.

The NRHP is the nation's master inventory of historic resources that are considered significant at the national, state, or local level. The minimum criteria for determining NRHP eligibility follow:

- The property is at least 50 years old (properties under 50 years of age that are of exceptional importance or are contributors to a district can also be included in the NRHP);
- It retains integrity of location, design, setting, materials, workmanship, feeling, and associations; and
- It possesses at least one of the following characteristics:
    - Association with events that have made a significant contribution to the broad patterns of history.
    - Association with the lives of persons significant in the past.
    - Distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant, distinguishable entity whose components may lack individual distinction.
    - Has yielded, or may yield, information important to prehistory or history.

State

California Register of Historical Resources

The California Register of Historical Resources (CRHR) is administered by the State Office of Historic Preservation and encourages protection of resources of architectural, historical, archeological, and cultural significance. The CRHR identifies historic resources for state and local planning purposes and affords protections under CEQA. Under Public Resources Code Section 5024.1(c), a resource may be eligible for listing in the CRHR if it meets any of the NRHP criteria.[11]

Historical resources eligible for listing in the CRHR must meet the significance criteria described previously and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if it maintains the potential to yield significant scientific or historical information or specific data.

The concept of integrity is essential to identifying the important physical characteristics of historical resources and hence; in evaluating adverse changes to them. Integrity is defined as "the authenticity of an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance." The process of determining integrity is similar for both the CRHR and NRHP and use the same seven variables or aspects to define integrity that are used to evaluate a resource's eligibility for listing. These seven characteristics include 1) location, 2) design, 3) setting, 4) materials, 5) workmanship, 6) feeling, and 7) association.

Archaeological Resources and Human Remains

Archaeological, and historical sites are protected by a number of state policies and regulations under the California Public Resources Code, California Code of Regulations (Title 14 Section 1427), and California Health and Safety Code. California Public Resources Code Sections 5097.9-5097.991 require notification of discoveries of Native American remains and provides for the treatment and disposition of human remains and associated grave goods. Section 15064.5 of the CEQA Guidelines specifies procedures to be used in the event of an unexpected discovery of Native American human remains to protect them from disturbance, vandalism, and inadvertent destruction.

Both state law and the County of San Mateo require that the San Mateo County Coroner be notified if cultural remains are found on a site. If the Coroner determines the remains are those of Native Americans, the Native American Heritage Commission and a "most likely descendant" must also be notified.

Local

Envision Burlingame 2040 General Plan

The following General Plan Policies pertaining to cultural resources are applicable to the proposed project:

[11] CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6. March 14, 2006.

Policy	Description
CC-1.11	Protect and maintain Burlingame's historic Eucalyptus groves and other heritage trees in a healthy, safe and efficient manner so they remain an important part of the community.

4.5.1.2 *Existing Conditions*

Burlingame is situated within the historic territory of many discrete tribes of Native Americans known collectively as the Ohlone (also known as Costanoans). The Ohlone inhabited a natural environment of grasslands and oak forests in the Burlingame area. Burlingame contains 10 recorded Native American sites, 31 historic period buildings, structures, or objects, and one other historic period resource. Additionally, the State Office of Historic Preservation Property Directory lists 32 recorded buildings or structures within Burlingame, and Caltrans lists San Mateo County bridges eligible for National Register Historic Preservation listing. No known historic or archaeological resources are located on or adjacent to the project site.

4.5.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?	☐	☐	☐	☒
2) Cause a substantial adverse change in the significance of an archaeological resource as pursuant to CEQA Guidelines Section 15064.5?	☐	☒	☐	☐
3) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Impact CUL-1: The project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5. **(No Impact)**

The project site is currently developed as a driving range. No historic buildings or structures are located on or adjacent to the project site. Therefore, the project would not result in impacts to historic resources. **(No Impact)**

Impact CUL-2: The project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. **(Less than Significant Impact with Mitigation Incorporated)**

The project site was previously used as a landfill after the Bay was filled in the 1950s, and therefore has low potential to contain archaeological resources on-site. However, the project would disturb

soils, including native soils, for trenching, site grading, pile foundations, and other construction activities. While there are no recorded archaeological or historic sites on the project site, there is a low potential for buried archaeological resources to occur on the site.

Mitigation Measure: Implementation of the following mitigation measures would ensure that potential impacts to buried cultural resources remain at a less than significant level.

MM CUL – 2.1: *Undiscovered Archaeological Resources.* If evidence of an archaeological site or other suspected cultural resource as defined by CEQA Guideline Section 15064.5, including darkened soil representing past human activity ("midden"), that could conceal material remains (e.g., worked stone, worked bone, fired clay vessels, faunal bone, hearths, storage pits, or burials) is discovered during construction related earth-moving activities, all ground-disturbing activity within 100 feet of the resources shall be halted and the City's Community Development Director shall be notified. The project sponsor shall hire a qualified archaeologist to conduct a field investigation. The City's Community Development Director shall consult with the archaeologist to assess the significance of the find. Impacts to any significant resources shall be mitigated to a less-than-significant level through data recovery or other methods determined adequate by a qualified archaeologist and that are consistent with the Secretary of the Interior's Standards for Archaeological documentation. Any identified cultural resources shall be recorded on the appropriate DPR 523 (A-J) form and filed with the NWIC.

MM CUL – 2.2: *Report of Archaeological Resources.* If archaeological resources are identified, a final report summarizing the discovery of cultural materials shall be submitted to the City's Community Development Director prior to issuance of building permits. This report shall contain a description of the mitigation program that was implemented and its results, including a description of the monitoring and testing program, a list of the resources found and conclusion, and a description of the disposition/curation of the resources.

MM CUL – 2.3: *Human Remains.* If human remains are discovered at any project construction site during any phase of construction, all ground-disturbing activity within 100 feet of the resources shall be halted and the City's Community Development Director and the San Mateo County Coroner shall be notified immediately, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. If the remains are determined by the County coroner to be Native American, the Native American Heritage Commission (NAHC) shall be notified within 24 hours, and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. The project sponsor shall also retain a professional archaeologist with Native American burial experience to conduct a field investigation of the specific site and consult with the Most Likely Descendant, if any, identified by the NAHC. As necessary, the archaeologist may provide professional assistance to the Most Likely Descendant, including

the excavation and removal of the human remains. The City of Burlingame shall be responsible for approval of recommended mitigation as it deems appropriate, taking account of the provisions of State law, as set forth in CEQA Guidelines section 15064.5(e) and Public Resources Code section 5097.98. The project sponsor shall implement approved mitigation, to be verified by the City of Burlingame, before the resumption of ground-disturbing activities within 100 feet of where the remains were discovered.

With the implementation of the above mitigation measures, impacts to buried cultural resources would be less than significant. **(Less than Significant Impact with Mitigation Incorporated)**

Impact CUL-3:	The project would not disturb any human remains, including those interred outside of dedicated cemeteries. **(Less than Significant Impact with Mitigation Incorporated)**

See discussion of Impact CUL-2, above. **(Less than Significant Impact with Mitigation Incorporated)**

4.6 ENERGY

4.6.1 Environmental Setting

4.6.1.1 *Regulatory Framework*

Federal and State

Energy Star and Fuel Efficiency

At the federal level, energy standards set by the EPA apply to numerous consumer products and appliances (e.g., the EnergyStar™ program). The EPA also sets fuel efficiency standards for automobiles and other modes of transportation.

Renewables Portfolio Standard Program

In 2002, California established its Renewables Portfolio Standard Program, with the goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent of retail sales by 2010. In 2008, Executive Order S-14-08 was signed into law, requiring retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. In October 2015, Governor Brown signed SB 350 to codify California's climate and clean energy goals. A key provision of SB 350 requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from renewable sources by 2030. SB 100, passed in 2018, requires 100 percent of electricity in California to be provided by 100 percent renewable and carbon-free sources by 2045.

California Building Standards Code

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6 of the California Code of Regulations (Title 24), was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three years, and the 2016 Title 24 updates went into effect on January 1, 2017.[12] Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.[13]

California Green Building Standards Code

CALGreen establishes mandatory green building standards for buildings in California. CALGreen was developed to reduce GHG emissions from buildings, promote environmentally responsible and healthier places to live and work, reduce energy and water consumption, and respond to state environmental directives. The most recent update to CALGreen went into effect on January 1, 2017, and covers five categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.

[12] California Building Standards Commission. "Welcome to the California Building Standards Commission." Accessed February 6, 2018. http://www.bsc.ca.gov/.
[13] California Energy Commission (CEC). "2016 Building Energy Efficiency Standards." Accessed February 6, 2018. http://www.energy.ca.gov/title24/2016standards/index.html.

Advanced Clean Cars Program

CARB adopted the Advanced Clean Cars program in 2012 in coordination with the EPA and National Highway Traffic Safety Administration. The program combines the control of smog-causing pollutants and GHG emissions into a single coordinated set of requirements for vehicle model years 2015 through 2025. The program promotes development of environmentally superior passenger cars and other vehicles, as well as saving the consumer money through fuel savings.[14]

Local

Envision Burlingame 2040 General Plan

The General Plan includes policies aimed at increasing energy efficiency, promoting renewable energy sources, and reducing energy waste. General Plan energy policies applicable to the proposed project are listed below.

Policy	Description
HP-2.6	Pursue the goal of using 100 percent renewable energy for the City's municipal accounts. Encourage residents and businesses to opt up to 100 percent renewable purchase for additional community-wide greenhouse gas reductions. Encourage and support opportunities for developing local solar power projects.
HP-2.10	Aim for new construction and major renovations of City facilities to be zero net energy.
HP-2.11	Encourage the advancement of emerging technologies and innovations around energy, waste, water, and transportation. Support local green technology businesses. Explore demonstration project opportunities.
HP-2.13	Expand composting services to multi-family residential buildings and commercial buildings.
HP-6.2	Promote best practices for water conservation throughout the City, and continue to enforce City ordinances requiring high-efficiency indoor water fixtures in new development. Educate the public about Burlingame's water rebate programs, and continue to establish tiered water rates that promote water conservation. Consider water consumption when evaluating development projects. Encourage drought-tolerant landscaping and efficient irrigation systems.
HP-6.8	Continue to enforce Burlingame's Water-Efficient Landscaping Ordinance, and promote the use of native, drought-tolerant landscaping. Educate the public about the Bay-Friendly Landscaping Guidelines and other resources for water-efficient landscaping.
CC-1.6	Promote water conservation by encouraging and incentivizing property owners to incorporate drought-tolerant landscaping, "smart" irrigation systems, water efficient appliances, and recycled water systems. Continue to enforce the water-efficiency landscaping ordinance. Encourage recycling and reuse of graywater in new buildings.
CC-1.7	Incentivize solar panel installation on existing buildings and new developments.
CC-1.9	Support the use of sustainable building elements such as green roofs, cisterns, and permeable pavements. Continue to enforce the California Green Building Standards Code (CALGreen). Periodically revisit the minimum standards required for permit approval. Adopt zero-net-energy building goals for municipal buildings.

[14] California Air Resources Board. "The Advanced Clean Cars Program." Accessed August 1, 2019. https://www.arb.ca.gov/msprog/acc/acc.htm.

Policy	Description
CC-1.13	Support the electric vehicle network by incentivizing use of electric vehicles and installations of charging stations.
IF-5	Achieve waste reduction goals in excess of State mandates.
IF-5.5	Require demolition, remodeling, and major new development projects include salvaging or recycling asphalt and other concrete and all other nonhazardous construction and demolition materials to the maximum extent practicable.
IF-6	Ensure the provision of adequate and safe gas and electric services to Burlingame residents and businesses, and that energy facilities are constructed in a fashion that minimizes their impacts on surrounding development and maximizes efficiency.

4.6.1.2 *Existing Conditions*

Out of the 50 states, California is ranked second in total energy consumption and 48th in energy consumption per capita. Total energy usage in California was approximately 7,881 trillion British thermal units (Btu) in the year 2017, the most recent year for which this data was available.[15] The breakdown by sector was approximately 18 percent (1,416 trillion Btu) for residential uses, 19 percent (1,473 trillion Btu) for commercial uses, 23 percent (1,818 trillion Btu) for industrial uses, and 40 percent (3,175 trillion Btu) for transportation.[16] This energy is primarily supplied in the form of natural gas, petroleum, nuclear electric power, and hydroelectric power.

Electricity

Electricity in San Mateo County in 2018 was consumed primarily by the commercial sector (64 percent), with the residential sector consuming 36 percent. In 2018, a total of approximately 4,226 GWh of electricity was consumed in San Mateo County.[17]

Peninsula Clean Energy (PCE) is a public and locally controlled electricity provider for the County of San Mateo. Electricity provided by PCE is delivered through PG&E transmission lines. Commercial and residential customers in San Mateo County are included in the PCE service area and can choose to have 50 to 100 percent of their electricity supplied from carbon-free and renewable sources. Customers are automatically enrolled in the ECOplus plan, which generates its electricity from 85 percent carbon-free sources, with at least 50 percent from renewable sources. Customers have the option to enroll in the ECO100 plan, which generates its electricity from 100 percent carbon-free, renewable sources. [18]

[15] United States Energy Information Administration. "California State Energy Profile, 2017." Accessed September 23, 2019. https://www.eia.gov/state/print.php?sid=CA
[16] United States Energy Information Administration. "State Profile and Energy Estimates, 2017." Accessed September 23, 2019. https://www.eia.gov/state/print.php?sid=CA.
[17] California Energy Commission. Energy Consumption Data Management System. "Electricity Consumption by County." Accessed March 15, 2019. http://ecdms.energy.ca.gov/elecbycounty.aspx.
[18] Sources: 1) Peninsula Clean Energy. "Frequently Asked Questions." Accessed August 1, 2019. https://www.peninsulacleanenergy.com/faq/.

On-Site Energy Use

Energy use on the project site is attributed to operation of the existing driving range, including electricity for lighting and fuel for ball collection, and irrigation of the landscaped areas. Fuel is also used by vehicles traveling to the site to use the driving range.

4.6.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation?	☐	☐	☒	☐
2) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Impact EN-1: The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation. **(Less than Significant Impact)**

Construction

The anticipated construction schedule assumes the project would be built over a period of approximately 17 months, estimated to begin in Fall of 2020. The project would require site preparation, grading, trenching, building construction, paving, and the building interior. The overall construction schedule and process is designed to be efficient in order to avoid excess monetary costs. That is, equipment and fuel would not be used wastefully on the site because of the added expense associated with renting, maintaining, and fueling equipment. Therefore, the opportunities for future efficiency gains during construction are limited.

Energy is consumed during construction because the use of fuels and building materials are fundamental to construction of new buildings. However, energy would not be wasted or used inefficiently by project construction equipment and waste from idling would be further reduced with implementation of Mitigation Measure AIR-3.2 outlined in *Section 4.3, Air Quality*. Further, the project would be required to prepare a Construction Demolition and Recycling Waste Reduction Plan (Municipal Code Chapter 8.17). The plan would comply with the City of Burlingame Construction and Demolition Recycling Ordinance, which sets forth requirements for diversion of 60 percent of demolition and construction debris and verification of compliance prior to permit issuance. Therefore, construction of the proposed project would not consume energy in a manner that is wasteful, inefficient, or unnecessary. **(Less than Significant Impact)**

Operation

The project would redevelop the site with a Topgolf entertainment complex that includes a three-level, approximately 71,074 square-foot main building, outdoor patio, and an approximately five-acre outdoor driving range outfield. The main building would include a restaurant, corporate event space, and climate-controlled hitting bays. The outdoor driving range would be illuminated by field lights attached to the main building. Operation of the project would consume energy primarily for building heating and cooling, lighting, cooking, and waste disposal. Energy would also be consumed in the form of gasoline from vehicle trips to and from the site. The project would intensify the use of the site, thereby increasing the rate of electricity, natural gas, and fuel consumption.

The project would be required to comply with Title 24 of the State Building Code (Building Energy Efficiency Standards for Residential and Nonresidential Buildings), including the mandatory measures set forth in the CALGreen Code for planning and design, water conservation, energy efficiency, and environmental quality (Title 24, Part 11). The project would also be required to comply with the City's water conservation in landscaping requirements (Municipal Code Section 18.17.040), thus reducing the energy expended to irrigate the landscape. By meeting these mandatory measures, the project's operational energy use would be minimized.

The project proposes to provide 24 bicycle parking spaces on-site, per CALGreen requirements. The inclusion of bicycle parking on-site would incentivize the use of alternative methods of transportation, which could result in a reduction of fuel consumption. Additionally, the project would be required to provide 38 priority parking stalls for clean air vehicles and 29 electric vehicle charging stations. The project would further reduce fuel consumption (and emissions) by accommodating electric and clean air vehicles.

The project includes extensive landscaping; the amount of trees on-site would be increased from 103 trees to 186 trees, parking areas and walkways would be landscaped, and perimeter areas would include shrubs and groundcover. By planting a substantial number of new trees, the project would reduce the site's heat island effect, thus reducing the energy demand required to cool the facility. For this reason, and those discussed above, the project would not result in wasteful, inefficient, or unnecessary consumption of energy during operation. **(Less than Significant Impact)**

Impact EN-2:	The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. **(Less than Significant Impact)**

Envision Burlingame 2040 General Plan

The Envision Burlingame General Plan includes several policies which address renewable energy and energy efficiency. These policies are described in *Section 4.6.1.1, Regulatory Framework*, as they pertain to the proposed project. The proposed project is consistent with its General Plan land use designation (refer to *Section 4.11, Land Use and Planning*). As described in the Envision Burlingame 2040 General Plan DEIR, planned build-out of the General Plan, of which the project is a part, would not result in the wasteful or inefficient use of energy resources.

The project would be required to meet the building energy efficiency standards set forth in Title 24 and the CALGreen Code, thereby satisfying General Plan policies regarding waste reduction and

energy and water efficiency. The project is an expansion of an existing recreational land use and would not create a demand for energy resources beyond what is expected upon General Plan buildout. For these reasons, the proposed project would not conflict with or obstruct the implementation of General Plan energy policies. **(Less than Significant Impact)**

City of Burlingame 2030 Climate Action Plan

The City's 2030 Climate Action Plan (2030 CAP) outlines the City's strategy for reducing its GHG emissions in alignment with legislatively-adopted state targets. The 2030 CAP introduces 20 GHG reduction measures, several of which address energy efficiency and renewable energy. The measures applicable to the energy impacts of the proposed project include supporting an electric vehicle network (Measure 6); requiring projects to implement BAAQMD construction BMPs and use alternative fuels or electric alternatives in construction equipment (Measure 10); encouraging projects to implement voluntary Tier 1 and 2 Title 24 Building Standards (Measure 11); and supporting enrollment in Peninsula Clean Energy's ECO100 renewable energy program (Measure 13).

The project would be constructed to be LEED Certified equivalent, incorporating green building measures such as rooftop solar panels, electric vehicle charging stations, drought resistant landscaping, high-efficiency HVAC systems, and low VOC-emitting building materials. The project would provide pre-wired EV charging stations and install higher-efficiency water and lighting fixtures in alignment with the CALGreen Code. The project would implement construction BMPs and use low-emission and/or electric construction equipment, as described in *Section 4.3, Air Quality*. During the permitting process, the City will detail to the applicant the benefits of designing the project to meet Tier 1 and 2 Title 24 Building Standards. The project would automatically be enrolled in Peninsula Clean Energy's ECO50 renewable energy program, with the option available to enroll in the ECO100 program. The project will be required to complete an Implementation Checklist to ensure it is consistent with the mandatory measures outlined in the 2030 CAP. Therefore, the proposed project would not conflict with or obstruct the implementation of energy efficiency and renewable energy measures included in the 2030 CAP. **(Less than Significant Impact)**

4.7 GEOLOGY AND SOILS

The following section is based upon a Preliminary Geotechnical Investigation and Draft Geotechnical Investigation prepared by Geo-logic Associates in June 2018 and March 2019, respectively, and a peer review of the reports prepared by Cornerstone Earth Group in August 2019. Copies of these reports are included in Appendix D-1, D-2, and D-3 of this Initial Study.

4.7.1 Environmental Setting

4.7.1.1 *Regulatory Framework*

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed following the 1971 San Fernando earthquake. The act regulates development in California near known active faults due to hazards associated with surface fault ruptures. Alquist-Priolo maps are distributed to affected cities, counties, and state agencies for their use in planning and controlling new construction. Areas within an Alquist-Priolo Earthquake Fault Zone require special studies to evaluate the potential for surface rupture to ensure that no structures intended for human occupancy are constructed across an active fault.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) was passed in 1990 following the 1989 Loma Prieta earthquake. The SHMA directs the California Geological Survey (CGS) to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. CGS has completed seismic hazard mapping for the portions of California most susceptible to liquefaction, landslides, and ground shaking, including the central San Francisco Bay Area. The SHMA requires that agencies only approve projects in seismic hazard zones following site-specific geotechnical investigations to determine if the seismic hazard is present and identify measures to reduce earthquake-related hazards.

California Building Standards Code

The CBC prescribes standards for constructing safe buildings. The CBC contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, ground strength, and distance to seismic sources. The CBC requires that a site-specific geotechnical investigation report be prepared for most development projects to evaluate seismic and geologic conditions such as surface fault ruptures, ground shaking, liquefaction, differential settlement, lateral spreading, expansive soils, and slope stability. The CBC is updated every three years; the current version is the 2016 CBC.

California Division of Occupational Safety and Health Regulations

Excavation, shoring, and trenching activities during construction are subject to occupational safety standards for stabilization by the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) under Title 8 of the California Code of Regulations and

Excavation Rules. These regulations minimize the potential for instability and collapse that could injure construction workers on the site.

Public Resources Code Section 5097.5

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. They range from mammoth and dinosaur bones to impressions of ancient animals and plants, trace remains, and microfossils. These are valued for the information they yield about the history of the earth and its past ecological settings. California Public Resources Code Section 5097.5 specifies that unauthorized removal of a paleontological resource is a misdemeanor. Under the CEQA Guidelines, a project would have a significant impact on paleontological resources if it would disturb or destroy a unique paleontological resource or site or unique geologic feature.

Local

Envision Burlingame 2040 General Plan

The 2040 General Plan contains the following geology and soils policies which are applicable to the proposed project:

Policy	Description
CS-7.3	Create and implement a geologic review procedure that requires geologic reports be prepared as part of the development review process.

Burlingame Bayfront Specific Plan

The Bayfront Specific Plan includes a Development Framework and Community Standards which address the natural characteristics of the Bayfront Planning Area. The Community Standards for Geological Impacts applicable to the proposed project are listed below:

- Buildings shall be placed on pile supported foundations with flexible utility connections.
- Hard or impervious surfaces shall be placed on a flexible base.
- Any new facilities shall be installed according to the standards of the City of Burlingame Public Works Department and California Building Code Editions in effect at the time a building permit is issued.
- The first floor for any proposed building shall be built at an elevation of 10 feet above mean sea level (+10' MSL), with no occupied areas below elevation 10' MSL to address the possibility of flooding.

4.7.1.2 *Existing Conditions*

Regional Geology

The project site is underlain by alluvial, colluvial, and estuarine deposits within a structurally controlled basin in the California Coast Ranges province. The Coast Range province consists of 500 miles of northwest-trending ridges and valleys. Late Pleistocene and Holocene sediments (less than

one million years old) were deposited in the basin as it subsided. The Franciscan Complex makes up much of the basement rock of the Coast Ranges.

On-Site Geologic Conditions

Topography and Soils

The project site is an existing driving range that is generally flat and open with the exception of several low, irregularly-shaped mounds that are meant to stimulate golf course features such as greens and sand traps. In addition, there is a closed depression located near the south edge of the range that resulted from an unknown cause. During the geotechnical investigation, the depression was found to be partially filled with water from recent rainfall. The surface of the driving range is covered by artificial turf over a layer of very dense gravel. The project site rises a distance of about 865 feet from an elevation of about 34 feet at the golf tees on the east side to approximately 66 feet at the west end of the range.

The project site is located on top of a former landfill. The landfill was operated from 1957 to 1987 and used for disposal of inorganic construction debris, clean soil, concrete rubble, landscape debris, clean soil, and dried sludge from the wastewater treatment plant. Borings advanced for the geotechnical investigation found refuse from the former landfill ranging in thickness from 10 to 60 feet. Refuse samples consisted of clayey soil with lesser amounts of soil-like material that may be biosolids. The solid waste recovered in the samples appeared to consist of inert materials such as wood, carpet, ash, concrete, and miscellaneous debris.

The subsurface soils below the landfill are characterized by a series of sand, silt, and clay lenses. The principal near-surface geologic units include Bay Mud, alluvial deposits, and bedrock on the Franciscan Formation. Bay Mud consists predominantly of high plasticity clay with minor layers of lean to sandy clay, silt to clayey silt, and clayey sand. Bay Mud soils are moderately to highly compressible. At greater depths, Bay Mud is composed of stiff to very stiff, silty to sandy clay, clayey silt, and clayey to silty sand. The alluvial deposits at the site typically consist of interbedded alluvial and marine soils that underlie the younger Bay Mud and overlie the older Bay Mud deposits. The alluvium is mostly composed of fine to medium grained, poorly graded, medium dense to very dense, clean sand to clayey sand layers that are interbedded with stiff to very stiff, lean clay. Bedrock is not exposed in the project area; however, Franciscan Formation bedrock is exposed north of the site. Franciscan Complex bedrock is a mixed assemblage of distinct rock types, including serpentinite, sandstone, chert, shale, and greenstone.

Groundwater

The project site is located within the San Francisco Bay hydrologic region and covers portions of both the Westside Groundwater Basin and the Santa Clara Valley Groundwater Basin, San Mateo subbasin. Groundwater depths under the project site are reported as five feet national geodetic vertical datum (NGVD). Groundwater is estimated to flow in a west-northwest and northeast direction from a groundwater divide or ridge running across the site in a north-south direction. Groundwater at the site is tidally influenced.

Seismicity and Seismic Hazards

The project site is located within the seismically active San Francisco Bay region. The San Francisco Bay Area contains several faults that are capable of generating earthquakes of magnitude 7.0 or higher. The San Andreas Fault system spans the Coast Ranges from the Pacific Ocean to the San Joaquin Valley. The closest faults to the project site are the San Andreas (approximately three miles southwest of the site), San Gregorio (approximately 10 miles west of the site), and Hayward (approximately 16 miles east of the site) Faults.[19] The site is not located within an Alquist-Priolo Earthquake Fault Zone for any of the faults mentioned above.

Liquefaction and Lateral Spreading

The project site is located within a Liquefaction Hazard Zone, as identified in maps prepared by the California Geological Survey.[20] Liquefaction can be defined as ground failure or loss of strength that causes otherwise solid soil to take on the characteristics of a liquid. This phenomenon is triggered by earthquakes or ground shaking that causes saturated or partially saturated soils to lose strength, potentially resulting in the soil's inability to support structures. Liquefaction can result in adverse impacts to human and building safety, and is typically addressed at the building design stage of a project. Lateral spreading is a type of ground failure related to liquefaction. It consists of the horizontal displacement of flat-lying alluvial material toward an open area, such as a steep bank of a stream channel.

The preliminary geotechnical investigation found that subsurface materials below the landfill are clayey and predominantly hard to very hard to the depths explored. Where sands are encountered, they typically occur in thin layers that do not appear to be continuous, have more than 10 percent silt and clay and are relatively dense. Based on this information, it was concluded that the potential for liquefaction and lateral spreading to affect the site is low.

Landslides

The project site is not located within a Landslide Hazard Zone, as identified in maps prepared by the California Geological Survey. The project site is located on the top deck of an approximately 40-foot high closed landfill which slopes downward to the northeast at approximately three percent. Slope instability could result for structures located at the sloped edges of the former landfill.

Paleontological Resources

The project site is located above a former landfill. Therefore, the project site is not considered to have a high paleontological sensitivity.

[19] USGS. "The San Andreas and Other Bay Area Faults." https://earthquake.usgs.gov/earthquakes/events/1906calif/virtualtour/bayarea.php Accessed August 8, 2019.
[20] California Geological Survey. "Earthquake Zones of Required Investigation." https://maps.conservation.ca.gov/cgs/EQZApp/app/ Accessed August 8, 2019.

4.7.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
– Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42)?	☐	☐	☒	☐
– Strong seismic ground shaking?	☐	☐	☒	☐
– Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
– Landslides?	☐	☐	☒	☐
2) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
3) Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
4) Be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
6) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☒	☐	☐

Impact GEO-1:	The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides. **(Less than Significant Impact)**

Fault Rupture

The project site is not located within an Alquist-Priolo Earthquake Fault Zone, making fault rupture at the site unlikely. While existing faults are located in the region, the proposed project is outside of the fault zone for any regional fault systems, and significant impacts from fault ruptures are not anticipated to occur. **(Less than Significant Impact)**

Seismic Ground Shaking

The project site is located within the seismically active San Francisco Bay region. The faults in this region are capable of generating earthquakes of magnitude 7.0 or higher. During an earthquake, very strong ground shaking could occur at the project site.

To avoid or minimize potential damage from seismic shaking, the project would be built using standard engineering and seismic safety design techniques. Building design and construction at the site will be completed in conformance with the recommendations of the final design-level geotechnical investigation. The buildings shall meet the requirements of applicable Building and Fire Codes, including the 2016 California Building Code (CBC) Chapter 16, Section 1613, as adopted or updated by the City. For these reasons, the proposed project would not directly or indirectly cause adverse effects due to strong seismic ground shaking. **(Less than Significant Impact)**

Liquefaction and Landslides

Although the preliminary geotechnical investigation indicated a low potential for liquefaction at the project site, the project is located in a Liquefaction Hazard Zone and would be required to complete an analysis of liquefaction pursuant to CGS Special Publication 117. Any necessary measures to reduce liquefaction hazards would be incorporated into the project's design prior to issuance of permits. In doing so, the project would reduce the potential of exacerbating or being affected by liquefaction hazards in the area. The project would not directly or indirectly cause adverse effects due to liquefaction.

As mentioned, the project site is not located within a Landslide Hazard Zone. The project site is located above a former landfill with slopes of approximately three percent at the edges. Structures in proximity to the sloped areas of the landfill could experience instability; however, the proposed project would not exacerbate any existing landslide hazards. As discussed below under Impact GEO-2 and GEO-3, the project will be required to adhere to the recommendations of the final design-level geotechnical investigation pertaining to soil and slope stability. This would ensure that the project analyzes slope stability and incorporates any necessary measures into the project's design to reduce potential risks. **(Less than Significant Impact)**

Impact GEO-2:	The project would not result in substantial erosion or the loss of topsoil. **(Less than Significant Impact)**

Ground disturbance on the approximately 13-acre project site would occur during the removal of existing site improvements, excavation to establish utility connections and building foundations, grading, and construction of the proposed building. These activities could increase the exposure of soil to wind and water erosion. As discussed in *Section 4.10, Hydrology and Water Quality*, the project would be required to comply with the Construction General Permit, which would ensure construction Best Management Practices (BMPs) are implemented during the construction phase of the project to reduce stormwater runoff volumes, rates and pollutant loads. Reducing the stormwater volume released from the site would minimize its erosion impact on the surrounding areas. The preliminary geotechnical investigation also includes the following recommendations to reduce the project's potential for erosion or loss of topsoil, which would be incorporated into the project plans after the final geotechnical investigation is prepared:

- Surface water runoff should be directed away from building foundations, concrete slabs-on-grade and pavements, and towards suitable collection and discharge facilities;
- Ponding of surface water should be avoided by establishing positive drainage away from all improvements;
- Water collected from roof downspouts should be discharged into a closed pipe or towards drainage structures, and water carried to a suitable discharge point;
- Over-watering, especially near building slab and pavement areas, could result in saturation of the soil and subsequent distress to site improvements. Trees should be planted away from building, concrete slabs, pavements, etc. because tree roots could cause distress to those improvements.

Therefore, upon adherence to the recommendations of the geotechnical investigation and local, regional, and statewide stormwater regulations, the proposed project would result in a less than significant erosion impact. **(Less than Significant Impact)**

Impact GEO-3:	The project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. **(Less than Significant Impact)**

As discussed above under Impact GEO-1, the proposed project would not exacerbate geologic hazards such as landslides, lateral spreading, liquefaction, or collapse. While the project site shows signs of differential settlement (i.e. the depression in the existing driving range), land subsidence was not noted as a concern for development at the site.

The proposed building would be setback approximately 65 to 100 feet from the southern landfill slopes. Parking lots and access roads would be constructed to within approximately six to 20 feet from the southern and western slopes. The peer review of the preliminary geotechnical investigation recommended that slope stability analysis for both static and seismic loading conditions be incorporated into the final geotechnical investigation. Any necessary measures to reduce the risk of

slope deformation will be included in the final geotechnical analysis and reflected in the final project plans. Therefore, adherence to the recommendations of the final geotechnical investigation would reduce potential impacts from slope instability.

The geotechnical investigation concluded that the primary geotechnical considerations for design and construction of the facility include potential settlement of the refuse material and the underlying young Bay Mud soils; and the relatively low foundation support capability capacity of the refuse material. Differential settlement under the loads of the proposed building, net poles, and outfield targets is likely. This could affect target alignments and tilt, surface and subsurface drainage patterns and structures, pavements, and/or utility connections. The preliminary geotechnical investigation and peer review include recommended building and construction techniques to address potential differential settlement at the site, such as the use of flexible utilities and over-excavation of wet and soft soils. Prior to permit issuance, a final geotechnical investigation will be prepared which will establish the final recommendations and design considerations for the project. Adherence to the recommendations of the final geotechnical investigation would reduce potential impacts from long-term settlement of underlying soils to a less than significant level. **(Less than Significant Impact)**

Impact GEO-4:	The project would not be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property. **(Less than Significant Impact)**

The soils at the project site were not identified as having high expansion potential in the preliminary geotechnical investigation. The preliminary geotechnical investigation and peer review set forth recommendations for building and site design which will ensure the proposed project is designed and constructed in a manner that addresses site-specific soil conditions. By adhering to the recommendations included in the final geotechnical investigation for soil and seismic hazards, and constructing the building in accordance with standard engineering practices, the proposed project would not result in a significant impact due to expansive soils. **(Less than Significant Impact)**

Impact GEO-5:	The project would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water. **(No Impact)**

The project site is located within an urbanized area of Burlingame where sewers are available to dispose of wastewater from the project site. Therefore, the site will not need to support septic tanks or alternative wastewater disposal systems. **(No Impact)**

Impact GEO-6:	The project would not directly or indirectly destroy a unique paleontological resource or site or unique geological feature. **(Less than Significant Impact with Mitigation Incorporated)**

Paleontological resources are the fossilized remains and/or traces of prehistoric plant and animal life exclusive of human remains or artifacts. Fossil remains, such as bones, teeth, shells, and wood, are found in geologic deposits (rock formations). Because the proposed project would not excavate into

bedrock, and the site is located on a former landfill, the likelihood of discovery of significant fossils is very low. The following mitigation measure would ensure that the proper precautions are taken during an inadvertent paleontological discovery.

Mitigation Measures:

MM GEO – 6.1: *Unique Paleontological and/or Geologic Features and Reporting*. Should a unique paleontological resource or site or unique geological feature be identified at the project site during any phase of construction, all ground disturbing activities within 25 feet shall cease and the City's Community Development Director notified immediately. A qualified paleontologist shall evaluate the find and prescribe mitigation measures to reduce impacts to a less than significant level. Work may proceed on other parts of the project site while mitigation for paleontological resources or geologic features is implemented. Upon completion of the paleontological assessment, a report shall be submitted to the City and, if paleontological materials are recovered, a paleontological repository, such as the University of California Museum of Paleontology. **(Less than Significant Impact with Mitigation Incorporated)**

4.8 GREENHOUSE GAS EMISSIONS

4.8.1 Environmental Setting

4.8.1.1 *Background Information*

Gases that trap heat in the atmosphere, GHGs, regulate the earth's temperature. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate. The most common GHGs are carbon dioxide (CO_2) and water vapor but there are also several others, most importantly methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). These are released into the earth's atmosphere through a variety of natural processes and human activities. Sources of GHGs are generally as follows:

- CO_2 and N_2O are byproducts of fossil fuel combustion.
- N_2O is associated with agricultural operations such as fertilization of crops.
- CH_4 is commonly created by off-gassing from agricultural practices (e.g., keeping livestock) and landfill operations.
- Chlorofluorocarbons (CFCs) were widely used as refrigerants, propellants, and cleaning solvents but their production has been stopped by international treaty.
- HFCs are now used as a substitute for CFCs in refrigeration and cooling.
- PFCs and sulfur hexafluoride emissions are commonly created by industries such as aluminum production and semi-conductor manufacturing.

Each GHG has its own potency and effect upon the earth's energy balance. This is expressed in terms of a global warming potential (GWP), with CO_2 being assigned a value of one and sulfur hexafluoride being several orders of magnitude stronger. In GHG emission inventories, the weight of each gas is multiplied by its GWP and is measured in units of CO_2 equivalents (CO_2e).

An expanding body of scientific research supports the theory that global climate change is currently affecting changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. The climate and several naturally occurring resources within California are adversely affected by the global warming trend. Increased precipitation and sea level rise will increase coastal flooding, saltwater intrusion, and degradation of wetlands. Mass migration and/or loss of plant and animal species could also occur. Potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress; an increase in climate-sensitive diseases; more frequent and intense natural disasters such as flooding, hurricanes and drought; and increased levels of air pollution.

4.8.1.2 *Regulatory Framework*

State

Global Warming Solutions Act

Under the California Global Warming Solution Act, also known as Assembly Bill (AB) 32, the California Air Resources Board (CARB) established a statewide GHG emissions cap for 2020, adopted mandatory reporting rules for significant sources of GHG, and adopted a comprehensive

plan, known as the Climate Change Scoping Plan, identifying how emission reductions would be achieved from significant GHG sources.

In 2016, Senate Bill (SB) 32 was signed into law, amending the California Global Warming Solution Act. SB 32, and accompanying Executive Order B-30-15, require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. CARB updated its Climate Change Scoping Plan in December 2017 to express the 2030 statewide target in terms of million metric tons of carbon dioxide equivalent ($MMTCO_2e$). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 $MMTCO_2e$.

Senate Bill 375

SB 375, known as the Sustainable Communities Strategy and Climate Protection Act, was signed into law in September 2008. SB 375 builds upon AB 32 by requiring CARB to develop regional GHG reduction targets for automobile and light truck sectors for 2020 and 2035, as compared to 2005 emissions levels. The per-capita GHG emissions reduction targets for passenger vehicles in the San Francisco Bay Area include a seven percent reduction by 2020 and a 15 percent reduction by 2035.

Consistent with the requirements of SB 375, the Metropolitan Transportation Commission partnered with the Association of Bay Area Governments, BAAQMD, and Bay Conservation and Development Commission to prepare the region's Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan process. The SCS is referred to as Plan Bay Area. Plan Bay Area establishes a course for reducing per-capita GHG emissions through the promotion of compact, high-density, mixed-use neighborhoods near transit, particularly within identified Priority Development Areas (PDAs) and Transit Priority Areas (TPAs).

Advanced Clean Cars Program

CARB adopted the Advanced Clean Cars program in 2012 in coordination with the EPA and National Highway Traffic Safety Administration. The program combines the control of smog-causing (criteria) pollutants and GHG emissions into a single coordinated set of requirements for model years 2015 through 2025. The program promotes development of environmentally superior passenger cars and other vehicles, as well as saving the consumer money through fuel savings.[21]

Regional

Bay Area 2017 Clean Air Plan

Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state and federal air quality standards would be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two related BAAQMD goals: protecting public health and protecting the climate. To protect the climate, the 2017 CAP includes control measures designed to reduce emissions of methane and other super-

[21] CARB. "The Advanced Clean Cars Program". Accessed January 10, 2019. https://www.arb.ca.gov/msprog/acc/acc.htm.

GHGs that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. The City of Burlingame and other jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing GHG impacts developed by BAAQMD within the CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

Local

City of Burlingame 2030 Climate Action Plan

The City of Burlingame 2030 Climate Action Plan (2030 CAP) was adopted in 2019 and replaces the City's 2009 CAP. The 2030 CAP provides best estimates of GHG emissions in the community, based on the most current data and methodologies available, and outlines the City's strategy for reducing greenhouse gas emissions in alignment with state mandates. The 2030 CAP is consistent with AB 32, which directed public agencies in California to support the statewide goal of reducing GHG emissions to 1990 levels by 2020, and SB 32, which directed public agencies to support the statewide goal of reducing GHG emissions to 40 percent below 1990 levels by 2030. The 2030 CAP also demonstrates continual, substantial progress towards achieving the State's long-range goal of reducing GHG emissions to 80 percent below 1990 levels by 2050, as established by Executive Order S-3-05.

The 2030 CAP uses the Year 2005 community-wide GHG inventory as a baseline for emission reduction targets. The 2005 emission levels were reduced by 15 percent to represent 1990 emission levels, per CARB guidance. The measured progress towards attaining reduction targets in the 2030 CAP is based on the City's most recent (Year 2015) community-wide GHG inventory. Projections of emissions are based on the land use and growth assumptions set forth by the Envision Burlingame General Plan. The General Plan serves as the City's guidance document, and the 2030 CAP acts as its implementation tool for climate action. Both documents were prepared to satisfy all of the qualifications set forth in CEQA Guidelines Section 15183.5, Tiering and Streamlining the Analysis of Greenhouse Gas Emissions.

The 2030 CAP includes a total of 20 mandatory reduction measures, each of which connect with multiple supporting policies in the General Plan. The emissions reductions achieved by each measure are quantified for years 2020, 2030, 2040 and 2050. Implementation of the reduction measures contained in the 2030 CAP would reduce citywide emissions to 213,249 $MTCO_2e$ by 2020 and 129,961 $MTCO_2e$ by 2030, which is below the 2020 and 2030 GHG reduction targets of 216,916 $MTCO_2e$ and 130,150 $MTCO_2e$, respectively.

Envision Burlingame 2040 General Plan

The General Plan includes several policies which explicitly address GHG emissions. The policies applicable to the proposed project are listed below.

Policy	Description
HP-2.3	Work to achieve greenhouse gas emissions reductions locally that are consistent with the targets established by AB 32 (California Global Warming Solutions Act of 2006) and subsequent supporting legislation.
HP-2.5	Maintain the policy of using 100% renewable energy for the City's municipal accounts. Encourage residents and businesses to opt up to 100% renewable purchase for additional community-wide greenhouse gas reductions. Encourage and support opportunities for developing local solar power projects.

4.8.1.3 *Existing Conditions*

City of Burlingame

As discussed above in *Section 4.8.1.1, Regulatory Framework*, the City most recently quantified its GHG emissions in a community-wide GHG inventory completed in 2015. This inventory indicated the total GHG emissions in 2015 were 274,456 $MTCO_2e$. Emissions increased by five percent relative to 2005 levels, partly due to large increases in emissions from the industrial and wastewater sectors. When large industrial sources are excluded, emission levels decreased by five percent from 2005 to 2015.

Project Site

The approximately 13-acre project site is currently in use as the Burlingame Golf Center. The existing use of the site contributes to the region's GHG emissions portfolio primarily from emissions due to vehicular travel to and from the site.

4.8.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
2) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?	☐	☐	☒	☐

Impact GHG-1:	The project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. **(Less than Significant Impact)**

GHG emissions associated with development of the proposed project would occur over the short-term from construction activities, consisting primarily of emissions from equipment exhaust and worker and vendor trips. There would also be long-term operational emissions associated with vehicular traffic within the project vicinity, energy and water usage, and solid waste disposal.

Construction Emissions

The project would be constructed over a period of 17 months and would emit GHGs during this time. Neither the City of Burlingame nor BAAQMD have an adopted threshold of significance for construction-related GHG emissions; however, construction emissions would be minimized with adherence to the City of Burlingame Construction and Demolition Recycling Ordinance. Further, the project would implement BAAQMD-recommended construction BMPs (refer to MM AIR-3.2), which restrict equipment idling time to five minutes or less. Because construction would be temporary and would not result in a permanent increase in emissions, the project would not result in a significant GHG impact from construction emissions. **(Less than Significant Impact)**

Operational Emissions

Once operational, the project would increase regional GHG emissions by intensifying development on-site and creating additional vehicle trips. The City of Burlingame has prepared a qualified GHG reduction strategy per CEQA Guidelines Section 15183.5. The 2030 CAP determined that adherence to its 20 mandatory reduction measures would achieve the City's GHG reduction targets through years 2020 and 2030, in alignment with statewide goals mandated in AB 32 and SB 32, respectively. As is discussed under Impact GHG-2, the proposed project is consistent with applicable reduction measures in the 2030 CAP. Therefore, the project would not result in operational GHG emissions that would have a significant effect on the environment. **(Less than Significant Impact)**

Impact GHG-2:	The project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs. **(Less than Significant Impact)**

2030 Climate Action Plan

The 2030 CAP was adopted in 2019 with the purpose of analyzing and mitigating the significant effects of GHG emissions at a programmatic level and establishing the City's strategy for reducing GHG emissions from existing and new land uses and development projects. Consistency with the 2030 CAP would ensure that new development does not conflict with the City's GHG reduction goals through 2020 and 2030, and that the City stays on track to meet GHG targets through 2050. To be consistent with the 2030 CAP, a project must be consistent with its General Plan land use designation and the applicable mandatory reduction measures described in the 2030 CAP. The mandatory reduction measures applicable to the proposed project, and the project's consistency with these measures, are described below.

1. Mixed-Use Development and Transit-Oriented Infill Development, and Transit Supportive Land Use (General Plan Policies CC-1.2 and M-6.1)
   - Require new developments to comply with the Implementation Checklist. Support applicants that are consistent with the General Plan land use designations, increase goods and services in proximity to residential areas, and bring residential units near transit stations.
   - Enforce land use designations during the early planning stages of new development, particularly for land uses within PDAs identified in Plan Bay Area 2040.

   Consistent: The proposed project will complete and submit the Implementation Checklist to the City during the development review process. The proposed use of the site is consistent with its General Plan land use designation (refer to *Section 4.11, Land Use and Planning*) and therefore is consistent with the assumptions of the 2030 CAP.

2. Transportation Demand Management (General Plan Policy CC-1.5)
   - The City shall require new multi-unit residential developments of 10 units or more and commercial developments of 10,000 square feet or more to incorporate TDM strategies that achieve a 20 percent reduction in trip generation rates below the standard rate published in the latest Institute of Transportation Engineers (ITE) Trip Generation Manual (10^{th} edition), or other reputable source. This trip reduction level may be achieved through site design, transit, bicycle, shuttle, parking restriction, carpooling, or other TDM measures. All TDM plans shall have a designated coordinator who will track the effectiveness of the TDM Program over time.

   Consistent: The proposed project is preparing a TDM plan to achieve the trip reductions stipulated by the 2030 CAP and the Envision Burlingame General Plan.

3. Complete Streets (General Plan Policy M-1.1)
   - Develop a well-connected network of Complete Streets that can move all modes safely, efficiently, and comfortably to promote efficient circulation, public health, and safety.

   Consistent: The path of travel for bicycles leading into the site will be denoted with "sharrows". Shared pedestrian/bicycle lanes will be used to minimize conflicts between bicycles and automobile traffic. The project will include sidewalks along the perimeter of the proposed building.

6. EV Network and Electric Vehicles (General Plan Policy CC-1.13)
   - Support the electric vehicle network by incentivizing use of electric vehicles and installations of charging stations.

   Consistent: The proposed project would be required to include up to 29 EV parking spaces, or six percent of the total parking spaces provided (CALGreen Code).

7. Parking Pricing, Parking Requirements, and Creative Parking Approaches (General Plan Policies M-7.1, M-7.3, and M-7.5)

- The City shall require all new non-residential development to reduce the number of parking spaces provided by the project by 20 percent below the standard parking requirement (based on ITE or other reputable source requirements).

Consistent: The most recent plan set for the project indicates it would provide 475 vehicle parking spaces. While this exceeds the amount required by the Municipal Code by 120 spaces, given the lack of on-street parking and location on the Bayfront, additional parking is supportable in this case. Topgolf will have a TDM program and will provide EV parking, secure bicycle parking, and dedicated carpool pick-up and drop-off locations.

10. Construction Best Management Practices (General Plan Policy HP-3.12)
    - Require construction projects to implement BAAQMD's Best Practices for Construction. Also require construction projects to transition to electrically-powered construction equipment as it becomes available, and seek construction contractors who use alternative fuels in their equipment fleet for municipal construction projects.

    Consistent: The project includes mitigation measures (MM AIR-3.1 and -3.2) which ensure construction BMPs are implemented and low-emission, electric, or alternatively-fueled construction equipment is used.

11. Green Building Practices and Standards (General Plan Policy CC-1.9)
    - Enforce the CALGreen Code and encourage new development to comply with the voluntary Tier 1 and Tier 2 standards.

    Consistent: The project would adhere to the CALGreen Code. During the development review process, the project could be conditioned to meet Tier 1 and Tier 2 standards.

12. Peninsula Clean Energy ECO100 (General Plan Policy IF-6.9)
    - Increase ECO100 enrollment by residences and businesses. Support PCE's goal of sourcing 100 percent of its electricity from GHG free sources by 2021.

    Consistent: The project would be automatically enrolled in ECO50, with the option to transition to ECO100. The City will make the project applicant aware of this option during the development review process.

18. Zero Waste (General Plan Policy IF-5.16)
    - Implement zero waste supportive contracts and services and achieve waste diversion goals of 85 percent by 2030, 90 percent by 2040, and 95 percent by 2050.

    Consistent: The project would prepare Construction Demolition and Recycling Plan to meet requirements for diversion of demolition and construction debris. Recycling services will be provided to the project per CALGreen Code Section 5.410.1.

20. Increase the Public Tree Population (General Plan Policy CC-2.2).
    - The City's Parks and Recreation Department shall ensure there is a net positive planting of 33 trees per year.

Consistent: The project will plant approximately 142 new trees on-site.

The proposed project would be generally consistent with the mandatory measures in the 2030 CAP. During the development review process, the City will review and condition the project as necessary to ensure it meets the required measures of the 2030 CAP. In this manner, the proposed project would not conflict with the 2030 CAP and would not prevent the City from meeting its GHG reduction goals through 2020 and 2030. **(Less than Significant Impact)**

Association of Bay Area Governments Final Plan Bay Area 2040

ABAG's Plan Bay Area is the RTP/SCS for the San Francisco Bay Area. Plan Bay Area establishes GHG emissions goals for automobiles and light-duty trucks, a potent source of GHG emissions attributable to land use development. As previously described, ABAG was tasked by CARB to achieve a seven percent per capita reduction in mobile-source GHG emissions compared to 2005 vehicle emissions by 2020 and a 15 percent per capita reduction by 2035. Plan Bay Area 2013-2040 establishes an overall mechanism to achieve these GHG targets for the project region consistent with both the target date of AB 32 (2020) and the post-2020 GHG reduction goals of SB 32. CARB has confirmed the project region will achieve its GHG reduction targets by implementing Plan Bay Area (CARB 2014).

The RTP/SCS identifies 200 "Priority Development Areas," which are areas focused for growth and development. Priority Development Areas are defined by the RTP/SCS as existing neighborhoods that are served by public transit and have been identified as appropriate for additional, compact development. While the project site is located just outside of a Priority Development Area, portions of the project are located in a Transit Priority Area in the vicinity of local and regional transit connections.[22] Furthermore, the project modernizes land uses within a built environment (infill development), increasing site land use densification. The project would increase density in the vicinity over current conditions. Increased density, measured in terms of persons, jobs, or dwelling units per unit area, reduces emissions associated with transportation as it reduces the distance people travel for work or services and provides a foundation for the implementation of other strategies such as enhanced transit services.

For these reasons, the project is consistent with Plan Bay Area and it can be assumed that regional mobile emissions will decrease in line with the goals of Plan Bay Area with implementation of the proposed project. Implementing ABAG's RTP/SCS would greatly reduce the regional GHG emissions from transportation, and the proposed project would not obstruct the achievement of Plan Bay Area's emission reduction targets. **(No Impact)**

[22] Metropolitan Transportation Commission. "MTC Policy Map Explorer". October 2018. http://opendata.mtc.ca.gov/datasets/1b8fdd83aa564aa180a59e9b7c4583ca Accessed August 6, 2019.

4.9 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based on a Phase I Environmental Site Assessment (ESA) prepared by Environmental Advisors and Engineers, Inc. in July 2018. A copy of this report is included in Appendix E of this Initial Study.

4.9.1 Environmental Setting

4.9.1.1 *Regulatory Framework*

Overview

The storage, use, generation, transport, and disposal of hazardous materials and waste are highly regulated under federal and state laws. Federal regulations and policies related to development include the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, and the Resource Conservation and Recovery Act (RCRA). In California, the EPA has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (CalEPA). In turn, local agencies have been granted responsibility for implementation and enforcement of many hazardous materials regulations under the Certified Unified Program Agency (CUPA) program.

Worker health and safety and public safety are key issues when dealing with hazardous materials. Proper handling and disposal of hazardous material is vital if it is disturbed during project construction. Cal/OSHA enforces state worker health and safety regulations related to construction activities. Regulations include exposure limits, requirements for protective clothing, and training requirements to prevent exposure to hazardous materials. Cal/OSHA also enforces occupational health and safety regulations specific to lead and asbestos investigations and abatement.

Federal and State

Federal Aviation Regulations Part 77

Federal Aviation Regulations, Part 77 Objects Affecting Navigable Airspace (FAR Part 77) sets forth standards and review requirements for protecting the airspace for safe aircraft operation, particularly by restricting the height of potential structures and minimizing other potential hazards (such as reflective surfaces, flashing lights, and electronic interference) to aircraft in flight. These regulations require that the Federal Aviation Administration (FAA) be notified of certain proposed construction projects located within an extended zone defined by an imaginary slope radiating outward for several miles from an airport's runways, or which would otherwise stand at least 200 feet in height above the ground.

Cortese List (Government Code Section 65962.5)

Section 65962.5 of the Government Code requires CalEPA to develop and update a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by the state, local agencies, and developers to comply with CEQA requirements. The Cortese List includes hazardous substance release sites identified by the Department of Toxic Substances Control (DTSC), State

Water Resources Control Board (SWRCB), and San Mateo County. The project site is not on the Cortese List.[23]

Asbestos-Containing Material and Lead Paint Regulations

Friable asbestos is any asbestos containing material (ACM) that, when dry, can easily be crumbled or pulverized to a powder by hand, allowing the asbestos particles to become airborne. Common examples of products that have been found to contain friable asbestos include acoustical ceilings, plaster, wallboard, and thermal insulation for water heaters and pipes. Common examples of non-friable ACMs are asphalt roofing shingles, vinyl asbestos floor tiles, and transite siding made with cement. Use of friable asbestos products was banned in 1978. National Emission Standards for Hazardous Air Pollutants (NESHAP) guidelines require that potentially friable ACMs be removed prior to building demolition or remodel that may disturb the ACMs.

The U.S. Consumer Product Safety Commission banned the use of lead-based paint in 1978. Removal of older structures with lead-based paint is subject to requirements outlined by Cal/OSHA Lead in Construction Standard, Title 8, California Code of Regulations 1532.1 during demolition activities. Requirements include employee training, employee air monitoring, and dust control. If lead based paint is peeling, flaking, or blistered, it is required to be removed prior to demolition.

California Accidental Release Prevention Program (CalARP)

The California Accidental Release Prevention (CalARP) Program aims to prevent accidental releases of regulated hazardous materials that represent a potential hazard beyond the boundaries of property. Facilities that are required to participate in the CalARP program use or store specified quantities of toxic and flammable substances (hazardous materials) that can have off-site consequences if accidentally released. The County of San Mateo Department of Environmental Health reviews CalARP risk management plans as the Certified Unified Program Agency (CUPA).

Regional and Local

San Mateo County Health Department

The San Mateo County Health Department, Division of Environmental Health Services is the Local Enforcement Agency (LEA) for implementation of the California Code of Regulations (CCR), Title 27 for the post-closure management of landfills. The LEA, SWRCB, CalRecycle, and BAAQMD all have jurisdiction over post-closure management. The LEA along with other agencies would review any modification to the existing Final Closure and Post-Closure Management Plan for the site.

San Francisco International Airport Comprehensive Land Use Plan

The Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport (ALUCP) was completed in November 2012. The ALUCP sets forth standards and policies, in compliance with various federal, state, and local laws, for land use compatibility with airport activities. Projects located within the Airport Influence Area (AIA), as delineated in the

[23] CalEPA. "Cortese List Data Resources." Accessed August 9, 2019. https://calepa.ca.gov/sitecleanup/corteselist.

ALUCP, require referral to the Airport Land Use Commission (ALUC). The AIA is a composite of areas surrounding the airport that are affected by noise, height, and safety considerations.

Envision Burlingame 2040 Draft General Plan

The General Plan contains the following hazards and hazardous materials policies which are applicable to the proposed project:

Policy	Description
CS-6.1	Require the proper storage and disposal of hazardous materials to prevent leakage, potential explosions, fire, or the release of harmful fumes. Coordinate with the Fire Department to identify and monitor pre-incident plans associated with hazardous materials storage and use.
CS-8.1	Consider all applicable Federal statutes (including 49 U.S.C. 47107), Federal regulations (including 14 Code of Federal Regulations 77 et seq.), the Federal Aviation Administration (FAA) Airport Compliance Manual, FAA Advisory Circulars, other forms of written guidance, and State law with respect to criteria related to land use safety and airspace protection when evaluating development applications within the Airport Influence Area of the San Francisco International Airport and Mill-Peninsula Medical Center helipad.
CS-8.3	Ensure all applicable plans, ordinances, and development applications are reviewed by the City/County Association of Governments for San Mateo County's Airport Land Use Commission, as required by State law.

4.9.1.2 *Background Information*

Hazardous materials are commonly used by large institutions and commercial and industrial businesses. Hazardous materials include a broad range of common substances such as motor oil and fuel, pesticides, detergents, paint, and solvents. A substance may be considered hazardous if, due to its chemical and/or physical properties, it poses a substantial hazard when it is improperly treated, stored, transported, disposed of, or released into the atmosphere in the event of an accident.

4.9.1.3 *Existing Conditions*

The project site is currently used as a public driving range and occupies approximately 13 acres of the surface of the 50-acre closed landfill owned by the City of Burlingame. The adjacent City Parks and Recreation maintenance area is to the north, soccer fields are to the northeast, the club house and parking lot is to the southeast, and playing fields and the Wastewater Treatment Plant (WWTP) are to the west.

Historic Uses

Extensive filling of the San Francisco Bay mud flats began in 1953. The area adjacent to the west of the site was the location of a currently closed landfill known as Browning Ferris Industries Landfill (alias San Mateo Disposal). It reportedly began operation in 1937 and accepted household wastes and biological waste. It was used as a burn dump in the 1940s and 1950s but ceased operation in 1956.

The Burlingame Landfill operated from 1957 to 1987. The Burlingame Landfill accepted waste including construction debris, concrete rubble, roofing shingles, gardening debris, wood, metal, cloth, plastic, and anaerobic digester sludge. Hazardous waste and commercial collected household waste were not accepted.

A review of historical aerial photographs indicated that by 1998, the construction of the current recreation areas was underway, and by 2005 the site and surrounding area were developed as they currently exist. No observable change was noted in aerial photographs from 2005 to 2012.

On-Site Environmental Conditions

The project site is located directly above the former Burlingame Landfill. The landfill includes a landfill gas (LFG) collection system within the waste and capped by a two-foot soil foundation layer, a one-foot clay layer, a six-inch miscellaneous fill layer, a six-inch aggregate layer, a one- to two-inch sand layer, and artificial turf. The LFG system involves wells that penetrate into the waste and are connected by lateral pipes to extraction headers that direct the LFG to a flare located at the WWTP. The LFG system and groundwater conditions are periodically monitored for Volatile Organic Compound (VOC) and methane concentrations. In the most recent AB 32 Landfill Methane Rule Annual Report (SCS Engineers, 2017), it was found that more than 99 percent of the methane in the LFG was collected and destroyed by the flare at the WWTP.

The annual groundwater monitoring report for 2016/2017 (Kleinfelder, 2017) reported the findings of several samples collected from leachate wells, groundwater monitoring wells, and surface water samples in the project area. The results of the monitoring report are included below:

- The only VOC detected in the groundwater was tert butyl alcohol (TBA) at 8.4 micrograms per liter (µg/L) in groundwater monitoring well US-3A. TBAs were previously detected in on-site monitoring and are suspected to be from off-site sources. This location is on the far east side of the landfill and is unlikely to affect the site. The concentration does not exceed the RWQCB non-drinking water groundwater environmental screening level (ESL) or the California notification level of 12 µg/L for drinking water.

- Several VOCs were detected in leachate from the former landfill. The VOCs detected in leachate included chlorobenzene, 1,4-dichlorobenzene, and TBA. Concentrations of chlorobenzene and 1,4-dichlorobenzene were detected below federal and California maximum contaminant levels (MCLs). Concentrations of TBA were detected below the RWQCB non-drinking water groundwater ESL but above the California notification level of 12 µg/L for drinking water. The leachate wells where these concentrations were detected are on the south-southeast side of the site and potentially upgradient.

- No VOCs in surface water were detected.

The 2017/2018 annual monitoring report (SCS Engineers, 2018) found that overall the data collected was generally consistent with historical data. The information provided in the report is similar to the previous report prepared by Kleinfelder, with the following exceptions:

- TBA was detected in both US-3A and US-8 groundwater monitoring wells below the ESL. Monitoring well US-8 is on the south-southeast perimeter of the site and potentially upgradient.

- Total Kjeldahl-Nitrogen (TKN) was detected at 4.9 mg/L in US-8, which is slightly above the prediction limit of 4.6 mg/L.

- Acetone was detected at low levels below regulatory thresholds in leachate monitoring wells GR-3 and GR-4.

Recognized Environmental Conditions

A REC refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property; due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. The Phase I ESA did not identify any RECs for the project site.

Controlled Recognized Environmental Conditions

The Phase I ESA identified one controlled recognized environmental condition (CREC) on the site. A CREC refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. The CREC is discussed below.

- The closed Burlingame Landfill, which is beneath the site and areas adjacent to the site, as well as the adjacent landfill to the west variously identified as Browning Ferris Industries, San Mateo Disposal, and Burlingame Disposal Site are considered to be a controlled recognized environmental condition. VOCs detected in groundwater and leachate samples from the site are considered to be part of the controlled recognized condition at the landfill, although it is possible they are from off-site sources.

Vapor Encroachment Screening (VES) was conducted under the project site to assess the potential for migration of vapor phase contamination and to assess if a Vapor Encroachment Condition (VEC) exists at the site. According to ASTM E2600-15, a VEC is the presence or likely presence of chemical of concern vapors in the vadose zone of the site caused by the release of vapors from contaminated soil and/or groundwater either on or near the site. The Phase I ESA identified one VEC on the site.

- The landfill is considered to be a controlled vapor encroachment condition due to the presence of methane and VOCs that are collected by the LFG extraction system. The LFG system provides vapor removal to minimize potential vapor encroachment. Buildings on or near the landfill are also required to have gas monitoring systems. The LFG extraction system and the monitoring program are regulatory requirements of the landfill permit and must be maintained indefinitely.

Off-Site Environmental Conditions

The Phase I ESA reviewed information in federal, state, local and tribal environmental databases to determine if current or historical activities on or near the project site could present a hazardous condition affecting the site. A listing in any tribal, local, state, or federal database does not necessarily indicate an environmental threat; however, knowledge of such listings is useful in determining the potential of adverse environmental impact on the site and in site management and monitoring activities. The database listings are summarized below:

State Hazardous Waste Site (SHWS) List

The SHWS is a state list of hazardous waste facilities planned for cleanup using state funds or sites where potentially responsible parties will pay for cleanup. Three SHWS facilities were found within the one-mile search radius. Two of these are more than ½-mile from the site and likely cross-gradient from the site. Due to distance from the site, the gradient, and ongoing regulatory monitoring activities, they are not considered to represent an environmental concern to the site.

The last listed facility is a Solid Waste Landfill on Airport Boulevard near Broadway Boulevard (location of current ball fields west of the site). The facility is listed as the Browning Ferris Industries Landfill (alias San Mateo Disposal). The facility contains leachate with high concentrations of ammonia and organic carbon. Annual inspections have been completed at the former landfill from 2006 through 2015 and are documented on the CalRecycle website. The inspection reports did not note any violations and concluded that the site does not represent a risk to public health and safety. The site is considered a controlled recognized environmental condition, as discussed previously, due to ongoing landfill gas collection and groundwater monitoring.

Leaking Underground Storage Tank (LUST) List

The LUST List is a tribal and state database of reported or suspected LUST facilities. The site itself was not listed as a LUST facility, although 56 LUST facilities were identified within a ½-mile search radius. Most of these facilities were identified twice and were listed as “case closed”. Four facilities with an active status were determined to be of a proximity or gradient to have potential impact to the site. The facilities include Unocal Station #3885 at 1147 Rollins Road, BP Oil Company Facility #11204 at 1200 Bayshore Highway, ARCO #0508 at 1040 Broadway, and Prestige Stations at 1000 Broadway. Based on either the topographical gradient, the status of the listing, observed groundwater flows, distance from the site, or monitoring results, none of these sites are expected to be an environmental concern at the project site.

State Registered Underground Storage Tank (UST) List

The UST List is a tribal and state database of USTs required to be registered. The database lists one 2,000-gallon and one 6,000-gallon UST at the WWTP. Soil and groundwater sampling has been completed for these USTs; detected concentrations of hydrocarbons were found to be below RWQCB Tier 1 ESLs. Because there is no evidence of release to surface or groundwater from these USTs, the USTs related to the WWTP facility are not considered to be an environmental concern at the project site.

Wildland Fires

The project site is not located within an identified Very High Fire Hazard Severity Zone in a State Responsibility Area (SRA) or a Local Responsibility (LRA).[24,25] The project site is not adjacent to any wildlands that could present a fire hazard.

4.9.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
2) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
4) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, will it create a significant hazard to the public or the environment?	☐	☐	☐	☒
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☒	☐	☐
6) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
7) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

[24] CAL FIRE. *San Mateo County Fire Hazard Safety Zone Map – State Responsibility Area*. November 2007.
[25] CAL FIRE. *San Mateo County Fire Hazard Safety Zone Map – Local Responsibility Area.* December 2008.

Impact HAZ-1:	The project would not create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials. **(Less than Significant Impact)**

Construction of the proposed project would involve the use of potentially hazardous materials, including vehicle fuels, oils, and fluids. All hazardous materials would, however, be transported, contained, stored, used, and disposed of in accordance with manufacturers' instructions and would be handled in compliance with all applicable standards and regulations. Construction-related hazardous materials use would be temporary, which does not constitute routine transport, use, or disposal**.**

The proposed operation of the Topgolf entertainment complex is not anticipated to routinely transport and use hazardous materials. The extent of hazardous materials use on-site would generally be limited to chemicals needed for cleaning and maintenance. Compliance with applicable federal, state, and local laws and regulations pertaining to the handling, storage, and disposal of hazardous materials would ensure that no significant hazards to the public or the environment result, if such routine activities were to occur. Therefore, impacts related to the creation of a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials would be less than significant. **(Less than Significant Impact)**

Impact HAZ-2:	The project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. **(Less than Significant Impact)**

The main hazardous materials concern for the proposed project is the exposure of construction workers and future site users to LFG and VOCs attributable to the Burlingame Landfill and the adjacent Browning Ferris Industries Landfill. As discussed previously, a number of regulatory programs and site management agreements take precedent over the landfills (i.e. Final Closure and Postclosure Maintenance Plan, BAAQMD Rule 8-34, AB 32 Landfill Methane Rule). Regulatory compliance requires that the landfill cap be maintained, LFG be controlled and monitored, and groundwater be monitored. In 2007, the RWQCB issued an order that reduced the sampling and reporting frequency and number of parameters to be monitored in leachate, groundwater and surface water. The reduction was justified by the fact that concentrations of constituents of concern in groundwater and surface water have been consistently non-detect or below ESLs for five years and the concentrations in leachate have been stable. Monitoring reports in 2017 and 2018 indicate concentrations of VOCs in groundwater, leachate and surface water are below relevant ESLs and do not present a hazard to the project. In addition, a review of hazardous materials databases did not indicate any off-site sources of contamination that present an environmental concern to the project site. The project proposes placement of piles to support the proposed building and net poles. The final geotechnical report would identify the need for additional slurry cap or seal at each pile location to reduce the potential for landfill gas seepage. The modifications proposed by the project would require an amendment to the Final Closure and Postclosure Maintenance Plan subject to approval by the LEA, SWRCB, and CalRecycle. For these reasons, implementation of the project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and

accident conditions involving the release of hazardous materials into the environment. **(Less than Significant Impact)**

Impact HAZ-3:	The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. **(No Impact)**

The proposed project is located approximately ½-mile northwest of the nearest school, Burlingame High School. Therefore, the project would not emit hazardous emissions or handle hazardous materials within ¼-mile of an existing or proposed school. **(No Impact)**

Impact HAZ-4:	The project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment. **(No Impact)**

The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, there would be no hazard to the public or the environment due to the project's listing as a hazardous materials site. **(No Impact)**

Impact HAZ-5:	The project would be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. The project would not result in a safety hazard or excessive noise for people residing or working in the project area. **(Less than Significant Impact with Mitigation Incorporated)**

The proposed project is located within the AIA for the San Francisco International Airport and would be referred to the ALUC for review and comment. Per FAR Part 77, structures greater than 90 feet in height at the project site require an aeronautical study to be completed by the FAA. The FAA has completed an aeronautical study of the proposed project and issued a Determination of No Hazard; however, since the time of the study the proposed height of the net poles has increased from 199 feet to 205 feet. As stated in the FAA letter, "any changes in coordinates, heights, and frequencies or use of greater power…will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA." Therefore, the following mitigation measure is included to ensure the project does not result in a safety hazard, in compliance with FAR Part 77.

Mitigation Measures: The proposed project shall implement the following mitigation measure prior to the commencement of construction on the site.

MM HAZ-5.1: In accordance with FAR Part 77, an aeronautical study shall be completed by the FAA for the proposed project which analyzes the final maximum height of the proposed net poles. The project shall obtain clearance from the FAA in the form of an issuance of Determination of No Hazard prior to the

commencement of construction. Any conditions set forth in the FAA Determination of No Hazard shall be incorporated into the project. The aeronautical study and Determination of No Hazard shall be submitted to the Community Development Director.

The project site is also located outside of noise contours in the ALUCP and would not be exposed to excessive noise from airport activities. With implementation of the mitigation measure described above, the project would not result in a safety hazard or excessive noise for people working in the project area. **(Less than Significant Impact with Mitigation Incorporated)**

Impact HAZ-6:	The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. **(No Impact)**

The project proposes to redevelop an existing recreational site for similar recreational uses. The project would utilize existing roads (Anza Boulevard and Airport Boulevard) in the area for site access. During construction and operation of the project, roadways would not be permanently blocked such that emergency vehicles would be unable to access the site or surrounding sites. The project also proposes a secondary access driveway which would improve access to the site in the event of an emergency. The project would be constructed and maintained in accordance with California Building and Fire Code requirements, as adopted by the City of Burlingame. For these reasons, the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. **(No Impact)**

Impact HAZ-7:	The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. **(No Impact)**

The project site is located in an urbanized area of Burlingame. There are no areas susceptible to wildfire in the project vicinity. Therefore, the project would not expose people or structures to substantial risk as a result of potential wildfires. **(No Impact)**

4.10 HYDROLOGY AND WATER QUALITY

4.10.1 Environmental Setting

4.10.1.1 *Regulatory Framework*

Overview

The federal Clean Water Act and California's Porter-Cologne Water Quality Control Act are the primary laws related to water quality in California. Regulations set forth by the EPA and the State Water Resources Control Board (SWRCB) have been developed to fulfill the requirements of this legislation. EPA regulations include the National Pollutant Discharge Elimination System (NPDES) permit program, which controls sources that discharge pollutants into the waters of the United States (e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by the Regional Water Quality Control Boards (RWQCBs). The project site is within the jurisdiction of the San Francisco Bay RWQCB.

Federal and State

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) established the National Flood Insurance Program (NFIP) to reduce impacts of flooding on private and public properties. The program provides subsidized flood insurance to communities that comply with FEMA regulations protecting development in floodplains. As part of the program, FEMA publishes Flood Insurance Rate Maps (FIRMs) that identify Special Flood Hazard Areas (SFHAs). An SFHA is an area that would be inundated by the one-percent annual chance flood, which is also referred to as the base flood or 100-year flood.

Statewide Construction General Permit

The SWRCB has implemented a NPDES General Construction Permit for the State of California (Construction General Permit). For projects disturbing one acre or more of soil, a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) must be prepared by a qualified professional prior to commencement of construction. The Construction General Permit includes requirements for training, inspections, record keeping, and, for projects of certain risk levels, monitoring. The general purpose of the requirements is to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from the adverse effects of construction-related storm water discharges.

Regional and Local

San Francisco Bay Basin Plan

The San Francisco Bay RWQCB regulates water quality in accordance with the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). The Basin Plan lists the beneficial uses that the San Francisco Bay RWQCB has identified for local aquifers, streams, marshes, rivers, and the San Francisco Bay, as well as the water quality objectives and criteria that must be met to protect these uses. The San Francisco Bay RWQCB implements the Basin Plan by issuing and enforcing

waste discharge requirements, including permits for nonpoint sources such as the urban runoff discharged by a City's stormwater drainage system. The Basin Plan also describes watershed management programs and water quality attainment strategies.

Municipal Regional Permit Provision C.3.

The San Francisco Bay RWQCB re-issued the Municipal Regional Stormwater NPDES Permit (MRP) in 2015 to regulate stormwater discharges from municipalities and local agencies (co-permittees) in Alameda, Contra Costa, San Mateo, and Santa Clara Counties, and the cities of Fairfield, Suisun City, and Vallejo.[26] Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 10,000 square feet or more of impervious surface area are required to implement site design, source control, and Low Impact Development (LID)-based stormwater treatment controls to treat post-construction stormwater runoff. LID-based treatment controls are intended to maintain or restore the site's natural hydrologic functions, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource (e.g. rainwater harvesting for non-potable uses). The MRP also requires that stormwater treatment measures are properly installed, operated, and maintained.

In addition to water quality controls, the MRP requires new development and redevelopment projects that create or replace one acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation, or other impacts to local rivers, streams, and creeks. Projects may be deemed exempt from these requirements if they do not meet the size threshold, drain into tidally influenced areas or directly into the Bay, or drain into hardened channels, or if they are infill projects in subwatersheds or catchment areas that are greater than or equal to 65 percent impervious.

San Mateo Countywide Water Pollution Prevention Program

The San Mateo Countywide Water Pollution Prevention Program (SMCWPPP) is a partnership of the City/County Association of Governments (C/CAG), each incorporated city and town in the county, and the County of San Mateo, which are co-permittees under the MRP. The MRP outlines the State's requirements for municipal agencies in San Mateo County to address the water quality and flow-related impacts of stormwater runoff. Some of these requirements are implemented directly by municipalities while others are addressed by the SMCWPPP on behalf of all the municipalities. The MRP is a comprehensive permit that requires activities related to construction sites, industrial sites, illegal discharges and illicit connections, new development, and municipal operations. The permit also requires a public education program, implementing targeted pollutant reduction strategies, and a monitoring program to help characterize local water quality conditions and to begin evaluating the overall effectiveness of the permit's implementation.

[26] MRP Number CAS612008

Envision Burlingame 2040 General Plan

The General Plan includes the following Storm Drainage and Flood Control goals and policies that would be applicable to the project:

Policy	Description
IF-4.1	Protect people and property from the adverse effects of flooding through a stormwater system that adequately moves runoff from existing and future development, prevents property damage due to flooding, and improves environmental quality.
IF-4.2	Identify and correct problems of localized flooding. Promote the use of green infrastructure, whenever feasible, to mimic a natural hydrologic system that uses stormwater as a resource.
IF-4.4	Plan for and implement Low Impact Development (LID) retrofits, such as green infrastructure which uses vegetation and soil to capture, treat, and retain stormwater runoff. Promote the use of pervious surfaces, green streets, and rainwater harvesting to achieve multiple benefits, such as creating open space, improving stormwater quality, and increasing groundwater recharge. Avoid or minimize the impact of stormwater discharges on local receiving waters, including San Francisco Bay.
IF-4.7	Require new development to be designed to prevent the diversion of stormwater onto neighboring parcels.
IF-4.9	Prevent pollutants from entering the storm drain system by managing point and non-point pollution sources through public and private facilities, local regulations, and education.

4.10.1.2 *Existing Conditions*

Burlingame and the Bay Area are part of the San Francisco Bay/Sacramento-San Joaquin Delta System, the largest estuary on the west coast. Flows in the region are highly seasonal, with more than 90 percent of the annual runoff occurring during the winter rainy season (October – April). Several creeks and storm drainages originate or pass through Burlingame, ultimately draining into San Francisco Bay. The largest watersheds within the City are Mills Creek, Easton Creek, Burlingame Creek, and Sanchez Creek, which drain a combined area of approximately 90 square miles.[27]

The Sanchez Creek Watershed drains the central Hillsborough area southwest of the project site, bounded by Sanchez Avenue on the north and Ralston Avenue on the south. The drainage is carried by Sanchez Creek through open channels and box culverts to the Caltrain tracks. Stormwater from the Laguna Avenue residential area is collected and carried by the Terrace Creek box culvert to the same area. The combined stormwater is carried through a double box culvert from Carolan Avenue to Sanchez Lagoon, which is adjacent to the south side of the site and runs parallel to U.S. 101. The lagoon, also referred to as the Burlingame Lagoon, drains to San Francisco Bay via Sanchez Channel, located approximately ¾-mile east of the site.

[27] Envision Burlingame Existing Conditions Report, Public Draft. November 2015.

Flooding

The project site is not located within a 100-year flood zone. Based on the Federal Emergency Management Agency's Flood Insurance Rate Maps, the site is located within a Wetlands Land Grant area, which is classified as an Area of Minimal Flood Hazard.

Storm Drainage System

There are existing storm drain inlets and lines maintained by the City of Burlingame in Airport Boulevard in the vicinity of the site, which drain to the Sanchez Lagoon and San Francisco Bay. The project proposes to connect to an existing 18-inch storm drain line that currently serves the existing golf range on the site.

Groundwater

The City of Burlingame overlies the southern portion of the approximately 40-square mile Westside Groundwater Basin, which is bounded by Golden Gate Park to the north, Coyote Point to the south, the San Bruno Mountains and San Francisco Bay to the east, and the Pacific Ocean to the west. The City has not utilized groundwater as a drinking water source, as the sole source of the City's drinking water has been wholesale water supplied by the San Francisco Public Utilities Commission (SFPUC). The City has constructed one groundwater supply well located near Washington Park, which has been used to irrigate portions of the City-owned landscaping and parks. It was not constructed for drinking water purposes.[28] The project site is not located within any designated groundwater recharge areas.

4.10.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
2) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
3) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
– result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐

[28] Erler & Kalinowski, Inc. *2015 Urban Water Management Plan for the City of Burlingame*. June 2016.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
– substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
– create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
– impede or redirect flood flows?	☐	☐	☒	☐
4) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
5) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

Impact HYD-1: The project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. **(Less than Significant Impact)**

Construction Impacts

Construction of the proposed project, including grading and excavation activities, may result in temporary impacts to surface water quality. When disturbance to underlying soil occurs, surface runoff that flows across the site may contain sediments that are ultimately discharged into the storm drainage system. All construction activity that results in land disturbances equal to or greater than one acre must obtain coverage under the Construction General Permit, which is administered by the SWRCB. The project would disturb greater than one acre of land and, therefore, would require coverage under the Construction General Permit. To obtain coverage, the project applicant would be required to file a Notice of Intent (NOI) with the SWRCB and prepare a Storm Water Pollution Prevention Plan (SWPPP), which outlines construction Best Management Practices (BMPs) to be implemented during the construction phase of the project to reduce stormwater runoff volumes, rates and pollutant loads.

In addition to conformance with the Construction General Permit, the project would be subject to the City of Burlingame Stormwater Management and Discharge Control Ordinance, which establishes water pollution control and prevention requirements for construction and other activities. Under this ordinance, the project would be required to obtain a Stormwater Construction Pollution Prevention Permit from the Public Works Department. Implementation of construction BMPs required under the Construction General Permit and the City's Stormwater Construction Pollution Prevention Permit system would ensure potential construction water quality impacts are less than significant. **(Less than Significant Impact)**

Post-Construction Impacts

The proposed project would replace more than 10,000 square feet of existing impervious surface area; therefore, it is considered a regulated project under Provision C.3 of the MRP and must provide on-site runoff treatment in conformance with the Provision C.3 requirements.

The project proposes the use of numerically sized bioretention basins to meet the on-site runoff treatment requirements of Provision C.3. Stormwater runoff from the new impervious surfaces on the site (building roofs, concrete and asphalt concrete) would drain into bioretention facilities located within adjacent landscaped areas, which would have sufficient capacity to treat the runoff prior to it entering the storm drainage system. Site design and pollutant source control measures included in the project include grading to direct runoff from sidewalks, driveways and parking lots into vegetated areas, use of drought-tolerant and water-conserving landscape materials, and stenciled storm drain inlets.

Implementation of the site design, source control and LID-based runoff treatment controls described above would reduce the rate of stormwater runoff while also removing pollutants. For these reasons, development of the proposed project would not result in significant impacts to post-construction water quality. **(Less than Significant Impact)**

Impact HYD-2:	The project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. **(No Impact)**

The project site is not located within a designated groundwater recharge zone, and the project would not rely on groundwater from the local groundwater basin to supply its water needs. The project, therefore, would not impede sustainable groundwater management of the Westside Groundwater basin. **(No Impact)**

Impact HYD-3:	The project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows. **(Less than Significant Impact)**

The existing City stormwater system collects untreated stormwater from the site and surrounding area and discharges it directly to Sanchez Lagoon and San Francisco Bay. Development of the proposed project would change the existing drainage pattern of the site by dividing the site into seven Drainage Management Areas (DMAs), with each DMA directing stormwater runoff from impervious surfaces to a LID-based treatment control (bioretention basin). The runoff would be treated by the

basins prior to entering the off-site stormwater drainage system and discharging to San Francisco Bay. The proposed basins would reduce the rate of stormwater runoff while also removing pollutants. While there would be an incremental increase in the volume of stormwater generated from the site due to an increase in impervious surface area, the project would not result in exceedances of capacity in the existing stormwater drainage facilities in the project area. **(Less than Significant Impact)**

Impact HYD-4:	The project would not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. **(No Impact)**

The project site is located on fill material, and is elevated above the 100-year floodplain. It is not subject to flooding in the event of a 100-year storm. Due to its elevation, the project site would not be subject to inundation from a seiche. The site is also not within a Tsunami Inundation Zone.[29] Therefore, the project would not result in a risk of release of pollutants due to inundation. **(No Impact)**

Impact HYD-5:	The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. **(No Impact)**

The project includes LID-based treatment controls and would not obstruct implementation of the Basin Plan. As previously discussed, the project site is not located within any designated groundwater recharge areas, and would not impact groundwater supplies. The project would therefore not conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan. **(No Impact)**

[29] California Department of Conservation. CGS Information Warehouse:Tsunami. Web address: http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=tsunami. Accessed July 30, 2019.

4.11 LAND USE AND PLANNING

4.11.1 Environmental Setting

4.11.1.1 *Regulatory Framework*

Envision Burlingame 2040 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts resulting from planned development projects in the City. The proposed project would be subject to the land use policies of the City's General Plan, including the following:

Policies	Description
HP-3.7	Avoid locating stationary and mobile sources of air pollution near sensitive uses such as residences, schools, childcare facilities, healthcare facilities, and senior living facilities. Where adjacencies exist, include site planning and building features that minimize potential conflicts and impacts.
HP-5.15	Ensure public access to natural resources, particularly along the Bayfront and in Mills Canyon. Require new development in the Bayfront Area to provide public access to the waterfront, and work with property owners to connect gaps in the Bay Trail.

Burlingame Bayfront Specific Plan

A specific plan is a tool for the systematic implementation of the General Plan, similar to zoning regulations, and establishes a link between implementing policies of the General Plan and individual development proposals. A specific plan differs from zoning in that it applies to a defined geographic area and has tailored development regulations.

The Burlingame Bayfront Specific Plan (Specific Plan) was approved by the Burlingame City Council in April 2004, and amended in August 2006 and June 2012. The Specific Plan includes goals and development policies for the approximately ½-square mile Bayfront Planning Area. The Specific Plan also establishes community standards to be used as a basis for individual project and site environmental analysis. The proposed project would be subject to the development policies of the Specific Plan, including the following:

Policies	Description
A-2	Land uses on the east side of US 101 should be environmentally consistent with, and supportive of, Burlingame's main function as a residential community.
A-4	Given the proximity to San Francisco Bay and the history of fill and development of Burlingame's Bayfront, the area should be tied together by the Bay Trail system and focal points of active and passive recreation and open space.
A-5	Encourage land uses which provide a connection between the east and west sides of US 101.

B-3	Especially in the areas with water frontage, promote development which is compatible with the existing environmental constraints in the area; discourage uses in the area where the existing environmental influences will affect the economic viability of the use or have a negative impact on the local recreation, visitor-oriented and employee center uses.
C-7	Encourage safe pedestrian and bicycle access on the public right-of-way within the Bayfront Area and access to provide convenient east-west connections across US 101.
G-3	Anza Extension: Enhance the quality of the community-oriented open space facilities and services while connecting them to the larger open space network with trails and pedestrian paths.

City of Burlingame Zoning Ordinance

The City of Burlingame Zoning Ordinance (Title 25 of the Municipal Code) divides the City into various residential, commercial, and industrial zones. For commercial and industrial areas, the zoning ordinance specifies what types of businesses can operate in each of these areas and regulates where on a property a building can be placed. In residential areas, the zoning code regulates setbacks, height and contains measurements of mass and bulk.

San Francisco International Airport Comprehensive Land Use Plan

The Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport (ALUCP) was completed in November 2012. The ALUCP sets forth standards and policies, in compliance with various federal, state, and local laws, for land use compatibility with airport activities. Projects located within the Airport Influence Area (AIA), as delineated in the ALUCP, require referral to the Airport Land Use Commission (ALUC). The AIA is a composite of areas surrounding the airport that are affected by noise, height, and safety considerations.

4.11.1.2 *Existing Conditions*

The project site is designated *Parks and Recreation (PR)* in the City of Burlingame 2040 General Plan. This designation applies to regional parks, community and neighborhood parks, and special use facilities such as community centers, golf courses, and trails that accommodate active recreation activities. Burlingame has a diverse set of parks and recreation facilities that meet a variety of needs for both residents and visitors, and this land use designation preserves these spaces throughout the City.

The project site is located within the Anza Extension area and designated *Community Park* in the Bayfront Specific Plan. The Anza Extension area is dominated by open space and public facilities including playing fields, passive open space and public trails, with no substantial buildings. Development projects in this area are required to comply with the Design Guidelines outlined in Chapter V of the Specific Plan, with the primary goal of enhancing quality of the community-oriented open space facilities and services while connecting them to the larger open space network with trails and pedestrian paths.

The project site is zoned as *Unclassified* in the City's Zoning Ordinance.

The project site is located approximately 1.3 miles south of the San Francisco International Airport (SFO). The project site is located within the AIA for SFO and outside of all noise contours for the

airport. At the site, a building or structure with an elevation of 90 feet above mean sea level would require aeronautical review by the FAA per CFR Part 77. [30]

4.11.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Physically divide an established community?	☐	☐	☐	☒
2) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

Impact LU-1: The project would not physically divide an established community. **(No Impact)**

The proposed project would redevelop the site with a Topgolf entertainment complex. The project proposes no subdivision of existing land for future development, or the construction of dividing infrastructure like highways, freeways, or major arterial streets. Residential communities are located approximately 900 feet south of the project site, across U.S. 101. Access to nearby neighborhoods would not be restricted or hindered by the proposed project. Therefore, implementation of the proposed project would not significantly impact an established community. **(No Impact)**

Impact LU-2: The project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. **(Less than Significant Impact)**

Envision Burlingame 2040 General Plan

The project site's designation of *Parks and Recreation (PR)* is intended to preserve parks and recreation facilities throughout the City. This designation allows for special use facilities, such as golf courses. The proposed project would redevelop an existing driving range for use as a Topgolf entertainment complex, which would include a driving range, mini-golf course, and various on-site amenities, such as a restaurant and playroom. The project would expand on an existing recreational use and would be generally consistent with its General Plan land use designation.

The 2040 General Plan includes various goals and policies which were adopted to reduce environmental impacts. Applicable goals and policies are discussed in relevant sections throughout this Initial Study. The 2040 General Plan EIR concluded that the various regulations and policies set forth by the 2040 General Plan, in combination with existing local, regional, and statewide

[30] City/County Association of Governments of San Mateo County. *Comprehensive Airport Land Use Plan for the Environs of San Francisco International Airport.* Exhibits IV-2, IV-5 and IV-10. November 2012.

regulations, would reduce potentially significant land use impacts from General Plan buildout to be less than significant. The proposed project would not interfere with any General Plan policies adopted to avoid or mitigate an environmental effect; therefore, the project's impact would be less than significant. **(Less than Significant Impact)**

Burlingame Bayfront Specific Plan

The site is located within the Anza Extension area of the Bayfront Specific Plan and would be subject to the Design Guidelines set forth in Chapter V of the Plan. Parking, landscape, and open space design are the primary considerations within this area. As a community-serving recreational facility, the proposed project generally meets the goals of the Bayfront Specific Plan for the Anza Extension Area. During the design review process, the proposed project would be reviewed for its consistency with the Design Guidelines set forth in the Bayfront Specific Plan. The Bayfront Specific Plan also includes community standards for wind impacts to recreational uses on the San Francisco Bay such as windsurfing. The proposed building on the site would not be located in an area requiring evaluation for potential wind impacts given its location more than 400 feet from the shoreline.[31] The proposed project would, therefore, would not cause an environmental effect due to conflict with the Bayfront Specific Plan. **(Less than Significant Impact)**

San Francisco International Airport ALUCP

The proposed project is located within the AIA and has been referred to the ALUC for review prior to project approval. Per CFR Part 77, structures greater than 90 feet above mean sea level at the project site require the filing of a Notice of Construction or Alteration (Form 7460-1) with the FAA at least 30 days before the proposed construction. The filing of Form 7460-1 begins an aeronautical study of the project by the FAA. The aeronautical study concludes with a Determination of No Hazard or a Determination of Hazard; projects with a Determination of No Hazard would not obstruct air navigation and would not have a substantial aeronautical impact.

The project proposes a series of net poles to capture golf balls hit from the hitting bays. Net poles reach heights of 236 feet above mean sea level. Therefore, the project applicant shall fire Form 7460-1 and an aeronautical study of the project shall be completed prior to the commencement of construction, in accordance with MM HAZ-5.1. Therefore, the project would not conflict with policies in the ALUCP adopted to avoid environmental impacts. **(Less than Significant Impact)**

[31] City of Burlingame. *Bayfront Specific Plan.* Figure VI-6 Wind Constraints. June 18, 2012.

4.12 MINERAL RESOURCES

4.12.1 Environmental Setting

4.12.1.1 *Existing Conditions*

The San Mateo County General Plan identifies 13 mineral resources found in San Mateo County and classifies these resources into four categories. Seven of these minerals: chromite, clay, expansible shale, mercury, sand and gravel, sands (specialty), and stone (dimension), are not likely to be used primarily because of limited quantities, urbanization or economic infeasibility.

The project site is used as a driving range and does not contain any known mineral resources.

4.12.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state?	☐	☐	☐	☒
2) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Impact MIN-1: The project would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state. **(No Impact)**

Due to the fact that the project site is located on a prior landfill in the City of Burlingame, the project would not result in the loss of mineral resources on or in the vicinity of the project site. **(No Impact)**

Impact MIN-2: The project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. **(No Impact)**

The project site is not identified as containing mineral resources in the San Mateo County General Plan. The project, therefore, would not result in the loss of availability of a mineral resource. **(No Impact)**

4.13 NOISE

The following discussion is based on the noise assessment completed by Bollard Acoustical Consultants, Inc. in February 2020. The report is attached as Appendix F of this Initial Study.

4.13.1 Environmental Setting

Several factors influence sound as it is perceived by the human ear, including the actual level of sound, the period of exposure to the sound, the frequencies involved, and fluctuation in the noise level during exposure. Noise is measured on a "decibel" (dB) scale which serves as an index of loudness. Because the human ear cannot hear all pitches or frequencies, sound levels are frequently adjusted or weighted to correspond to human hearing. This adjusted unit is known as the "A-weighted" decibel or dBA. Further, sound is averaged over time and penalties are added to the average for noise that is generated during times that may be more disturbing to sensitive uses such as early morning or late evening.

Since excessive noise levels can adversely affect human activities (such as conversation and sleeping) and human health, federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. The noise guidelines are almost always expressed using one of several noise averaging methods such as L_{eq}, DNL (also referred to as L_{dn}), or CNEL.[32] Additional terminology to describe noise includes L_{max}, which refers to instantaneous maximum noise levels.

4.13.1.1 *Vibration Overview*

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Vibration amplitude can be quantified using Peak Particle Velocity (PPV), which is defined as the maximum instantaneous positive or negative peak of the vibration wave. Because of the impulsive nature of construction activities, the use of the PPV descriptor has been routinely used to measure and assess ground-borne vibration. Studies have shown that the threshold of perception for average persons is in the range of 0.008 to 0.012 in/sec PPV.

4.13.1.2 *Regulatory Framework*

State

California Department of Transportation (Caltrans)

The California Department of Transportation (Caltrans) criteria applicable to damage and annoyance potential from transient and continuous vibration that is usually associated with construction activity are presented in Tables 4.13-1 and 4.13-2. Equipment or activities typical of continuous vibration include: excavation equipment, static compaction equipment, tracked vehicles, traffic on a highway, vibratory pile drivers, pile-extraction equipment, and vibratory compaction equipment. Equipment or

[32] **Leq** stands for the Noise Equivalent Level and is a measurement of the average energy level intensity of noise over a given period of time such as the noisiest hour. **Ldn or DNL** stands for Day-Night Level and is a 24-hour average of noise levels, with 10 dB penalties applied to noise occurring between 10:00 PM and 7:00 AM. **CNEL** stands for Community Noise Equivalent Level; it is similar to the DNL except that there is an additional five (5) dB penalty applied to noise which occurs between 7:00 PM and 10:00 PM. Generally, where traffic noise predominates, the CNEL and DNL are typically within two (2) dBA of the peak-hour L_{eq}.

activities typical of single-impact (transient) or low-rate repeated impact vibration include: impact pile drivers, blasting, drop balls, "pogo stick" compactors, and crack-and-seat equipment.

Table 4.13-1: Guideline Vibration Damage Potential Threshold Criteria

Structure and Condition	Maximum PPV (inches/second)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: California Department of Transportation, Transportation and Construction Vibration Guidance Manual (2013)
Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.
PPV = peak particle velocity.

Table 4.13-2: Guideline Vibration Annoyance Potential Criteria

Human Response	Maximum PPV (inches/second)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

Source: California Department of Transportation, Transportation and Construction Vibration Guidance Manual (2013)
Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.
PPV = peak particle velocity.

California Green Building Standards Code

The California Green Building Standards Code (CalGreen) requires that wall and roof-ceiling assemblies exposed to the adjacent roadways have a composite Sound Transmission Class (STC) rating of at least 50 or a composite Outdoor-Indoor Transmission Class (OITC) rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 when the commercial property falls within the 65 dBA L_{dn} noise contour for a freeway or expressway, railroad, industrial source or fixed-guideway noise source.

Local

City of Burlingame General Plan

The City of Burlingame General Plan Noise Element provides a set of suggested outdoor noise levels suitable to various land use categories (refer to Table 4.13-3). In addition to those exterior noise level criteria, the City also establishes an interior noise level standard of 45 dB CNEL applicable to any habitable room including residential and transient lodging uses.

Table 4.13-3: Outdoor Noise Level Planning Criteria Maximum Outdoor Noise Levels

Land Use Categories	CNEL (dBA)
Public, Quasi-Public and Residential: Schools, Hospitals, Libraries, Auditoriums, Intensively Used Parks and Playgrounds, Public Buildings, Single Family Home, Multiple Family Apartments and Condominiums, Mobile Home Parks	60
Passively-Used Open Space: Wilderness-Type Parks, Nature or Contemplation Areas of Public Parks	45
Commercial Shopping Centers, Self-Generative Business, Commercial Districts, Offices, Banks, Clinics, Hotels and Motels	65
Industrial Non-Manufacturing Industry, Transportation, Communication, Utilities, Manufacturing	75

These criteria may be invoked for the following purposes:

a. To determine the suitability of development on lands considered as receptors to which the standards apply; and

b. To determine the suitability of building types and proposed construction materials to be applied on the site.

City of Burlingame Municipal Code

The City of Burlingame Municipal Code provides general noise regulations and specific performance standards for entertainment businesses. Section 10.40.035 pertaining to general noise regulations and Section 6.16.150 pertaining to performance standards for entertainment business are provided below.

10.40.035 General noise regulations

Notwithstanding any other provisions of this code, and in addition thereto, it is unlawful for any person willfully to make or continue, or cause to be made or continued, any loud, unnecessary or unusual noise which disturbs the peace and quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area. The standards which shall be considered in determining when a violation of the provisions of this section exists shall include, but not be limited to, the following:

(a) The level of the noise;

(b) The intensity of the noise;

(c) Whether the nature of the noise is usual or unusual;

(d) Whether the origin of the noise is natural or unnatural;

(e) The level and intensity of the background noise, if any;

(f) The proximity of the noise to residential sleeping facilities;

(g) The nature and zoning of the area within which the noise emanates;

(h) The density of the inhabitation of the area within which the noise emanates;

(i) The time of the day or night the noise occurs;

(j) The duration of the noise;

(k) Whether the noise is recurrent, intermittent or constant; and

(l) Whether the noise is produced by a commercial or noncommercial activity. (Ord. 1060 § 1, (1976))

6.16.150 Performance standards for entertainment businesses

The following performance standards shall apply to all entertainment businesses except amusement arcades, and shall be deemed conditions of all entertainment permits. Failure to comply with each such requirement, unless expressly provided otherwise in the specific entertainment permit, shall be grounds for suspension or revocation of a permit issued pursuant to this chapter:

(a) Maximum occupancy load, fire exits, aisles and fire equipment shall be regulated, designed, and provided in accordance with the fire and building regulations and standards of the city. A manager shall be on the premises at all times during which entertainment is being offered.

(b) The premises within which the entertainment business is located shall provide sufficient sound-absorbing insulation so that noise generated inside the premises shall not be audible anywhere on any adjacent property or public right-of-way or within any other building or other separate unit within the same building and comply with all applicable city noise regulations. The establishment shall measure the current twenty-four (24) hour ambient noise levels (L_{10}) at the exterior of the property along the public right-of-way using a methodology approved by the director of community development before opening for business. Upon request by the city, the establishment shall conduct noise measurements to determine whether the noise from the establishment is exceeding the five (5) dBA standard for increases in noise from the baseline as provided in the Burlingame General Plan, and shall report the measurements to the city, and the establishment shall ensure that the five (5) dBA standard is not exceeded.

(c) No entertainment shall be permitted between the hours of 1:30 a.m. and 9:00 a.m.

4.13.1.3 *Existing Conditions*

The ambient noise environment in the project vicinity varies depending on proximity to project-area roadways (U.S. 101, Airport Boulevard, Anza Boulevard), with U.S. 101 being the dominant noise source in the project vicinity. The nearest noise sensitive receptors to the project site are the residential uses on the south side of U.S. 101 and the two hotels located east and west of the site. The noise environment at the nearest sensitive receptors is also affected by aircraft operations at San Francisco International Airport (SFO) and local sports playing field activities.

To generally quantify existing overall ambient noise levels from all sources at the nearest noise-sensitive receptors to the project site, continuous (72-hour) ambient noise surveys were conducted at three (3) locations on December 6-8, 2018. A short-term ambient noise survey was conducted at one (1) additional location on the afternoon of December 5, 2018. The monitoring locations are shown on Figure 4.13-1.

There are more than four (4) noise-sensitive receptors in the project vicinity, particularly with respect to the considerable number of existing residences located on the south side of Highway 101. Noise measurements were taken at the following locations: Crown Plaza San Francisco Airport hotel located approximately 800 feet west of the project site (identified as Area 1 on Figure 4.13-1), DoubleTree hotel located approximately 500 feet east of the project site (identified as Area 2 on Figure 4.13-1), adjacent to the single-family residences located south of U.S. 101 along Rollins Road (identified as Area 3 on Figure 4.13-1), and adjacent to the multi-family residences (apartments) located along Rollins Road (identified as Area 4 on Figure 4.13-1). The results of the noise measurements are reported in Table 4.13-4.

Table 4.13-4: Ambient Noise Monitoring Results at Nearest Sensitive Receptors to Proposed Topgolf Project

Site	Date	Day of Week	CNEL	Measured Hourly Noise Levels (dB)					
				Daytime (7 AM – 7 PM)		Evening (7 PM – 10 PM)		Nighttime (10 PM – 7 AM)	
				L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}
LT1	12/6/18	Thu.	66	61	69-86	60	70-76	59	64-81
	12/7/18	Fri.	67	59	67-79	61	71-84	60	67-86
	12/8/18	Sat.	66	58	69-84	60	73-77	59	63-78
LT2	12/6/18	Thu.	68	60	64-83	62	73-82	61	62-78
	12/7/18	Fri.	69	64	69-81	62	75-77	61	70-79
	12/8/18	Sat.	68	60	66-76	62	74-77	61	67-80
LT3	12/6/18	Thu.	69	67	76-102	64	75-84	62	73-85
	12/7/18	Fri.	70	67	80-92	64	73-83	62	73-87
	12/8/18	Sat.	69	65	76-91	64	76	61	72-83
ST1[1]	12/5/18	Wed.	74	73	80	--	--	--	--

Notes:

1. Short-term noise level measurements at site ST1 were conducted during the 1 PM hour of December 5, 2018. The L_{dn} value of 75 dB is estimated based on a comparison of measured noise levels of ST1 and LT3.

Source: Bollard Acoustical Consultants, Inc. (2018)



NOISE MEASUREMENT LOCATIONS | FIGURE 4.13-1

4.13.1.4 *Sensitive Receptors*

Existing land uses in the project vicinity include hotels, playing fields, commercial uses, a wastewater treatment facility, single-family and multi-family residential uses, and a park. Of these uses, the greatest degree of sensitivity exists at the exterior and interior areas of the nearest residential uses located on the south side of U.S. 101, and within the interior spaces of the two hotels located east and west of the project site. The wastewater treatment facility, playing fields and park are considered noise-generating uses, not noise-sensitive spaces.

4.13.1.5 *Noise and Vibration Thresholds*

Appendix G of the CEQA Guidelines states that a project would normally be considered to result in significant noise impacts if noise levels conflict with adopted environmental standards or plans or if noise generated by the project would substantially increase existing noise levels at sensitive receivers on a permanent or temporary basis. In addition, a substantial permanent noise increase would occur if the noise level increase resulting from the project (e.g., noise from project operations or project-generated traffic) is three (3) dBA L_{dn} or greater at noise-sensitive receptors, with an ambient noise level of 60 dBA L_{dn} or greater. Where noise levels would remain at or below the normally acceptable noise level standard with the project, noise level increases of five (5) dBA L_{dn} or greater would be considered significant.

As noted previously, existing noise-sensitive land uses in the project vicinity include residential to the south on the opposite side of U.S. 101, and hotels to the east and west. Land uses adjacent to the project site consist of a wastewater treatment facility, playing fields and a park. The land uses adjacent to the project site (playing fields, parking areas, and the wastewater treatment plant) are considered noise-generating uses, not noise-sensitive uses. As a result, the focus of this analysis is the identification of potential noise impacts at the noise-sensitive residential and hotel interiors and residential interior and exterior spaces (e.g. backyards, common outdoor activity areas).

The City of Burlingame General Plan exterior noise level standards presented in Table 4.13-3 were applied to the proposed project. Specifically, at the property lines of the nearest hotels to the east and west of the project site, project noise-generation was assessed relative to the 65 dB CNEL threshold for hotel land uses. At the property lines of the nearest residential land uses to the south, project noise-generation was assessed relative to the 60 dB CNEL threshold for residential land uses. An interior noise level standard of 45 dB CNEL was applied to both residential and hotel uses.

The City of Burlingame General Plan noise level standards are in terms of the 24-hour average noise metric, community noise equivalent level (CNEL). Noise level standards which represent a 24-hour average such as the day/night average level (L_{dn}) or CNEL tend to disguise short-term variations in the noise environment. As a result, the use of an hourly average noise level performance standard (Hourly L_{eq}) for proposed on-site noise-generating activities would provide a more conservative approach in the assessment of project noise impacts at the nearest sensitive receptors.

4.13.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
1) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
2) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
3) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

Impact NOI-1: The project would not result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. **(Less than Significant Impact with Mitigation Incorporated)**

Noise from Project-Generated Traffic

With development of the project site, traffic volumes on the local roadway network will increase. Those increases in daily traffic volumes will result in a corresponding increase in traffic noise levels at existing uses located along those roadways. The Federal Highway Administration (FHWA) Model was used with traffic data to predict existing, existing plus project, background, and background plus project traffic noise levels.

The Traffic Impact Analysis (TIA) conducted for the project by Fehr & Peers concluded that the proposed project would increase traffic on U.S. 101 by less than one percent during the AM and PM peak hours. From a noise standpoint, a doubling (100 percent increase) in traffic volumes along a given roadway segment would be required to result in a noise level increase of three dB. The project-related increase in U.S. 101 traffic would be less than one percent, resulting in an increase in U.S. 101 traffic noise of approximately 0.04 dB. The project would not increase traffic noise by three dBA on any nearby roadway and, therefore, it would result in a less than significant impact. **(Less than Significant Impact)**

Noise from Project Operation

Parking Lot Noise

The project proposes parking areas on the west, south, and east sides of the Topgolf facility. Based on existing data of noise generation due to parking lot activities, a typical maximum noise level associated with parking lot activity does not exceed 65 dB L_{max} at a distance of 50 feet. Average (L_{eq}) noise levels were predicted to be five dB lower than maximum noise levels. Given the proposed hours of operation, parking lot CNEL values would be four dB higher than L_{eq} values, assuming equal level of activity for nine daytime, three evening hours, and four nighttime hours. Because it is known that parking lot activity will be lighter during non-peak hours, this assumption is conservative.

The distance between the nearest proposed parking spaces and the closest hotel building façade to the west (Area 1 on Figure 4.13-1), is approximately 900 feet. At that distance, noise levels generated by the nearest parking lot activities are predicted to be approximately 35 dB L_{eq} and 39 dB CNEL. The predicted exterior CNEL is considered satisfactory relative to the City's General Plan exterior noise level standard of 65 dB CNEL for hotels. Parking lot noise levels within the hotel guest rooms would be 25 dB lower due to noise attenuation provided by the building façade and would satisfy the City's General Plan interior noise level standard of 45 dB CNEL.

The distance between the nearest proposed parking spaces and the closest hotel building façade to the east (Area 2 on Figure 4.13-1), is approximately 500 feet. At that distance, noise levels generated by the nearest parking lot activities are predicted to be approximately 40 dB L_{eq} and 44 dB CNEL. The predicted exterior CNEL is considered satisfactory relative to the City's General Plan exterior noise level standard of 65 dB CNEL. Parking lot noise levels within the hotel guest rooms would be 25 dB lower due to noise attenuation provided by the building façade and would satisfy the City's General Plan interior noise level standard of 45 dB CNEL.

The residences and apartments to the south, on the opposite side of the U.S. 101 (Areas 3 and 4 on Figure 4.13-1, respectively), are located approximately 875 feet and 1,000 feet from the nearest proposed parking spaces at the project site. Despite the elevated project site, these residences would be shielded from view of the proposed parking areas by the existing U.S. 101 traffic noise barrier. Noise levels generated by the nearest parking lot activities are predicted to be approximately 30 to 34 dB L_{eq} and 34 to 38 dB CNEL. The predicted exterior CNEL is considered satisfactory relative to the City's General Plan exterior noise level standard of 60 dB CNEL for residential land uses. Parking lot noise levels within the residences would be 25 dB lower due to noise attenuation provided by the building façades and would satisfy the City's General Plan interior noise level standard of 45 dB CNEL.

As described above, noise from parking lot activities on the project site would not exceed 60 dBA for the adjacent hotel and residential uses, resulting in a less than significant impact. **(Less than Significant Impact)**

Mechanical Equipment Noise

The heating, ventilation, and air conditioning (HVAC) systems for maintaining comfortable temperatures within the proposed hotel, commercial/retail, and Topgolf facility office uses will vary. The mechanical equipment is located within a mechanical equipment enclosure.

Noise from rooftop HVAC units has been measured to be approximately 50 dB at a reference distance of 100 feet from the building façades of similar uses. HVAC systems located within dedicated mechanical equipment rooms typically result in even lower noise levels. The nearest noise-sensitive land uses are located a minimum of 900 feet from any project-related HVAC equipment. At that distance, average HVAC exterior noise levels are predicted to be approximately 31 dB L_{eq}/L_{max} and 34 dB CNEL, conservatively assuming the mechanical equipment were to operate nine daytime, three evening, and four nighttime hours per day.

Within the nearest hotels or residences, HVAC noise levels would be approximately 15 dB lower with windows open, and 25 dB lower with windows closed. Resulting interior noise levels would range from approximately 10 to 20 dB CNEL within the nearest noise-sensitive buildings.

Mechanical system noise levels at the nearest noise-sensitive land uses would be satisfactory relative to the City's exterior noise level standards of 60 dB CNEL, 65 dB CNEL, and 45 dB CNEL interior noise level standard. In addition, predicted HVAC system noise levels would be well below measured ambient conditions at all of the nearest noise-sensitive land uses to the project site. As a result, noise impacts resulting from daytime and/or nighttime HVAC system usage within the project area is considered less than significant. **(Less than Significant Impact)**

Topgolf Facility Noise

Proposed operating hours of the Topgolf facility are Sunday through Thursday from 9:00 AM to 12:00 AM, and Friday and Saturday from 9:00 AM to 2:00 AM. The facility would include a three-story driving range facility with 120 climate-controlled hitting bays, with an outdoor outfield enclosed by netting. The Topgolf facility includes a full-service restaurant, bar, lounges and corporate/event meeting spaces, and family entertainment area with games.

To evaluate the noise generation of the proposed Topgolf facility, data was utilized from an extensive sound level survey at the Topgolf facility in Gilbert, Arizona. Measured sound levels resulting from typical weekend Topgolf activities at the Gilbert facility were plotted on the project site in the location of the proposed Topgolf facility (refer to Figure 4.13-2). The Figure 4.13-2 "heat map" highlights the range of noise levels which can be expected throughout the site. Noise generation of the proposed Topgolf Burlingame facility would be comparable to that of the Gilbert facility where the sound level surveys were conducted. Table 4.13-5 identifies the average (L_{eq}), maximum (L_{max}), and day-night average level (L_{dn}), at each of the nearest noise-sensitive areas to the project site. The project would not increase ambient noise levels at the nearest sensitive receptors.

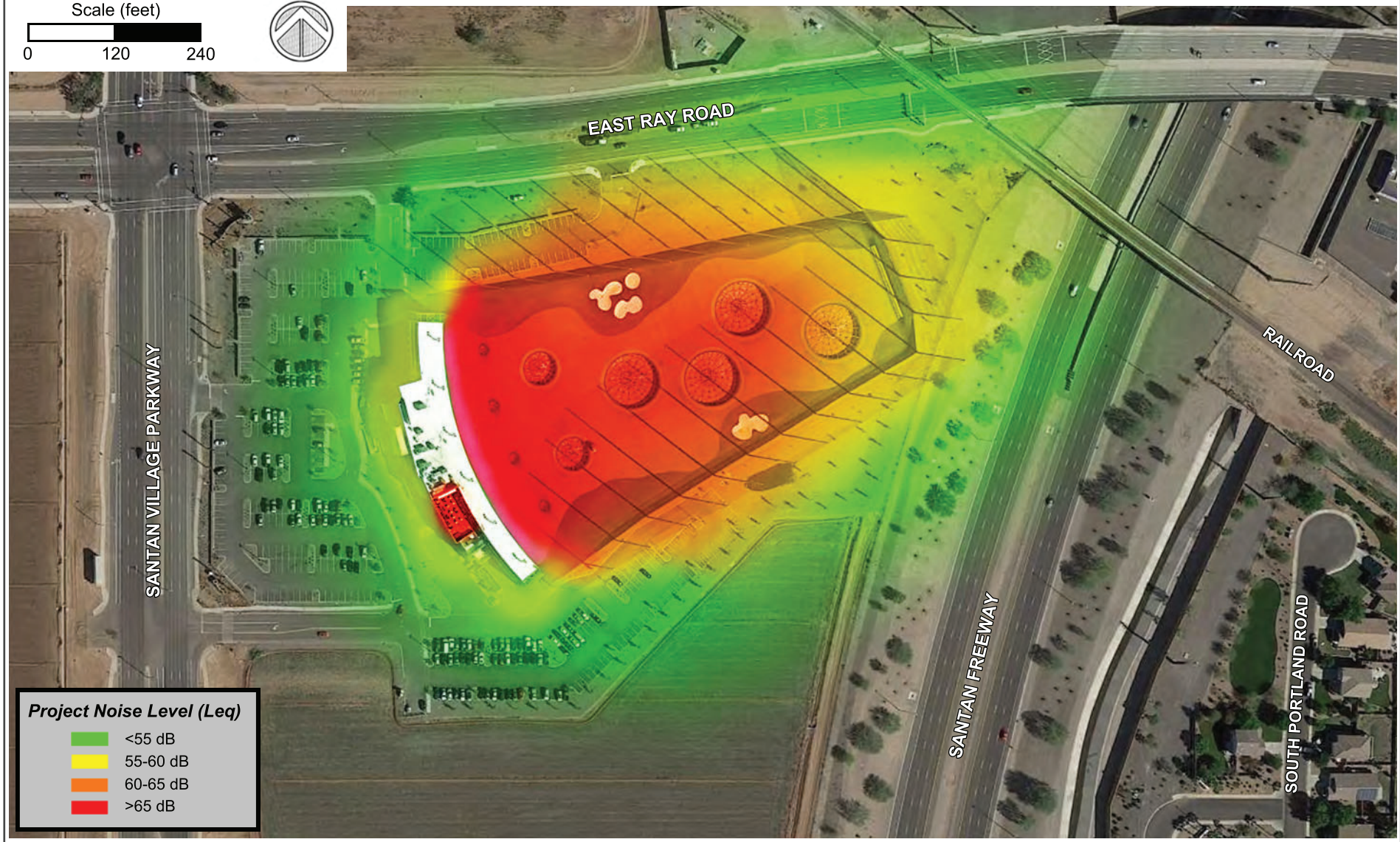
Table 4.13-5: Predicted Noise Levels at Nearest Receptors							
Location	**Distance from Topgolf Facility (ft)**	**Predicted Topgolf Noise Levels, dB[1]**			**Baseline Ldn, dB[5]**	**Baseline + Project Ldn, dB**	**Project Related Increase in Ldn, dB**
		L_{eq}	**L_{max}**	**CNEL[2]**			
Hotel to West (Area 1)[3]	970	17	25	21	41	41	0
Hotel to East (Area 2)[3]	920	28	35	32	43	43	0
Nearest Residences to South (Area 3)[4]	900	43	51	47	69	69	0
Nearest Residences to Southwest (Area 4)	1,100	41	45	44	74	74	0

Notes:

1. Predicted levels are based on reference levels from BAC file data, and six dBA per doubling of distance attenuation rate.
2. CNEL calculations conservatively assume continuous Topgolf noise generation between 9 am and 2 am.
3. Interior spaces of hotels were conservatively estimated to be 25 dB lower than exterior noise levels due to noise reduction provided by the hotel building facades.
4. Because the project site topography is significantly elevated, no additional offset was applied to the residences represented by Area 3 to account for the shielding provided by the existing U.S. 101 noise barrier.
5. Baseline noise levels are identified in Table 4.13-1. Baseline noise levels at Areas 1 and 2 were adjusted by -25 dB to account for the noise reduction provided by the hotel building facades.

Source: Bollard Acoustical Consultants, Inc. (2015, 2019)

As shown in Table 4.13-5, noise impacts associated with on-site Topgolf activities, including amplified music and sound generated by facility patrons would be less than significant. (**Less than Significant Impact)**



Source: Bollard Acoustical Consultants.

PROJECT NOISE GENERATION HEAT MAP | FIGURE 4.13-2

Combined Noise Impacts from All On-Site Noise Sources

The combined noise levels for each proposed on-site noise sources operating concurrently were projected to the nearest sensitive receptors to the project site assuming standard spherical spreading of sound (minus six dBA per doubling of distance from the source). The combined project noise (using decibel addition of the individual noise sources) was then added to the existing (baseline) noise measurements to evaluate the relative increase resulting from the overall project. The results of the noise assessment at those locations are shown in Table 4.13-6. It should be noted that project construction noise would not occur simultaneously with the combined operational noise (since all uses would be operational), and was not included in this calculation.

Table 4.13-6: Predicted Noise Levels from All On-Site Noise Sources Combined

Location	Distance from Topgolf Facility (ft)	Predicted Topgolf Noise Levels, dB[1]			Baseline Ldn, dB[4]	Baseline + Project Ldn, dB	Project Related Increase in Ldn, dB
		L_{eq}	L_{max}	CNEL[2]			
Hotel to West (Area 1)[3]	970	18	25	22	41	41	0
Hotel to East (Area 2)[3]	920	28	35	32	43	43	0
Nearest Residences to South (Area 3)[4]	900	43	51	47	69	69	0
Nearest Residences to Southwest (Area 4)	1,000	42	46	46	74	74	0

Notes:
1. Predicted levels are based on reference levels from BAC file data, and six dBA per doubling of distance attenuation rate.
2. CNEL calculations conservatively assume continuous Topgolf noise generation between 9 am and 2 am.
3. Interior spaces of hotels were conservatively estimated to be 25 dB lower than exterior noise levels due to noise reduction provided by the hotel building facades.
4. Baseline noise levels are identified in Table 4.13-1.

Source: Bollard Acoustical Consultants, Inc.

As shown in Table 4.13-6, noise generated by all on-site sources combined would satisfy the City of Burlingame exterior noise criteria applied at the property line of residential land uses. The combined project-related noise would not increase ambient noise levels at the nearest sensitive receptors. As a result, noise impacts associated with the combined project operations would be less than significant. **(Less Than Significant Impact)**

Noise from Project Construction

During the construction phases of the proposed project, noise from construction activities would add to the noise environment in the immediate project vicinity. Activities involved in typical construction would generate maximum noise levels, as indicated in Table 4.13-7, ranging from 70 to 90 dB at a distance of 50 feet.

The proposed project construction activities would include pile driving. A total of approximately 360 piles will be used and it is estimated that a 95-foot pile length will be needed for the project site. The duration of pile driving activities are anticipated to take approximately 60 days. According to Table 4.13-7 below, pile driving activities generate maximum noise levels of 95 dB at a distance of 50 feet.

Table 4.13-7: Typical Construction Equipment Noise	
Equipment Description	**Maximum Noise Level at 50 feet, dBA**
Auger drill rig	85
Backhoe	80
Bar bender	80
Boring jack power unit	80
Chain saw	85
Compactor (ground)	80
Compressor (air)	80
Concrete batch plant	83
Concrete mixer truck	85
Concrete pump truck	82
Concrete saw	90
Crane (mobile or stationary)	85
Dozer	85
Dump truck	84
Excavator	85
Flatbed truck	84
Front end loader	80
Generator (25 kilovolt-amperes [kVA] or less)	70
Generator (more than 25 kVA)	82
Grader	85
Impact pile driver	95
Jackhammer	85
Paver	85
Pickup truck	55
Pneumatic tools	85
Pumps	77
Rock drill	85
Scraper	85
Soil mix drill rig	80
Tractor	84
Vacuum street sweeper	80
Vibratory concrete mixer	80
Vibratory pile driver	95
Source: Federal Highway Administration 2006.	

The nearest existing noise-sensitive land uses are located between 500 and 1,000 feet to the required construction areas within the project site. At this range of distances, maximum noise levels for general construction activities would range from approximately 50 to 70 dB L_{max} at the nearest sensitive receptor (Area 2). Maximum noise levels due to pile driving would be approximately 75 dB L_{max} at the nearest sensitive receptor. Therefore, the predicted range of construction-related noise levels would not likely represent a substantial short-term increase over ambient maximum noise levels, particularly if construction activities are limited to daytime hours. However, due to the potential for substantial short-term exceedances of ambient noise levels at nearby sensitive areas during project construction, this impact is considered significant.

Mitigation Measures: The following mitigation measure shall be implemented to reduce construction noise impacts, including pile driving, to a less than significant level.

MM NOI-1.1: The project shall implement a noise control plan including, but not limited to, the following measures:

- Noise-generating construction operations shall be limited to the hours between 8 a.m. and 7 p.m. Monday through Friday, and between 9 a.m. and 6 p.m. on Saturdays, with no construction on Sundays or holidays, per BMC 13.04.100.
- All construction equipment and equipment staging areas shall be located as far as possible from nearby noise-sensitive land uses.
- All construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds shall be closed during equipment operation.
- All motorized construction equipment shall be shut down when not in use to prevent idling.
- The primary contractor shall prepare and implement a construction noise management plan. This plan shall identify specific measures to ensure compliance with the noise control measures specified above. The noise control plan shall be submitted to the City of Burlingame before any noise-generating construction activity begins.

With the implementation of MM NOI-1.1, short-term noise impacts during construction would be reduced to a less than significant level. (**Less than Significant Impact with Mitigation Incorporated)**

Impact NOI-2: The project would not result in generation of, excessive groundborne vibration or groundborne noise levels. **(Less than Significant Impact)**

The construction of the project may generate perceptible vibration when heavy equipment or impact tools (e.g. jackhammers, etc.) are used in areas adjoining developed properties. Construction activities would include grading, site preparation work, foundation work, and new building framing and finishing. Per Caltrans thresholds, construction vibration impacts would be considered significant when construction activities are anticipated to generate a peak vertical particle velocity of 0.5 in/sec at buildings of normal conventional construction.

Construction of the proposed project would require pile driving. Table 4.13-8 summarizes the predicted vibration levels generated by pile driving at the buildings nearest to the project site.

Table 4.13-8: Pile Driving Vibration Levels at Nearest Sensitive Buildings			
Site	**Description**	**Distance (feet)**	**Maximum PPV (inches/second) [1,2]**
Area 1	Hotel to the west	800	0.008
Area 2	Hotel to the east	500	0.017

Notes:
1. Upper range of impact pile driving used as worst-case assessment (1.518 PPV at 25 feet)
2. PPV = peak particle velocity.

The vibration data shown in Table 4.13-8 indicates that construction equipment-generated vibration levels are below the Caltrans thresholds for damage to structures of 0.5 in/sec PPV at the nearest off-site buildings. Furthermore, the vibration levels are below the Caltrans thresholds for annoyance. Because no damage to structures are anticipated due to the project and because of the temporary nature of construction activities, construction/demolition-related vibration impacts for this project are considered less than significant. **(Less than Significant Impact)**

Impact NOI-3: The project would not expose people residing or working in the project area to excessive noise levels from the San Francisco International Airport. **(Less than Significant Impact)**

The project site is located just over a mile south of San Francisco International Airport (SFO). Noise exposure at the project site due to aircraft operations was quantified by referencing the San Francisco International Airport Noise Exposure Map Report. The project site is over 5,000 feet south of the 65 dB CNEL contour. Based on the published noise contours, it was conservatively estimated that noise exposure at the project site due to SFO operations is no greater than 60 dB CNEL. The City of Burlingame applies a 60 dB CNEL for intensively used parks and playgrounds. Because SFO operational noise exposure is below the 60 dB CNEL threshold, this noise impact is considered less than significant. **(Less than Significant Impact)**

4.14 POPULATION AND HOUSING

4.14.1 Environmental Setting

Burlingame's residential population has experienced only a modest growth over the past 20 years. The 2010 population was 28,806, which represented only a 2.3 percent increase from the 2000 population of 28,158 and a 7.48 percent increase from the population in 1990 of 26,801. As of July 1, 2018, the population of Burlingame was approximately 30,467.[33]

The Bay Area region is projected to continue more robust growth in the coming decades, with a share of this growth accommodated in Burlingame. The Association of Bay Area Governments (ABAG) projects an increase in the Burlingame population to 31,700 in 2020, 34,800 in 2030, and 38,800 in 2040. This would mean an approximate 21 percent population increase between 2018 and 2040 (30,467 to 38,800). Note the projected 2040 General Plan population is less than the ABAG projection (approximately 36,500), which the City believes better represents the future development scenario.

With General Plan buildout, the net increases through the horizon year of 2040 would be approximately 2,951 dwelling units (mostly multi-family), 6,769 residents, and 9,731 employees.

4.14.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
2) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Impact POP-1: The project would not induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). **(No Impact)**

The proposed project would result in a net increase in jobs in the City. As noted above, Burlingame is projected to have an increase in 9,731 employees by the year 2040. The project does not propose a housing development and, therefore, would not result in an increase in population. The increase in

[33] United States Census Bureau. "QuickFacts". https://www.census.gov/quickfacts/fact/table/burlingamecitycalifornia/AGE295218. Accessed September 25, 2019.

jobs resulting from the project would not exceed the planned increase in employees in the General Plan nor result in unplanned population growth. **(No Impact)**

Impact POP-2:	The project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. **(No Impact)**

The project will redevelop land that is already used for recreation. The site is not currently and has not been used for residential purposes in the past, therefore, the proposed development would not displace existing housing or people. **(No Impact)**

4.15 PUBLIC SERVICES

4.15.1 Environmental Setting

4.15.1.1 *Regulatory Framework*

Local

Envision Burlingame 2040 General Plan

The City's General Plan contains the following polices pertaining to public services which are applicable to the proposed project:

Policy	Description
CS-1.1	Maintain optimal police staffing levels, including sworn officers and civilian support, necessary to meeting current and projected community needs.
CS-1.3	Identify, monitor, and achieve appropriate minimum police response times for all call priority levels.
CS-2.3	Continue to include the Central County Fire Department in the review of development proposals to ensure projects adequately address fire access and building standards.

4.15.1.2 *Existing Conditions*

Fire Protection

Fire protection services in the City of Burlingame are provided by the Central County Fire Department, which also serves the Town of Hillsborough and City of Millbrae. The CCFD provides all-risk services and plays a role in fire suppression, rescue, emergency medicine, operational training, fire prevention and investigation, and community education. The CCFD also participates in a Joint Powers Agreement within San Mateo County, providing Advanced Life Support as part of a 20-city, 56 engine company workforce. In addition, the CCFD is part of the San Mateo County Fire Services Automatic Aid Agreement, which calls for the CCFD to assist neighboring fire departments (and vice versa) in providing fire protection services (as needed) throughout the County.

The City's General Plan does not identify a service ratio goal, response time goal, or other performance standard for fire services. However, for reference, the CCFD has a 6:59 minute response time standard for emergency medical services, and a minimum goal of 13 personnel to a structure fire within eight minutes. The closest station to the project site is CCFD Fire Station 34, located at 799 California Drive, approximately one mile southeast of the site.

Police Protection

Police protection services are provided in the City of Burlingame by the Burlingame Police Department, located at 1111 Trousdale Drive, approximately 2.3 miles west of the project site. The BPD currently consists of 37 police officers and 25 professional staff, and includes an Operations Division, Administration Division, Traffic Division, and Investigations Section. Select members of the BPD also belong to a regional Special Operations Unit, which includes Special Weapons and

Tactics (SWAT). The City's General Plan does not identify a service ratio goal, response time goal, or other performance standard for police services.

Schools

Students in the City of Burlingame are served by two school districts: Burlingame School District (BSD) for grades K-8 and San Mateo Union High School District (SMUHSD) for grades 9-12.

Parks

The City of Burlingame provides and maintains developed parkland and open space to serve its residents. Residents of Burlingame are served by regional and community park facilities, including regional open space, community and neighborhood parks, playing fields, and trails. The City of Burlingame Parks and Recreation Department is responsible for development, operation, and maintenance of all City park facilities. The City's General Plan does not identify a service ratio goal, or other performance standard for park facilities.

The project site is located adjacent to Murray Fields which contains sports fields and a playground. The Bayside Dog Exercise Park is located approximately 100 feet to the west of the project site.

4.15.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1) Fire Protection?	☐	☐	☒	☐
2) Police Protection?	☐	☐	☒	☐
3) Schools?	☐	☐	☐	☒
4) Parks?	☐	☐	☒	☐
5) Other Public Facilities?	☐	☐	☐	☒

Impact PS-1:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services. **(Less than Significant Impact)**

As part of the permitting process, the Central County Fire Department would review project plans before permits are issued to ensure compliance with all applicable fire and building code standards and to ensure that adequate fire and life safety measures are incorporated into the Topgolf project in compliance with all applicable state and city fire safety regulations. Because the proposed project is not anticipated to generate substantial additional demand for fire protection services, and would not result in the need for new or expanded facilities, the impact of the project on fire protection services would be less than significant. **(Less than Significant Impact)**

Impact PS-2:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services. **(Less than Significant Impact)**

The proposed increase in development on the project site is accounted for in the planned growth for the City. The project would incrementally increase demand for police services. This increase in demand would not result in a substantial adverse physical impact associated with a need for new facilities in order to maintain acceptable levels of services or performance objectives. The proposed project would be constructed in accordance with current building codes and would be required to be maintained in accordance with applicable City policies identified in the General Plan to avoid unsafe building conditions and promote public safety. **(Less than Significant Impact)**

Impact PS-3:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools. **(No Impact)**

The project proposes a Topgolf facility which would not introduce new students to the community. Therefore, the project would not impact school facilities in Burlingame. **(No Impact)**

Impact PS-4:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks. **(Less than Significant Impact)**

The proposed project is an entertainment and recreational facility. While employees and patrons of the site may occasionally utilize nearby parks and trails, they would not place a physical burden or a substantial increase in demand on these facilities such that it would result in the need for new or expanded facilities. **(Less than Significant Impact)**

Impact PS-5:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities. **(No Impact)**

The Topgolf project would not affect other public facilities such as libraries or community centers. **(No Impact)**

4.16 RECREATION

4.16.1 Environmental Setting

The City of Burlingame provides and maintains developed parkland and open space to serve its residents. Residents of Burlingame are served by regional and community park facilities, including regional open space, community and neighborhood parks, playing fields, and trails. The City of Burlingame Parks and Recreation Department is responsible for development, operation, and maintenance of all City park facilities. The City's General Plan does not identify a service ratio goal, or other performance standard for park facilities.

The project site is located adjacent to Murray Fields which contains sports fields and a playground. The Bayside Dog Exercise Park is located approximately 100 feet to the west of the project site.

4.16.1.1 *Regulatory Setting*

Local

Bayfront Specific Plan

Adopted in 2004 (with amendments in 2006 and 2012), the Bayfront Specific Plan provides guidance for development of the Bayfront area to maximize its advantage of proximity to Highway 101 and San Francisco International Airport. Primary land uses allowed include offices, hotels, restaurants, commercial recreation, and light industrial businesses. The plan encourages a retail node along the shoreline and other economic activity that bolsters revenues. The City envisions the Bayfront as a regional recreation and business destination.

Envision Burlingame 2040 General Plan

The City's General Plan contains the following polices pertaining to recreation which are applicable to the proposed project:

Policy	Description
HP-4.8	Provide a range of quality recreational and multi-purpose facilities that are suited to community needs. Provide space for fitness classes, sports leagues, continuing education opportunities, community events, and other functions. Ensure facilities are well maintained and have adequate lighting, signage, and hours of operations.

Burlingame Municipal Code Chapter 10.55, Regulations for Park and Recreational Areas

This code section limits the types of activities, equipment, and number of people, and sets hours for public access. It applies to City parks, pools, recreation centers, the golf center, playgrounds, fields, open spaces, and school facilities (in certain circumstances). In addition, this code also stipulates permitting requirements for special events.

4.16.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated?	☐	☐	☒	☐
2) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

Impact REC-1: The project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. **(Less than Significant Impact)**

The project is a commercial recreational facility and is not anticipated to place a substantial physical burden on existing nearby parks and trail facilities. While employees and patrons of the site may utilize nearby parks and trails, the use of these facilities would not result in substantial physical deterioration. **(Less than Significant Impact)**

Impact REC-2: The project would include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. **(Less than Significant Impact)**

The project is a commercial recreational facility that may result in adverse physical effects on the environment as described throughout this Initial Study. The employees and patrons of the project could occasionally utilize nearby recreational facilities including parks and trails, however, such use would not result in the need for new or expanded offsite recreational facilities. **(Less than Significant Impact)**

4.17 TRANSPORTATION

The following section is based on a Transportation Impact Analysis prepared by Fehr & Peers in November 2019. A copy of this report is included in Appendix G of this Initial Study.

4.17.1 Environmental Setting

4.17.1.1 *Regulatory Framework*

State

Senate Bill 743

SB 743 establishes criteria for determining the significance of transportation impacts using a vehicle miles traveled (VMT) metric intended to promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. Specifically, SB 743 requires the replacement of automobile delay—described solely by level of service (LOS) or similar measures of vehicular capacity or traffic congestion—with VMT as the recommended metric for determining the significance of transportation impacts. The Governor's Office of Planning and Research (OPR) approved the CEQA Guidelines implementing SB 743 on December 28, 2018. Local jurisdictions are required to implement a VMT policy by July 1, 2020.

SB 743 did not authorize OPR to set specific VMT impact thresholds, but it did direct OPR to develop guidelines for jurisdictions to utilize. CEQA Guidelines Section 15064.3(b)(1) describes factors that might indicate whether a development project's VMT may be significant. Notably, projects located within 0.5-mile of transit should be considered to have a less than significant transportation impact based on OPR guidance.

Regional and Local

Regional Transportation Planning

The Metropolitan Transportation Commission (MTC) is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including San Mateo County. MTC is charged with regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities in the region. MTC and ABAG adopted Plan Bay Area 2040 in July 2017, which includes the region's Sustainable Communities Strategy (integrating transportation, land use, and housing to meet GHG reduction targets set by CARB) and Regional Transportation Plan (including a regional transportation investment strategy for revenues from federal, state, regional and local sources).

City/County Association of Governments

The City/County Association of Governments of San Mateo County (C/CAG) works on issues that affect the quality of life in general: transportation, air quality, stormwater runoff, airport/land use compatibility planning, hazardous waste, solid waste and recycling. C/CAG, as the Congestion Management Agency for San Mateo County, is required to prepare and adopt a Congestion Management Program (CMP) on a biennial basis. The purpose of the CMP is to identify strategies to

respond to future transportation needs, develop procedures to alleviate and control congestion, and promote countywide solutions. The CMP is required to be consistent with the MTC planning process that includes regional goals, policies, and projects for the Regional Transportation Improvement Program. [34] A project is required to submit a Transportation Demand Management (TDM) plan in compliance with the CMP guidelines if the project will generate 100 net new peak hour vehicle trips to the CMP roadway network.

Envision Burlingame 2040 General Plan

The City's General Plan contains the following transportation policies which are applicable to the proposed project.

Policy	Description
M-1.1	Define and develop a well-connected network of Complete Streets that can move all modes safely, efficiently, and comfortably to promote efficient circulation while also improving public health and safety.
M-3.1	Develop a safe, convenient, and integrated bicycle network that connects residential neighborhoods to employment, education, recreation, and commercial destinations throughout Burlingame.
M-9.2	Establish a transportation impact fee for new development that generates funds for improving all modes of transportation. Recognize that this ties into the update of performance measures, as developer fees and improvements will no longer be tied to intersection operations.

4.17.1.2 *Existing Conditions*

Roadway Network

Regional access to the site is provided via U.S. 101, while local access to the site is provided by Airport Boulevard, Anza Boulevard, Broadway, Old Bayshore Highway, and Rollins Road. These facilities are described below.

U.S. 101

U.S. 101 is an eight-lane divided freeway that connects Burlingame with San Francisco to the north, San Jose to the south, and numerous jurisdictions in between. It provides access to major employers, hotels, shopping destinations, residential areas, and the San Francisco International Airport. Located south of the project site, U.S. 101 is an east-west facility, transitioning to a north-south facility outside of the study area with four general purpose travel lanes in each direction. Access to and from the project site exists at the Broadway interchange (eastbound only), Old Bayshore Highway (westbound only), Anza Boulevard (westbound only), Airport Boulevard (westbound only), and Poplar Avenue (eastbound only).

[34] C/CAG of San Mateo County website. http://ccag.ca.gov/programs/transportation-programs/congestion-mangement/. Accessed September 25, 2019.

Airport Boulevard

Airport Boulevard is a 2.25-mile, east-west roadway that is two-lanes immediately adjacent to the project site. Extending from the Old Bayshore Highway and Broadway intersection to the Peninsula Avenue and Coyote Point Drive intersection in the City of San Mateo, Airport Boulevard provides connections to the waterfront area via three interchanges along U.S. 101. Approximately three-quarters of one mile is a four-lane divided arterial from Anza Boulevard to a bridge approximately 600 feet east of Bay View Place.

Anza Boulevard

Anza Boulevard is a two- to four-lane, north-south roadway that extends 0.4 miles from U.S. 101 to the waterfront, and provides access to the project site, as well as other hotels and office buildings along the waterfront via an interchange with northbound U.S. 101 on and off ramps. An access point to a surface parking lot that will serve the site exists between the U.S. 101 interchange and intersection with Airport Boulevard.

Broadway

Broadway is a one-mile, north-south two- to six-lane divided arterial that provides access to the project site via Airport Boulevard. Broadway extends from Vancouver Avenue to Old Bayshore Highway where it transitions to Airport Boulevard. Broadway operates as one of the main gateways into the City via the interchange with U.S. 101, which was recently reconstructed and completed as of summer 2018, and traveling southbound through the downtown core of Burlingame.

Old Bayshore Highway

Old Bayshore Highway is a 1.33-mile, east-west four-lane arterial that parallels the edge of the San Francisco Bay and U.S. 101, extending from just north of Millbrae Avenue, adjacent to San Francisco International Airport, to the intersection with Broadway and Airport Boulevard. Old Bayshore Highway provides a connection between two interchanges with U.S. 101, as well as hotels and commercial uses along the waterfront.

Rollins Road

Rollins Road is a three mile, two- to four-lane, east-west arterial that extends from Millbrae Avenue to the north in the City of Millbrae, to Humboldt Street to the south in the City of San Mateo. From Broadway in the City of Burlingame to the southern extent, the roadway parallels U.S. 101 as a service road providing access to residential neighborhoods between two U.S. 101 interchanges. To the west of Broadway, Rollins Road connects industrial businesses and office space with U.S. 101 interchanges at Millbrae Avenue and Broadway.

Transit Service

Transit service to the project site is provided by a bus route, train, and two shuttle routes which are described in more detail below. Existing transit facilities in the project area are shown on Figure 4.17-1.



EXISTING TRANSIT FACILITIES | FIGURE 4.17-1

San Mateo County Transit District (SamTrans)

The study area is served by Route 292, which operates as an all-day, limited stop bus service in the vicinity of the project. Route 292 operates between the Hillsdale Shopping Center in San Mateo and the Transbay Transit Center in downtown San Francisco. Weekday service is from approximately 3:55 AM to 2:30 AM the following day with 30 minutes headways for a majority of the day. Weekend service operates from approximately 4:00 AM to 2:30 AM the following day at 30-60-minute headways. The nearest bus stop is located approximately 500 feet west of the Broadway/Old Bayshore Drive/Airport Boulevard intersection, which is a 0.8-mile walk to the project site.

Caltrain Service

Caltrain provides frequent passenger train service between San Jose and San Francisco seven days per week. During commute hours, Caltrain provides extended service to Morgan Hill and Gilroy. The closest Caltrain station is the Broadway Station, however, currently only weekend service is provided at that location with 90-minute headways from approximately 8:00 AM to 11:40 PM. The closest Caltrain stations with weekday service are the Burlingame Station and the Millbrae Station. As a part of the Caltrain Modernization Program, the rail service will be electrified which will provide increased service and include the reopening of the Broadway Station for weekday service. Electrification is also expected to help accommodate the increase in system ridership through more frequent and improved system operations with operations estimated to begin in 2022.

- The Burlingame Station is served by local and limited Caltrain trains. It is located approximately two miles southeast of the project site, and connected via the Burlingame Trolley Service. Trains that stop at the station operate at approximately 30-minute headways in both directions during peak hours, with 60-minute headways during midday. Northbound trains operate from approximately 5:30 AM to 11:35 PM and 5:20 AM to 12:35 AM the following day in the southbound direction. On weekends, service is provided at 90-minute headways from approximately 8:00 AM to 11:30 PM.

- The Millbrae Station is served by local, limited, and the Caltrain Baby Bullet, as well as by Bay Area Rapid Transit (BART). The station is located approximately 2.5 miles northwest of the project site, and connected via the Burlingame Bayside Area BART & Caltrain Shuttle. Caltrain service operates on approximately 15 to 20-minute headways in both directions during peak hours. Northbound trains operate from approximately 5:30 AM to 11:40 PM and 5:20 AM to 12:30 AM the following day in the southbound direction. On the weekends, service is provided at 90-minute headways from approximately 8:10 AM to 11:45 PM.

Burlingame Shuttle Service

Trolley service from the Burlingame and Millbrae Stations is provided to destinations within the City of Burlingame.

- Burlingame Trolley Service provides weekday peak-hour service between the Burlingame Caltrain Station and the San Francisco Airport Marriot Hotel. The Burlingame Trolley primarily connects the hotels east of U.S. 101 with downtown Burlingame and the station. The trolley operates between 11:50 AM to 9:45 PM at approximately 45-minute headways.

The nearest trolley stop is located at the Double Tree hotel stop, which is directly adjacent to the project site.

- Burlingame-Bayside BART/Caltrain Shuttle Service provides free public shuttle service between the Millbrae Transit Station and the Airport Boulevard/Bay View Place intersection in Burlingame. The shuttle stops curbside along Rollins Road, Old Bayshore Highway, and Airport Boulevard. The shuttle provides connections to the industrial and office properties along Rollins Road, as well as hotels and other destinations along the waterfront. The shuttle stops closest to the project site are located immediately west of the Airport Boulevard and Anza Boulevard intersection along both sides of Airport – approximately 1,000 feet walking distance from the project site. Shuttle service is provided on the weekdays during peak commute hours (7:00 to 10:00 AM and 4:00 to 7:00 PM) at 20 to30-minute headways, and is coordinated with BART and Caltrain schedules.

Bicycle and Pedestrian Facilities

Bicycle Facilities

Bicycle facilities are divided into three classes of relative significance. Class I bikeways are bicycle paths which are physically separated from motor vehicles and provide bicycle (two-way) and pedestrian travel on a separate path. Class II bikeways are striped bicycle lanes on roadways (for one-way bicycle travel) which are marked by signage and pavement markings. Class III bikeways are bicycle routes which allows shared use with pedestrian or motor vehicle traffic.

Bicycle connectivity to the project site includes Class I bicycle paths located along the waterfront between Broadway and Bay View Lane, as well as from the project site, south of Airport Boulevard to Beach Road. A Class I bicycle path overpass across U.S. 101 was also recently completed as a part of the Broadway interchange reconstruction, which provides strong north-south bicycle connectivity from Rollins Road to the project site via a Class III bikeway along
Airport Boulevard or Class I bicycle path along the waterfront. Class II bicycle lanes are present along Old Bayshore Highway from the U.S. 101 northbound ramps to the Broadway intersection, Airport Boulevard from the project site to canal bridge, Carolan Avenue from Broadway to Oak Grove Avenue, and Rollins Road from Millbrae Avenue to Broadway – connecting to the aforementioned overpass.

Class III bikeways, or bicycle routes, exist along Old Bayshore Highway, Airport Boulevard between the proposed project site access and Broadway, and Broadway from California Drive to Old Bayshore Highway. With the new overpass completed, a strong north-south bicycle connection exists for destinations to the south of U.S. 101, and the project site is approximately 1,500 feet away from the entrance of the bridge to the north and east.

Existing bicycle facilities in the project area are shown on Figure 4.17-2.



EXISTING BICYCLE FACILITIES | FIGURE 4.17-2

Pedestrian Facilities

Pedestrian facilities consist of multiuse paths adjacent to the project site, as well as sidewalks, crosswalks, and pedestrian signals at signalized intersections. The pedestrian environment was evaluated along the connecting roadways that directly serve the project site, as well as adjacent roadways that connect to transit stations and/or nearby destinations in the greater study area.

Pedestrian connectivity in the vicinity of the project site is provided by a mostly complete network of sidewalks and crosswalks that serve the adjacent commercial area along Airport Boulevard to the east. However, there is currently a missing sidewalk along Airport Boulevard from Broadway to approximately 600 feet west of Anza Boulevard. Multiuse paths (Class I Bikeways) exist along the waterfront to the north of Airport Boulevard, as well as portions along the south side of Airport Boulevard from Anza Boulevard to the canal east. A sidewalk runs along the west side of Broadway from Old Bayshore Highway to Rollins Road, where it transitions to both sides of the roadway, as well as on Old Bayshore Highway along both sides. A pedestrian crossing does not exist at the northbound U.S. 101 ramp access, thus providing an incomplete segment of sidewalk that a pedestrian cannot cross to access the eastern and western segments of sidewalk along the south side of Old Bayshore Highway.

4.17.1.3 *Analysis Methodology*

Signalized Intersection Level of Service

Signalized intersection operations and impacts are evaluated based on the appropriate jurisdiction's LOS standards (i.e., minimum threshold for acceptable operations). Study intersections include the LOS standards as defined by the City of Burlingame and City of San Mateo, which are defined below.

In the City of Burlingame, acceptable LOS for signalized intersections is defined as LOS D or better during the AM/PM peak period following the intersection level of service in the Highway Capacity Manual (HCM) 2010 method. The HCM 2010 method evaluates signalized intersection operations based on average control delay for all vehicles at the intersection. This average delay can be correlated to a level of service. Four intersections used the HCM 2000 due to lane configurations or signal timing that could not be analyzed by the HCM 2010. Per the City of Burlingame's General Plan Update (2018), the City's transportation performance measures will be changing from LOS standards to vehicle miles traveled (VMT) in the near future per guidelines from the California Office of Planning and Research. Level of service was used to determine the transportation impacts of the project as those municipal VMT performance measures have not been finalized.

The City of San Mateo General Plan Update (2010) adopted a performance measure of mid-LOS D and an average delay of 45.0 seconds or better as acceptable. This measure was used for those study intersections located within the City of San Mateo. The average control delay is calculated using the TRAFFIX analysis software and is correlated to an LOS designation as shown in Table 4.17-1.

Table 4.17-1: Signalized Intersection Level of Service Definitions		
Level of Service	**Description**	**Average Control Delay Per Vehicle (Seconds)**
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	≤ 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	55.1 to 80.0
F	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.	> 80.0

Unsignalized Intersection Level of Service

The operations of the unsignalized intersections were evaluated using HCM 2010. LOS ratings for stop-sign controlled intersections are based on the average control delay expressed in seconds per vehicle. At two-way or side-street-controlled intersections, the average control delay is calculated for each stopped movement, not for the intersection as a whole. For approaches composed of a single lane, the control delay is computed as the average of all movements in that lane. Table 4.17-2 summarizes the relationship between delay and LOS for unsignalized intersections.

Table 4.17-2: Unsignalized Intersection Level of Service Definitions		
Level of Service	**Description**	**Average Control Delay Per Vehicle (Seconds)**
A	Little or no delay.	≤ 10.0
B	Short traffic delays.	10.1 to 15.0
C	Average traffic delays.	15.1 to 25.0
D	Long traffic delays.	25.1 to 35.0
E	Very long traffic delays.	35.1 to 50.0
F	Extreme traffic delays with intersection capacity exceeded.	> 50.0

Freeway Segment Operations

Freeway segments were analyzed following the C/CAG Congestion Management Program 2017 report findings to formulate existing conditions. Freeway segments are evaluated using the average vehicle speed per the Highway Capacity Manual 1994 method. A freeway segment is considered to operate at an acceptable LOS if the segment operates at or better than the level of service standard identified for the study freeway segment by the C/CAG CMP. C/CAG's LOS standard for the study freeway segments is LOS E except for the following three segments which have different standards: SR 92 from I-280 to U.S. 101, which is LOS D, and U.S. 101 from Peninsula Avenue to SR 92 and Whipple Avenue to Santa Clara County Line, which are both LOS F. Table 4.17-3 describes the freeway segment LOS method followed by C/CAG. Additionally, according to the C/CAG technical guidelines, a freeway impact from the project is determined by whether project trips amount to one percent or more of segment capacity. The project does not exceed one percent of capacity on any freeway segment serving the project, therefore, a more detailed freeway segment analysis was not conducted.

Table 4.17-3: Freeway Segment Level of Service Definitions

Level of Service	Density (Passenger Car Per Mile Per Lane)
A	> 65 MPH
B	≥ 65 MPH
C	≥ 64.5 MPH
D	≥ 62 MPH
E	≥ 52 MPH
F	< 52 MPH

4.16.1.3 *Study Intersections and Freeway Segments*

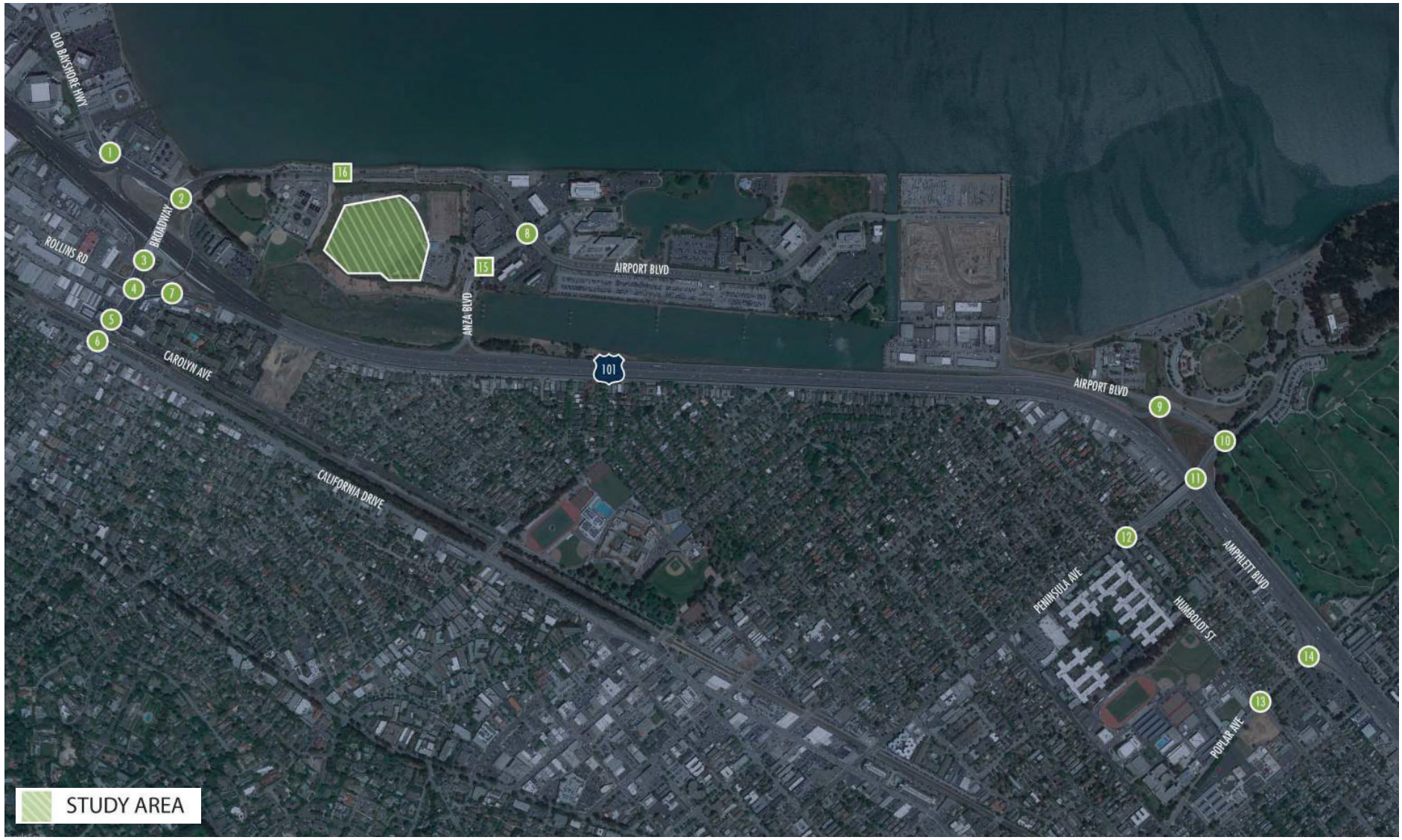
Study Intersections

The potential impacts related to the proposed development were evaluated following the standards and methodologies set forth by the cities of Burlingame, San Mateo, and Caltrans. AM and PM peak-hour traffic conditions for 13 signalized intersection and one unsignalized intersections were analyzed. The study intersections are shown on Figure 4.17-3 and listed in Table 4.17-4, below.

Table 4.17-4: Study Intersections

ID	Intersection	Jurisdiction
1	Old Bayshore Highway & U.S. 101	Caltrans
2	Broadway, Airport Boulevard & Old Bayshore Highway	Caltrans
3	Broadway & U.S. 101	Caltrans
4	Broadway & Rollins Road	City of Burlingame
5	Broadway & Carolan Avenue	City of Burlingame
6	Broadway & California Drive	City of Burlingame

Table 4.17-4: Study Intersections		
ID	**Intersection**	**Jurisdiction**
7	Cadillac Way & Rollins Road	City of Burlingame
8	Anza Boulevard & Airport Boulevard	City of Burlingame
9	Airport Boulevard & U.S. 101	Caltrans
10	Peninsula Avenue, Coyote Point Drive & Airport Boulevard	City of San Mateo
11	Peninsula Avenue & Bayshore Boulevard	City of San Mateo
12	Peninsula Avenue & Humboldt Street	City of San Mateo
13	Poplar Avenue & Humboldt Street	City of San Mateo
14	Poplar Avenue, Amphlett Boulevard & U.S. 101*	Caltrans
15	Anza Boulevard & Access 1 (Existing Driveway)*	City of Burlingame
16	Airport Boulevard & Access 2 (Proposed Driveway)*	City of Burlingame
* Unsignalized intersection.		



STUDY INTERSECTIONS | FIGURE 4.17-3

Significance Thresholds

Impacts on intersections are based on the significance criteria and thresholds of the jurisdiction in which the intersection is located. For this analysis, significance criteria for impacts on intersections are based on the Cities of Burlingame and San Mateo Level of Service standards, as described below.

City of Burlingame

1. Degrades the AM or PM peak hour from an acceptable LOS D (55 seconds/vehicle) or better under Existing or No Project Conditions to an unacceptable LOS E or worse under Project Conditions except when LOS E is determined by the City of Burlingame as acceptable due to costs of mitigation or when there would be other unacceptable impacts; or
2. Degrades the AM or PM peak hour operating at LOS E or F under Existing or No Project Conditions by increasing the delay per vehicle by five (5) seconds or more.

City of San Mateo

1. The level of service at the intersection degrades from an acceptable mid-LOS D (average delay of less than 45 seconds) or better under existing conditions to an average delay of longer than 45 seconds; or
2. The level of service at the intersection has an average delay longer than 45 seconds under existing conditions and the addition of the project trips causes the average delay at the intersection to increase by four (4) or more seconds.

For unsignalized intersections, a significant impact is said to be satisfactorily mitigated when measures are implemented that would restore intersection level of service to pre-project background or cumulative conditions, or better.

Study Freeway Segments

The following segments were selected for analysis because: 1) the project site is adjacent to U.S. 101 and 2) project access is provided via the U.S. 101 interchanges at Broadway, Anza Boulevard (NB) and Poplar Avenue (SB):

1. U.S. 101 – I-380 to Millbrae Avenue
2. U.S. 101 – Millbrae Avenue to Broadway
3. U.S. 101 – Broadway to Peninsula Avenue
4. U.S. 101 – Peninsula Avenue to SR 92
5. U.S. 101 – SR 92 to Whipple Avenue
6. U.S. 101 – Whipple Avenue to Santa Clara County Line
7. SR 92 – I-280 to U.S. 101

Traffic Scenarios Analyzed

Traffic conditions at study intersections were evaluated for six scenarios: existing conditions, existing plus project, background conditions, background plus project, cumulative conditions, and cumulative plus project. Table 4.17-5 below describes each scenario.

Table 4.17-5: Traffic Scenarios Analyzed	
Scenario	**Description**
Existing Conditions	The analysis of existing conditions was based on traffic counts recorded at all study intersections on May 30, 2018, as well as freeway count data extracted from July 13, 2018 to July 20, 2018. The existing conditions analysis also includes a description of key area roadways and an assessment of bicycle, pedestrian, and transit facilities and services near the site.
Existing Plus Project Conditions	This traffic scenario provides an assessment of operating conditions under existing conditions with the addition of project-generated traffic and transportation network infrastructure proposed by the project. The impacts of the proposed project on existing baseline traffic operating conditions were then identified.
Background Conditions	Future traffic forecasts without the proposed Project were developed for the background conditions by adding traffic from "approved but not yet constructed" developments near the project site to the existing conditions traffic counts.
Background Plus Project Conditions	This traffic scenario provides an assessment of operating conditions under background conditions with the addition of project-generated traffic and transportation network infrastructure proposed by the project. The impacts of the proposed project under background conditions were then identified.
Cumulative Conditions	Future traffic forecasts without the proposed Project were developed for the cumulative conditions by forecasting future traffic by applying a one percent annual growth rate to the existing count data and adding traffic from approved and pending developments in the area.
Cumulative Plus Project Conditions	This traffic scenario provides an assessment of operating conditions under cumulative conditions with the addition of project-generated traffic and transportation network infrastructure proposed by the project. The impacts of the proposed project under cumulative conditions were then identified.

4.17.1.4 *Existing Traffic Conditions*

As shown in Table 4.17-7, under existing conditions intersections the following study intersections are currently operating at a deficient LOS during at least one of the analyzed peak hours:

- Intersection #2: Broadway, Airport Boulevard & Old Bayshore Highway (LOS F, AM peak hour)
- Intersection #4: Broadway & Rollins Road (LOS E, AM peak hour)

4.17.1.5 *Background Conditions*

Background traffic conditions are defined as traffic conditions in the area when the project construction is near completion. The background scenario predicts the traffic conditions which would occur as approved but not yet constructed development gets constructed and occupied. For the purposes of this Initial Study, background conditions were established at the time the City initiated the traffic analysis for the proposed project (August 2018).

Background Signalized Intersection Levels of Service

Table 4.17-9 shows the LOS of signalized study intersections under background conditions. The results of the background intersection operations analysis show that seven of the 13 signalized study intersections are projected to operate at an acceptable service level during all analyzed peak hours, using the HCM methodology and their respective jurisdiction's LOS threshold. The remaining six study intersections are projected to operate at a deficient LOS during at least one of the analyzed peak hours, as shown below:

- Intersection #2: Broadway, Airport Boulevard & Old Bayshore Highway (LOS F, AM peak hour)
- Intersection #3: Broadway & U.S. 101 (LOS E, AM peak hour)
- Intersection #4: Broadway & Rollins Road (LOS E, AM peak hour)
- Intersection #6: Broadway & California Drive (LOS E, AM and PM peak hour)
- Intersection #10: Peninsula Avenue, Coyote Point Drive & Airport Boulevard (LOS D, AM peak hour)
- Intersection #12: Peninsula Avenue & Humboldt Street (LOS D, AM peak hour)

4.17.1.6 *Cumulative Conditions*

To evaluate the potential impact of traffic generated by the proposed project on the surrounding street system in 2028, the cumulative traffic condition in the area without the project was estimated. A one percent growth rate was applied to existing counts and grown to reflect estimated 2028 conditions. Traffic conditions without the project under the cumulative scenario reflect the counts with the applied growth rate as well as both approved (identified and applied under background conditions) and proposed projects within the City of Burlingame. These conditions are referred to as the cumulative baseline condition (i.e., "no project" conditions).

Cumulative Signalized Intersection Levels of Service

Table 4.17-10 shows the LOS of signalized study intersections under cumulative conditions. The results of the cumulative intersection operations analysis show that six of the 13 signalized study intersections are projected to operate at an acceptable service level during all analyzed peak hours, using the HCM methodology and their respective jurisdiction's LOS threshold. The remaining seven study intersections are projected to operate at a deficient LOS during at least one of the analyzed peak hours:

- Intersection #2: Broadway, Airport Boulevard & Old Bayshore Highway (LOS F, AM and PM peak hour)
- Intersection #3: Broadway & U.S. 101 (LOS F, AM peak hour)
- Intersection #4: Broadway & Rollins Road (LOS F, AM peak hour)
- Intersection #6: Broadway & California Drive (LOS F, AM and PM peak hour)
- Intersection #9: Airport Boulevard and U.S. 101 (LOS E, AM peak hour)
- Intersection #10: Peninsula Avenue, Coyote Point Drive & Airport Boulevard (LOS E, AM peak hour)
- Intersection #12: Peninsula Avenue & Humboldt Street (LOS E, AM peak hour; LOS D, PM peak hour)

4.17.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian facilities?	☐	☐	☒	☐
2) For a land use project, conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☒	☐
3) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	☐	☐	☒	☐
4) Result in inadequate emergency access?	☐	☐	☒	☐

Impact TRN-1: The project would conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian facilities. **(Less than Significant Impact)**

Trip Generation, Distribution and Assignment

The traffic generated by the project is estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. The project trip generation estimates the volume of traffic entering and exiting the site for the AM and PM peak hours. The trip distribution estimates the directions to and from which the project trips would travel. The trip assignment assigns the project-generated traffic to specific streets and intersections in the study area. These procedures are discussed below.

Since Topgolf is a new and unique type of facility, the Institute of Transportation Engineers (ITE) Trip Generation Manual does not have rates for such a use. In order to determine the estimated trips to be generated by the Topgolf facility, traffic counts collected in August 2014 at an existing Topgolf facility located in Scottsdale, Arizona were used. Fehr & Peers collected these counts as a part of a TIA analysis for a Topgolf facility in Roseville, CA, and one recently completed in the City of San Jose. The Scottsdale Topgolf site is self-contained, meaning that it is the only use on the site; therefore, the traffic counts can easily be converted to trip generation rates for Topgolf. Both the Scottsdale and Roseville facilities have 102 hitting bays and are approximately 70,000 square feet with the same uses as proposed for the Burlingame location. To present a worst case scenario, this study analyzed a potential for 120 hitting bays. Trips were projected for the proposed Topgolf based on trip generation rates for the number of hitting bays at the facility. The trip counts for the existing driving range, which were obtained using the Driving Range land use in the ITE Trip Generation Manual (10th Edition), were subtracted to get the number of net new trips.

Based on the trip generation estimates, the project will generate 1,546 net new daily trips, including a total of 26 trips in the AM peak hour (21 inbound/5 outbound) and 160 trips in the PM peak hour (83 inbound/77 outbound) during the weekday. These are shown in Table 4.17-6, below.

Table 4.17-6: Project Trip Generation Estimates

Land Use	Size	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Topgolf [1]	120 Bays	2,160	32	5	37	108	108	216
Driving Facility [2]	45 Tees	614	11	7	18	25	31	56
Existing Driving Range subtracted trips		-614	-11	-7	-18	-25	-31	-56
Total Project Trips		***1,546***	***21***	***5*** [3]	***26***	***83***	***77***	***160***

Sources:
[1] District data estimates
[2] Multi-Family Housing Low Rise (220) ITE Trip Generation, 10th Edition, regression equations.
[3] Five trips were retained for the AM outbound peak hour as a negative number of trips was not a feasible estimate.

Existing Intersection Level of Service

The project trips, as represented in the project trip distribution discussed above, were added to existing traffic volumes to obtain existing plus project traffic volumes. Intersection levels of service were evaluated against City of Burlingame, San Mateo, and Caltrans standards. The results of the intersection LOS analysis under existing plus project conditions are summarized in Table 4.17-7 below.

Table 4.17-7: Existing and Existing Plus Project Intersection Levels of Service

	Study Intersection	Peak Hour	Existing Condition		Existing Plus Project Condition		
			Average Delay (sec.)[1]	LOS	Average Delay (sec.)[1]	LOS	Increase in Avg. Delay
1	Old Bayshore Highway and U.S. 101	AM	33.0	C	33.6	C	+0.6
		PM	24.4	C	24.5	C	+0.1
2	Broadway, Airport Boulevard & Old Bayshore Highway	AM	**91.2**	**F**	**93.2**	**F**	+2.0
		PM	35.0	C	35.0	D	0.0
3	Broadway & U.S. 101	AM	25.5	C	26.3	C	+0.8
		PM	13.9	B	14.2	B	+0.3
4	Broadway & Rollins Road	AM	**55.3**	**E**	**55.4**	**E**	+0.1
		PM	19.7	B	19.7	B	0.0
5	Broadway & Carolan Avenue	AM	14.7	B	14.7	B	0.0
		PM	21.3	C	21.2	C	-0.1

Table 4.17-7: Existing and Existing Plus Project Intersection Levels of Service							
Study Intersection		**Peak Hour**	**Existing Condition**		**Existing Plus Project Condition**		
			Average Delay (sec.)[1]	**LOS**	**Average Delay (sec.)[1]**	**LOS**	**Increase in Avg. Delay**
6	Broadway & California Drive	AM PM	50.2 52.1	D D	50.2 52.4	D D	0.0 +0.3
7	Cadillac Way & Rollins Road	AM PM	5.8 4.3	A A	5.8 4.3	A A	0.0 0.0
8	Anza Boulevard & Airport Boulevard	AM PM	12.5 15.2	B B	12.6 15.6	B B	+0.1 +0.4
9	Airport Boulevard & U.S. 101	AM PM	30.6 11.1	C B	30.7 11.4	C B	+0.1 +0.3
10	Peninsula Avenue, Coyote Point Drive & Airport Boulevard	AM PM	42.1 13.2	D B	40.8 13.7	D B	-1.3 +0.5
11	Peninsula Avenue & Bayshore Boulevard	AM PM	21.8 22.5	C C	21.8 24.0	C C	0.0 +1.5
12	Peninsula Avenue & Humboldt Street	AM PM	40.0 35.5	D D	40.1 36.1	D D	+0.1 +0.6
13	Poplar Avenue & Humboldt Street	AM PM	14.4 15.3	B B	14.4 15.4	B B	0.0 +0.1
14	Poplar Avenue, Amphlett Boulevard & U.S. 101*	AM PM	18.7 15.1	C C	18.7 15.1	C C	0.0 0.0
15	Anza Boulevard & Access 1 (Existing Driveway)*	AM PM	9.5 11.1	A B	9.6 12.4	A B	+0.1 +1.3
16	Airport Boulevard & Access 2 (Proposed Driveway)*	AM PM	N/A N/A	N/A N/A	14.0 13.3	B B	N/A N/A

Notes:
BOLD text indicates an unacceptable LOS.
Bold Italic indicates a significant project impact.
[1] Delay shown for the signalized intersections is the weighted average control delay for all turning movements approaching the intersection.
* Unsignalized Intersection

As shown in Table 4.17-7 above, the two study intersections that currently operate at unacceptable levels would continue to do so under existing plus project conditions during the AM peak hour. No mitigation measures are proposed as project trips do not degrade intersection operations from acceptable to unacceptable conditions, or add more than five seconds of overall delay between existing and existing plus project scenarios. **(Less than Significant Impact)**

Freeway Segments Analysis

As shown in Table 4.17-8, the proposed project would not add trips greater than one percent of the freeway segment capacity during the AM and PM peak hours. Therefore, based on C/CAG's impact criteria, the project would have a less than significant impact at the identified freeway study segments under existing plus project conditions and no further study or mitigation measures are proposed. **(Less than Significant Impact)**

Table 4.17-8: Existing Plus Project Freeway Segment Level of Service

	Freeway Segment	Peak Hour	Capacity[1]	Direction	Existing LOS	Percentage of Capacity[2]
U.S. 101 Segments						
1	I-380 to Millbrae Avenue	AM	9,200	NB	E	0.0
				SB	E	0.0
		PM	9,200	NB	F	0.0
				SB	F	0.2
2	Millbrae Avenue to Broadway	AM	9,200	NB	E	0.1
				SB	E	0.0
		PM	9,200	NB	F	0.0
				SB	F	0.2
3	Broadway to Peninsula Avenue	AM	9,200	NB	F	0.1
				SB	F	0.0
		PM	9,200	NB	F	0.5
				SB	F	0.2
4	Peninsula Avenue to SR 92	AM	9,200	NB	F	0.3
				SB	F	0.0
		PM	9,200	NB	F	0.5
				SB	F	0.2
5	SR 92 to Whipple Avenue	AM	9,200	NB	F	0.3
				SB	F	0.0
		PM	9,200	NB	F	0.3
				SB	F	0.2
6	Whipple Avenue to Santa Clara County Line	AM	9,200	NB	F	0.2
				SB	F	0.0
		PM	9,200	NB	F	0.2
				SB	F	0.1
SR 92 Segment						
7	I-280 to U.S. 101	AM	4,400	EB	F	0.0
				WB	F	0.0
		PM	4,400	EB	F	0.0
				WB	F	0.0

Notes:

[1] Per the C/CAG Traffic Level of Service Calculation Methods, capacity is defined as 2,200 vehicles per hour per lane for a four-lane freeway segment and 2,300 vehicles per hour per plane for a freeway segment with six or more lanes.

[2] Percentage of project trips compared to the capacity defined by C/CAG methodology.

Background Intersection Level of Service

Traffic volumes for background conditions are comprised of existing volumes plus traffic generated by "approved but not yet built" developments to account for local growth in the study area. The City of Burlingame website provided information regarding these background development projects, with those approved as of August 2018 included in the study. Traffic counts generated by approved projects were obtained from their respective traffic impact reports or, if a report was not available, estimated based on trip generation rates published in the Institute of Transportation Engineers (ITE) Trip Generation Manual (10^{th} Edition).

The trips with TIA reports were distributed throughout the network based upon that available information. For projects that did not have transportation analysis conducted, or a TIA report available, it was determined that the Transportation Analysis for 619-625 California Drive Live/ Work Development completed in March 2018 would provide the most applicable trip distributions for the other approved projects. The remaining approved projects that used the distribution applied by 619-625 California Drive were all located within one-half mile of that proposed development, the Downtown area of Burlingame, and consisted of residential or office uses as well. Every trip generated from approved development projects in the City were assigned to the roadway network and included in the Background traffic volumes using the aforementioned methodologies. Table 4.17-9 presents the delay and LOS calculation results for the study intersections under background conditions. According to the results of the analysis, six study intersections would operate unacceptably in the AM or PM peak hours.

Table 4.17-9: Background and Background Plus Project Intersection Levels of Service

Study Intersection		Peak Hour	Background Condition		Background Plus Project Condition		
			Average Delay (sec.)[1]	LOS	Average Delay (sec.)[1]	LOS	Increase in Avg. Delay
1	Old Bayshore Highway and U.S. 101	AM	33.1	C	33.7	C	+0.6
		PM	25.3	C	25.3	C	0.0
2	Broadway, Airport Boulevard & Old Bayshore Highway	AM	**93.5**	**F**	**95.4**	**F**	+1.9
		PM	39.3	D	39.2	D	-0.1
3	Broadway & U.S. 101	AM	**71.6**	**E**	**73.1**	**E**	+1.5
		PM	15.3	B	15.6	B	+0.3
4	Broadway & Rollins Road	AM	**64.3**	**E**	**64.6**	**E**	+0.1
		PM	20.3	C	20.4	C	+0.1
5	Broadway & Carolan Avenue	AM	16.7	B	16.7	B	0.0
		PM	22.8	C	22.8	C	0.0
6	Broadway & California Drive	AM	**63.8**	**E**	**64.1**	**E**	+0.3
		PM	**56.3**	**E**	**56.7**	**E**	+0.4

Table 4.17-9: Background and Background Plus Project Intersection Levels of Service

Study Intersection		Peak Hour	Background Condition		Background Plus Project Condition		
			Average Delay (sec.)[1]	LOS	Average Delay (sec.)[1]	LOS	Increase in Avg. Delay
7	Cadillac Way & Rollins Road	AM	5.9	A	5.9	A	0.0
		PM	4.3	A	4.3	A	0.0
8	Anza Boulevard & Airport Boulevard	AM	17.9	B	18.1	B	+0.2
		PM	26.8	C	29.0	C	+2.2
9	Airport Boulevard & U.S. 101	AM	32.7	C	34.2	C	+1.5
		PM	12.6	B	12.9	B	+0.3
10	Peninsula Avenue, Coyote Point Drive & Airport Boulevard	AM	**45.3**	**D**	**46.6**	**D**	+1.3
		PM	14.8	B	15.5	B	+0.7
11	Peninsula Avenue & Bayshore Boulevard	AM	22.9	C	22.9	C	0.0
		PM	24.3	C	26.2	C	+1.9
12	Peninsula Avenue & Humboldt Street	AM	**45.6**	**D**	**45.6**	**D**	0.0
		PM	37.7	D	38.8	D	+1.1
13	Poplar Avenue & Humboldt Street	AM	15.0	B	15.0	B	0.0
		PM	15.7	B	15.8	B	+0.1
14	Poplar Avenue, Amphlett Boulevard & U.S. 101*	AM	18.7	C	18.7	C	0.0
		PM	15.3	C	15.3	C	0.0
15	Anza Boulevard & Access 1 (Existing Driveway)*	AM	10.4	B	10.4	B	0.0
		PM	15.4	C	19.0	C	+3.6
16	Airport Boulevard & Access 2 (Proposed Driveway)*	AM	N/A	N/A	14.0	B	N/A
		PM	N/A	N/A	13.3	B	N/A

Notes:
BOLD text indicates an unacceptable LOS.
Bold Italic indicates a significant project impact.
[1] Delay shown for the signalized intersections is the weighted average control delay for all turning movements approaching the intersection.
* Unsignalized Intersection

As indicated in Table 4.17-9 above, six study intersections that currently operate at an unacceptable LOS under background conditions would continue to do so under background plus project conditions. Project trips would not degrade intersection operations from acceptable to unacceptable conditions or add more than five seconds of overall delay between background and background plus project scenarios. The project, therefore, would have a less than significant impact under background plus project conditions. **(Less than Significant Impact)**

Cumulative Intersection Level of Service

In addition to the vehicle trips from "approved but not yet built" development projects discussed in the background condition above, vehicle trips from pending or proposed development projects in the study area were also estimated. Similar to the approved developments, trip generation estimates from the proposed development projects were obtained from their respective TIA reports, or estimated based on trip generation rates published in the ITE Trip Generation, 10th Edition when reports were not available.

Traffic flow and intersection operations along the Broadway corridor could be improved by the planned Burlingame Broadway Grade Separation Project. The Broadway Grade Separation Project would remove the at-grade railroad crossing and improve traffic flow between the Broadway and Carolan Avenue, and Broadway and California Drive signalized intersections. Most critically, it would improve the Broadway and California Drive intersection which under cumulative conditions experiences significant delays.

Table 4.17-10: Cumulative and Cumulative Plus Project Intersection Levels of Service

	Study Intersection	Peak Hour	Cumulative Condition		Cumulative Plus Project Condition		
			Average Delay (sec.)[1]	LOS	Average Delay (sec.)[1]	LOS	Increase in Avg. Delay
1	Old Bayshore Highway and U.S. 101	AM	38.1	D	38.1	D	+0.0
		PM	31.0	C	31.1	C	+0.1
2	Broadway, Airport Boulevard & Old Bayshore Highway	AM	**167.5**	**F**	**169.9**	**F**	+2.4
		PM	**100.8**	**F**	**101.1**	**F**	+0.3
3	Broadway & U.S. 101	AM	**97.1**	**F**	**98.8**	**F**	+1.6
		PM	18.8	B	19.5	B	+0.7
4	Broadway & Rollins Road	AM	**96.9**	**F**	**97.2**	**F**	+0.3
		PM	22.5	C	22.6	C	+0.1
5	Broadway & Carolan Avenue	AM	24.0	C	24.0	C	+0.0
		PM	27.4	C	27.4	C	+0.0
6	Broadway & California Drive	AM	**130.7**	**F**	**131.0**	**F**	+0.3
		PM	**89.5**	**F**	**91.3**	**F**	+0.8
7	Cadillac Way & Rollins Road	AM	6.5	A	6.5	A	+0.0
		PM	4.5	A	4.5	A	+0.0
8	Anza Boulevard & Airport Boulevard	AM	18.7	B	18.9	B	+0.2
		PM	29.6	C	32.2	C	+2.6
9	Airport Boulevard & U.S. 101	AM	**59.7**	**E**	**55.5**	**E**	-4.2
		PM	14.1	B	14.5	B	+0.4

Table 4.17-10: Cumulative and Cumulative Plus Project Intersection Levels of Service

Study Intersection		Peak Hour	Cumulative Condition		Cumulative Plus Project Condition		
			Average Delay (sec.)[1]	LOS	Average Delay (sec.)[1]	LOS	Increase in Avg. Delay
10	Peninsula Avenue, Coyote Point Drive & Airport Boulevard	AM	**72.2**	**E**	**74.7**	**E**	+2.3
		PM	16.8	B	17.5	B	+0.7
11	Peninsula Avenue & Bayshore Boulevard	AM	29.8	C	29.9	C	+0.1
		PM	33.4	C	40.0	D	+6.6
12	Peninsula Avenue & Humboldt Street	AM	**65.5**	**E**	**65.6**	**E**	+0.1
		PM	**48.1**	**D**	**48.8**	**D**	+0.7
13	Poplar Avenue & Humboldt Street	AM	17.7	B	17.7	B	+0.0
		PM	20.4	C	20.6	C	+0.2
14	Poplar Avenue, Amphlett Boulevard & U.S. 101*	AM	22.8	C	22.8	C	+0.0
		PM	17.7	C	17.7	C	+0.0
15	Anza Boulevard & Access 1 (Existing Driveway)*	AM	10.5	B	10.5	B	+0.0
		PM	16.0	C	20.1	C	+4.1
16	Airport Boulevard & Access 2 (Proposed Driveway)*	AM	--	--	14.9	B	--
		PM	--	--	14.1	B	--

Notes:
BOLD text indicates an unacceptable LOS.
Bold Italic indicates a significant project impact.
[1] Delay shown for the signalized intersections is the weighted average control delay for all turning movements approaching the intersection.
* Unsignalized Intersection

Under cumulative plus project conditions, only one intersection (Intersection #11 Peninsula Avenue/Bayshore Boulevard) would be degraded from LOS C to LOS D during the PM peak hour; however, the added project trips would not degrade intersection operations from acceptable to unacceptable mid-LOS D conditions. **(Less than Significant Impact)**

Pedestrian Facilities

Pedestrian facilities consist of multiuse paths adjacent to the project site, as well as sidewalks, crosswalks, and pedestrian signals at signalized intersections. An existing sidewalk provides access from Anza Boulevard, along the west side of the existing driveway to the surface parking lot, soccer field, and Burlingame Golf Center. The sidewalk would extend from its current terminus at the parking lot, into the proposed surface parking lot that will serve the project. The most recent site plan illustrates two sidewalks across the proposed parking lot providing east/west connectivity. Those sidewalks would connect to existing pedestrian infrastructure in the parking lot and along the driveway to Anza Boulevard to improve pedestrian connectivity throughout the site. (**Less than Significant Impact)**

Bicycle Facilities

Bicycle connectivity immediately around the project site includes Class I bicycle paths east-west along both the waterfront north of Airport Boulevard, east of Anza Boulevard and south of Airport Boulevard, and along the western side of Anza Boulevard. The Class I path along Anza Boulevard provides a connection via the existing driveway to the facilities north and east of the project site, as well as from the project site, south of Airport Boulevard to Beach Road. Additionally, Class II bike lanes are available along portions of Airport Boulevard and Broadway to the project site. Bicycle connectivity from the existing driveway shall be reviewed by the City to ensure connectivity as Class II bike lanes currently exist along the driveway for approximately 300 feet. **(Less than Significant Impact)**

Transit Services

Direct transit service to the project site is limited with the peak hour, weekday Burlingame-Bayside BART/Caltrain Shuttle serving bus stops at the Airport and Anza Boulevard intersection, and the Burlingame Trolley serving the adjacent Double Tree hotel at 45-minute headways. The Burlingame-Bayside shuttle is free to the public, and runs during peak travel hours on the weekdays at 20 to 30-minutes headways.

Additionally, a Transportation Demand Management (TDM) Plan was prepared for the project to encourage future employees to walk, bike, and ride public transit to get to the project site. The following TDM measures shall be implemented by Topgolf:

- A display in the employee breakroom to inform new employees of transit options, bikeshare, and other available transportation modes.
- Constrained parking for employees.
- Secure bicycle storage.
- Improvements to existing, adjacent bicycle and pedestrian facilities.

With the implementation of the TDM Plan, the expected volume of riders would not exceed the carrying capacity of the existing transit service near the project site. **(Less than Significant Impact)**

Impact TRN-2:	The project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). **(Less than Significant Impact)**

In response to Senate Bill 743 (SB 743), the Office of Planning and Research (OPR) has updated CEQA guidelines to include new transportation-related evaluation metrics. Draft guidelines were developed in August 2014, and updated in in January 2016 based on public comments in response to the August 2014 guidelines. OPR released final proposed Guidelines on November 27, 2017. The final proposed Guidelines include a new Section 15064.3 on VMT analysis and thresholds for land use developments. OPR also released a Technical Advisory on Evaluating Transportation Impacts in CEQA. New Guidelines section 15064.3 states that they do not take effect until January 1, 2020 unless the lead agency adopts them earlier. The City of Burlingame has not established any standards or thresholds on VMT. Therefore, the new guidelines have not yet been adopted and are not in effect at this time. Since there are no standards in effect on VMT analysis, a preliminary

assessment of the vehicle miles of travel (VMT) generated by the proposed project was prepared for information and disclosure purposes only.

To estimate VMT within the City of Burlingame, both without and with the project, Fehr & Peers used the C/CAG travel demand model as well as StreetLight data. StreetLight is a data vendor that provides cell phone data that can be used to estimate average trip lengths, as well as trip origins and destinations. StreetLight data was used to establish average trip lengths to two existing Topgolf sites – one in Roseville, CA and another in Scottsdale, AZ. This data was used to estimate the total project VMT produced by those two sites.

Trips to the Roseville Topgolf average 11 miles on a weekday, with slightly longer average trip of 13 miles on the weekends. Average trip length to that location on weekdays is 35 minutes and 39 minutes on weekends. Trips to the Scottsdale facility average 10 miles on a weekday and 14 miles on average during the weekends. Average trip length to that location on weekdays is 35 minutes and 37 minutes on weekends. Both illustrate the similar trip lengths in distance and time traveled to access a Topgolf location across different regions of the country.

The project has the potential to generate approximately 12,000 to 16,000 VMT on an average daily basis, accounting for longer trip lengths and greater levels of trip generation on weekends as compared to weekdays. To assess the project's effect on VMT, the C/CAG Model was executed for the existing scenario to devise the City of Burlingame's existing citywide VMT. The household and population data was derived from the American Community Survey (2017) and the employment data came from the Longitudinal Employer – Household Dynamics (LEHD) 2015 estimates. An estimated 450 people will be employed by the Topgolf at this location illustrating the net change in employment. The existing daily VMT for the City of Burlingame came from a select zone analysis using the C/CAG model. Results indicate that existing land uses in Burlingame generate approximately 1,754,362 VMT per day.

Results of the VMT analysis indicate the project would contribute to an increase in VMT as the project adds a regional entertainment use expected to attract customers from a catchment area larger than only the City of Burlingame. This conclusion is for information and disclosure purposes only.

Impact TRN-3:	The project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). **(Less than Significant Impact)**

It is projected that the majority of vehicle trips to the Topgolf site will access the site via the existing driveway, which currently serves the existing Burlingame Golf Center, Doubletree Hotel, and Murray Soccer Field. The Anza Boulevard full-movement driveway measures approximately 34 feet wide, which includes painted, on-street bicycle lanes on both sides, one inbound lane, and one outbound lane. The driveway is projected to operate acceptably with the existing side-street, stop-control for existing and background plus project conditions. Outbound queue lengths were reviewed for existing and background plus project conditions to determine if the driveway to the existing small parking lot on the south side would be obstructed. The outbound drive to the parking lot is approximately 26 feet from the stop bar. The longest outbound vehicle queue is estimated to be one vehicle. Therefore, the outbound vehicles on the driveway will not obstruct the small parking lot.

The proposed full-movement project driveway at Airport Boulevard is projected to be a secondary vehicular access to the Anza Boulevard driveway. The driveway will measure approximately 24 feet wide and provide one inbound lane and one outbound lane. It is proposed that the new roadway connect to the existing parallel parking facility east of the Burlingame Wastewater Treatment facility. Traffic control will remain as a side-street, stop-control and is projected to operate acceptably. Westbound to southbound left-turn vehicles will utilize the existing dedicated left-turn lane on Airport Boulevard.

Public Works would review future signage and/or landscaping plans to ensure adequate sight distance is provided at both project driveways and would not obstruct a driver's view of on-coming traffic. Therefore, the project would not increase hazards due to its design. **(Less than Significant Impact)**

Impact TRN-4:	The project would not result in inadequate emergency access. **(Less than Significant Impact)**

The proposed project's alignments of drive aisles, and the radii of the corners and curbs are adequate to accommodate circulation of emergency vehicles. Therefore, the project would not result in inadequate emergency access. **(Less than Significant Impact)**

4.18 TRIBAL CULTURAL RESOURCES

4.18.1 Environmental Setting

4.18.1.1 *Regulatory Framework*

State

Assembly Bill (AB) 52, effective July of 2015, established a new category of resources for consideration by public agencies when approving discretionary projects under CEQA, called Tribal Cultural Resources (TCRs). AB 52 requires lead agencies to provide notice of projects to tribes that are traditionally and culturally affiliated with the geographic area if they have requested to be notified. Where a project may have a significant impact on a tribal cultural resource, consultation is required until the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource or when it is concluded that mutual agreement cannot be reached.

Under AB 52, a TCRs are defined as follows:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are also either:
    - Included or determined to be eligible for inclusion in the California Register of Historic Resources[35]
    - Included in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)
- A resource determined by the lead agency to be a TCR.

4.18.1.2 *Existing Conditions*

Burlingame is situated within the historic territory of many discrete tribes of Native Americans known collectively as the Ohlone. The Ohlone inhabited a natural environment of grasslands and oak forests in the Burlingame area. Burlingame contains 10 recorded Native American sites.

The project site does not contain any recognized Native American resources. The project site was the former location of a landfill, which was closed in 2002. Development on the site consists of a driving range with hitting bays, small accessory storage structures, and pole-mounted nets.

[35] See Public Resources Code section 5024.1. The State Historical Resources Commission oversees the administration of the CRHR and is a nine-member state review board that is appointed by the Governor, with responsibilities for the identification, registration, and preservation of California's cultural heritage. The CRHR "shall include historical resources determined by the commission, according adopted procedures, to be significant and to meet the criteria in subdivision (c) (Public Resources Code, Section 5024.1 (a)(b)).

4.18.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	☐	☐	☐	☒
2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying this criteria, the significance of the resource to a California Native American tribe shall be considered.	☐	☒	☐	☐

Impact TCR-1:	The project would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k). **(No Impact)**

The project site does not contain tribal cultural resources that are listed or eligible for listing in the California Register, or in a local register of historical resources. For this reason, the project would not cause a substantial adverse change to these resources. **(No Impact)**

Impact TCR-2:	The project would not cause a substantial adverse change in the significance of a tribal cultural resource that is determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. **(Less than Significant Impact with Mitigation Incorporated)**

AB 52 requires lead agencies to conduct formal consultations with California Native American tribes during the CEQA process to identify tribal cultural resources that may be subject to significant impacts by a project. Where a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document must discuss the impact and whether feasible alternatives or mitigation measures could avoid or substantially lessen the impact. This consultation requirement applies only if the tribes have sent written requests for notification of projects to the lead agency. At the time of preparation of this Initial Study, no Native American tribes that are or have been

traditionally and/or culturally affiliated within the project vicinity have requested notification from the City of Burlingame under AB 52 regarding projects in the area and their effects on a tribal cultural resource.

As mentioned in *Section 4.18.1.2, Existing Conditions*, the project site does not contain any recognized tribal cultural resources. The site was Bayfront filled in the 1950s and was formerly used as a landfill before being repurposed for use as a driving range. The historical land uses of the site indicate that the presence of as-yet undiscovered tribal cultural resources is unlikely. Furthermore, the project does not propose substantial excavation which reduces the potential disturbance of subsurface tribal cultural resources.

Although disturbance of tribal cultural resources is unlikely given the fill material, construction activities could uncover previously unidentified tribal cultural resources. If disturbed during construction, tribal cultural resources would be significantly impacted. The proposed project includes mitigation measures (see MM CUL-2.1 through -2.3) to address the potential discovery of subsurface cultural materials, including tribal cultural resources. Implementation of these mitigation measures would reduce the project's impact to less than significant. **(Less than Significant Impact with Mitigation Incorporated)**

4.19 UTILITIES AND SERVICE SYSTEMS

4.19.1 Environmental Setting

4.19.1.1 *Regulatory Framework*

State and Regional

Urban Water Management Plan

Pursuant to The State Water Code, water suppliers providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet (approximately 980 million gallons) of water annually must prepare and adopt an urban water management plan (UWMP) and update it every five years. As part of a UWMP, water agencies are required to evaluate and describe their water resource supplies and projected needs over a 20-year planning horizon, water conservation, water service reliability, water recycling, opportunities for water transfers, and contingency plans for drought events. The City's most recent UWMP was prepared in June 2016.

Wastewater

The San Francisco Bay Regional Water Quality Board (RWQCB) includes regulatory requirements that each wastewater collection system agency shall, at a minimum, develop goals for the City's Sewer System Management Plan to provide adequate capacity to convey peak flows.

Assembly Bill 939

The California Integrated Waste Management Act of 1989, or Assembly Bill 939 (AB 939), established the Integrated Waste Management Board, required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50 percent of solid waste generated (from 1990 levels), beginning January 1, 2000, and divert at least 75 percent by 2010. Projects that would have an adverse effect on waste diversion goals are required to include waste diversion mitigation measures.

Assembly Bill 341

Assembly Bill (AB) 341 sets forth the requirements of the statewide mandatory commercial recycling program in the Public Resources Code. All businesses that generate four or more cubic yards of garbage per week and multi-family dwellings with five or more units in California are required to recycle. AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

Senate Bill 1383

Senate Bill (SB) 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The bill grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025.

Local

Envision Burlingame 2040 Draft General Plan

The City's 2040 General Plan contains the following goals and policies pertaining to utilities and service systems which are applicable to the proposed project.

Policy	Description
IF-2.3	Ensure long-term water supply capacity prior to granting building permits for new development. Require that new development projects fund the full cost of upgrading water storage and supply infrastructure to meet their specific needs.
IF-3.6	Require new development projects to fund the full cost of upgrading sewage collection and treatment infrastructure to meet their specific needs.
IF-5.8	Support regional efforts to develop and implement effective waste management strategies.

4.19.1.2 *Existing Conditions*

Water Supply and Services

Burlingame is a member of Bay Area Water Supply and Conservation Agency (BAWSCA) and purchases all of its potable water from the San Francisco Public Utilities Commission Regional Water System (SFPUC RWS). Water distribution, wastewater collection, water conservation, and maintenance of water quality are Burlingame's main water resource functions, as treated water purchased from the SFPUC RWS does not require further treatment.

Based on the City's Urban Water Management Plan, Burlingame is expected to have adequate water supply for projected demands in a normal rainfall year until the year 2040. During a single-dry rainfall year, water demand may exceed supply by seven to 17 percent after 2020 and under multiple dry years demand may exceed supply from 21 to 30 percent after 2020. The City of Burlingame has a Water Shortage Contingency Plan to address up to a 50 percent supply reduction. During 2015, the City had a cumulative water demand reduction of approximately 31 percent relative to 2013 water demand.[36]

There is an existing 16-inch water main in Airport Boulevard, 12-inch water main in Anza Boulevard and a water main along the site's western boundary available to serve the project.[37]

Wastewater Services

The City maintains the sewer system within the City boundaries. With few exceptions, the sewer system is gravity fed to lift stations located in the industrial sections of town, then to the Burlingame Wastewater Treatment Plant (WWTP) at 1103 Airport Boulevard. The WWTP provides treatment of domestic and commercial wastewater originating from the City of Burlingame, Town of

[36] City of Burlingame. *2015 Urban Water Management Plan*. June 2016.
[37] City of Burlingame. Existing Conditions Report – Public Draft. Figure 5-1 Citywide Water System. November 2015.

Hillsborough, and the Burlingame Hills Sewer Maintenance District. The WWTP has an average dry weather flow of three million gallons per day (mgd) and a total capacity of 5.5 mgd, leaving approximately 2.5 mgd of excess capacity.[38]

The WWTP is part of the North Bayside System Unit (NBSU), a joint powers authority that includes the cities of Burlingame, Millbrae, South San Francisco and San Bruno, as well as the San Francisco International Airport. Based on the joint use agreement, the WWTP discharges treated and disinfected effluent through the NBSU force main to the South San Francisco, and San Bruno Water Quality Control Plant, where the effluent is dechlorinated before being discharged into the Lower San Francisco Bay.

There is an existing sanitary sewer line servicing the existing buildings north of the site; this sewer line connects to an existing sewer main in Airport Boulevard. The project site itself is developed for use as a driving range. The current use of the site does not generate any wastewater.

Storm Drainage

The Citywide storm drainage system includes five major watershed areas: Easton, Burlingame/ Ralston Creek, Sanchez/Terrace, Mills, and El Portal/Trousdale. The project site is located within the Sanchez/Terrace watershed.[39]

The Sanchez/Terrace watershed is located on the southwest portion of the City. Flooding occurs within this area in the Laguna Avenue residential area and along California Drive. San Francisco Bay backflows into the residential area during high tides. The project site is not located in an area with known drainage issues. No storm drain improvement projects have been planned for the area.[40]

Solid Waste

The City of Burlingame is a member of Rethink Waste, South Bayside Waste Management Authority (Rethink Waste). Rethink Waste is a joint powers authority comprised of the cities of Atherton, Belmont, Burlingame, East Palo Alto, Foster City, Hillsborough, Menlo Park, Redwood City, San Carlos, San Mateo, unincorporated San Mateo, and West Bay Sanitary District. Corinda Los Trancos Landfill (Ox Mountain Landfill), is the principal landfill for Rethink Waste.[41] Ox Mountain Landfill has a remaining capacity of approximately 69 million cubic yards and has an estimated closure date of 2040.[42] Rethink Waste contracts with Ox Mountain Landfill for disposal of its member agencies, including the City of Burlingame. Recology San Mateo (Recology) provides solid waste, recycling, and organics collection services to all residential and commercial customers within the 12 member agencies of Rethink Waste.

[38] City of Burlingame. *Existing Conditions Report – Public Draft.* Page 5-6. November 2015.
[39] City of Burlingame. *Existing Conditions Report – Public Draft*. Figure 5-4 Citywide Storm Drain System and Watersheds. November 2015.
[40] City of Burlingame. *Existing Conditions Report – Public Draft.* Figure 5-5 Neighborhood Storm Drain Projects. November 2015.
[41] Feldman, Cliff. Personal Communications with Rethink Waste Recycling Programs Manager. December 8, 2014.
[42] McGourty, Scott. Personal Communications with Environmental Manager at Ox Mountain Landfill. November 6, 2014.

4.19.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
2) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
3) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
4) Generate solid waste in excess of state or local standards or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
5) Negatively impact the provision of solid waste services or impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
6) Be noncompliant with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Impact UTL-1: The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. **(Less than Significant Impact)**

Water Facilities

The proposed project would increase the water demand at the project site; however, as is discussed under Impact UTL-2, there would be adequate water supply to service the project with existing providers. The project would connect to existing water mains in the area to provide water to the proposed building and irrigate landscaped areas. Connecting to existing water mains would occur during grading of the site and result in minimal environmental effects. The project would not result in

the relocation or construction of new water facilities. Thus, the impact would be less than significant. **(Less than Significant Impact)**

Wastewater Treatment Facilities

The proposed project would increase the demand for wastewater treatment at the site; however, as discussed under Impact UTL-3, the WWTP has adequate capacity to accommodate the increased demand. The project would connect to existing sewer mains in the area to dispose of wastewater generated on-site. The project would not result in the relocation or construction of new wastewater treatment facilities. Thus, the impact would be less than significant. **(Less than Significant Impact)**

Stormwater Facilities

The proposed project would increase stormwater runoff at the site; however, as discussed in *Section 4.10, Hydrology and Water Quality*, stormwater runoff from the new impervious surfaces on the site (building roofs, concrete and asphalt concrete) would drain into bioretention facilities located within adjacent landscaped areas, which would have sufficient capacity to treat the runoff prior to it entering the storm drainage system. The proposed stormwater retention facilities would reduce the rate of stormwater runoff from the site and avoid impacts to the existing storm drainage system serving the site. The project would not result in the relocation or construction of new stormwater facilities. Thus, the impact would be less than significant. **(Less than Significant Impact)**

Electric Power, Natural Gas, and Telecommunications Facilities

The proposed project would connect to existing utility lines in the area for electric, natural gas, and telecommunication services. The project would not result in the relocation or construction of new electric power, natural gas, and/or telecommunications facilities. Thus, the impact would be less than significant. **(Less than Significant Impact)**

Impact UTL-2:	The project would not have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. **(Less than Significant Impact)**

The project proposes a Topgolf entertainment complex that includes a three-level, approximately 71,074 square-foot main building, outdoor patio, and an approximately five-acre outdoor driving range outfield. The project also includes an approximately 20,000-square foot mini-golf area. All existing improvements on the site would be removed to accommodate the proposed development.

Using CalEEMod water use rates for the proposed land uses the proposed project is estimated to have a water demand of 20,061 gallons per day (0.02 mgd).[43] The outdoor driving range would be artificial turf and would not increase water demand for the project. It was conservatively assumed that the entirety of the mini-golf area would be natural grass. If this area is covered with artificial turf, the water demand from the project would be reduced accordingly.

[43] 71,074 square feet entered in as "Racquet Club" and 20,000 square feet entered in as "Golf Course". CalEEMod. Appendix D – Default Data Tables. Table 9.1 Water Use Rates. September 2016.

Buildout of the General Plan is estimated to increase water demand in the City to 2,138 million gallons in 2040 (5.86 mgd). This amounts to an increase in water demand of approximately 855 million gallons annually (2.34 mgd) relative to the recorded 2015 water demand of 1,283 million gallons (3.5 mgd).[44] The proposed project would comprise a fraction of expected citywide increases in water demand (approximately 0.8 percent). The City's 2015 UWMP concluded that the City would have adequate water supply to meet demand in normal, dry, and multiple-dry year scenarios upon implementation of water shortage contingency actions. The proposed project is consistent with the land use assumptions which were used to make that conclusion; therefore, the project would have adequate water supply to meet its demands. **(Less than Significant Impact)**

Impact UTL-3:	The project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. **(Less than Significant Impact)**

The proposed project would have a wastewater demand of approximately 9,782 gallons per day.[45] This increase in wastewater generation at the site would be minimal in relation to expected citywide increases in wastewater generation. As mentioned in *Section 4.19.1.2, Existing Conditions*, the WWTP which serves the City of Burlingame has approximately 2.5 mgd of treatment capacity. The wastewater demand of the proposed project would not exceed the capacity of the WWTP and, therefore, the impact would be less than significant. **(Less than Significant Impact)**

Impact UTL-4:	The project would not generate solid waste in excess of state or local standards or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. **(Less than Significant Impact)**

The proposed project is estimated to generate 405 tons of solid waste per year.[46] The proposed project would increase the solid waste generated at the site when compared to existing conditions; however, this increase would not result in an exceedance of capacity for disposal of solid waste in the City. **(Less than Significant Impact)**

Impact UTL-5:	The project would not negatively impact the provision of solid waste services or impair the attainment of solid waste reduction goals. **(Less than Significant Impact)**

The proposed project would be consistent with the state's solid waste reduction goal 75 percent by 2025. The proposed project would be required to divert and recycle waste consistent with federal, state, and local requirements. Thus, the project would not impair the attainment of solid waste reduction goals. **(Less than Significant Impact)**

[44] City of Burlingame. Burlingame 2040 General Plan DEIR. Page 20-7. June 2018.
[45] Based on 85 percent of water use attributable to the proposed 71,074-square foot building.
[46] CalEEMod. Appendix D – Default Data Tables. Table 10.1 Solid Waste Disposal Rates. September 2016.

Impact UTL-6:	The project would not be noncompliant with federal, state, and local management and reduction statutes and regulations related to solid waste. **(No Impact)**

As discussed under Impact UTL-5, the project would comply with local, state, and federal regulations related to solid waste. **(No Impact)**

4.20 WILDFIRE

4.20.1 Environmental Setting

4.20.1.1 *Existing Conditions*

The project site is in an urbanized area. The site is not located within an identified Very High Fire Hazard Severity Zone in a State Responsibility Area (SRA) or a Local Responsibility (LRA). The project site is not located near wildlands that could present a fire hazard.

4.20.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
1) Impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
2) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
3) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
4) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

The project site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones; therefore, the project would not result in wildfire impacts. **(No Impact)**

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
2)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
3)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Impact MFS-1: The project does not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. **(Less than Significant Impact with Mitigation Incorporated)**

As discussed in the prior sections of this Initial Study, the proposed project would not degrade the quality of the environment, substantially affect biological resources or eliminate important examples of California history or prehistory with implementation of the identified standard measures, conditions of approval, and mitigation measures. As discussed in *Section 4.3, Air Quality*, implementation of mitigation measures (MM AIR-3.1 and MM AIR-3.2) for impacts during project construction would reduce potentially significant air quality impacts to a less than significant level. As discussed in *Section 4.4, Biological Resources,* implementation of mitigation measures (MM BIO-1.1) for impacts to nesting birds would reduce potentially significant impacts to biological resources to a less than significant level. As discussed in *Section 4.5, Cultural Resources,* with implementation of the identified standard measures and mitigation measures (MM CUL-2.1 – 2.3), the project would result in a less than significant impact on archaeological and historic resources.

Significant project-level impacts can all be mitigated to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

Impact MFS-2:	The project does not have impacts that are individually limited, but cumulatively considerable. **(Less than Significant Impact)**

Cumulative Traffic Noise Impacts

The proposed project would not result in substantial increases in off-site traffic noise impacts relative to cumulative traffic conditions present without the project. Since the predicted increases in traffic noise levels are below three dBA, the project would have a less than significant impact on cumulative noise resulting from an increase in traffic. **(Less than Significant Impact)**

Cumulative Transportation Impacts

The Traffic Impact Analysis prepared for the project included an evaluation of intersection levels of service (LOS). The analysis evaluated existing plus project, background plus project, and cumulative plus project scenarios. The results of the LOS analysis indicated that the intersections currently operating unacceptably would continue to do so under background plus project and cumulative plus project conditions. All of the other study intersections would operate at acceptable levels of service under all scenarios analyzed. Therefore, cumulative traffic impacts of the project would be less than significant. **(Less than Significant Impact)**

Impact MFS-3:	The project does not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. **(Less than Significant Impact with Mitigation Incorporated)**

Consistent with Section 15065(a)(4) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. Under this standard, a change to the physical environment that might otherwise be minor must be treated as significant if people would be significantly affected. This factor relates to adverse changes to the environment of human beings generally, and not to effects on particular individuals. While changes to the environment that could indirectly affect human beings would be represented by all of the designated CEQA issue areas, those that could directly affect human beings include construction air quality, hazards and hazardous materials and noise. The proposed project would adhere to General Plan policies and implement mitigation measures to reduce potential impacts to a less than significant level. As discussed in *Section 4.3, Air Quality*, with implementation of mitigation measures MM AIR-3.1 and MM AIR-3.2, project construction activities would not expose sensitive receptors in the project area to health risks associated with toxic air contaminants or fugitive dust above CEQA significance thresholds. As discussed in *Section 4.9, Hazards and Hazardous Materials*, the proposed project shall implement MM HAZ-5.1 to ensure FAA clearance is obtained for the proposed net poles. With an FAA Determination of No Hazard, the proposed net poles would not result in a significant safety risk to airport operations.

The project proposes placement of piles to support the proposed building and net poles through the existing landfill cap. Changes to the landfill are subject to regulatory controls from a variety of local and state agencies as described in *Section 4.9, Hazards and Hazardous Materials*. The final geotechnical report would identify the need for additional slurry cap or seal at each pile location to reduce the potential for landfill gas seepage. The modifications proposed by the project would require an amendment to the Final Closure and Postclosure Maintenance Plan subject to approval by the LEA, SWRCB, and CalRecycle. For these reasons, implementation of the project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment and would not cause a substantial adverse effect on human beings.

No other direct or indirect adverse effects on human beings have been identified. **(Less than Significant Impact with Mitigation Incorporated)**

SECTION 5.0 REFERENCES

The analysis in this Initial Study is based on the professional judgement and expertise of the environmental specialists preparing this document, based upon review of the site, surrounding conditions, site plans, and the following references:

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SECTION 6.0 LEAD AGENCY AND CONSULTANTS

6.1 LEAD AGENCY

City of Burlingame
Kevin Gardiner, Community Development Director
Catherine Keylon, Senior Planner

6.2 CONSULTANTS

David J. Powers & Associates, Inc.
Environmental Consultants and Planners

Will Burns, AICP, Principal Project Manager
Mike Campbell, AICP, Project Manager
Tali Ashurov, Associate Project Manager
Daniel DeBrito, Associate Project Manager
Zachary Dill, Graphic Artist

Arbor Resources
Consulting Arborists
David L. Babby, Registered Consulting Arborist

Bollard Acoustical Consultants, Inc.
Noise and Vibration Consultants
Paul Bollard, President

Cornerstone Earth Group
Geotechnical Consultants
John Dye, Principal Engineer

Digital Imaging Studio
Aesthetic Consultants
Patrick Ghiringhelli, 3D Design Visualization Director

Environmental Advisors and Engineers, Inc.
Hazardous Materials Consultants
Deborah A. English, P.E, Senior Project Manager

Fehr & Peers
Traffic Consultants

FirstCarbon Solutions
Biological Consultants
Jason Brandman, Project Manager
Brian Mayerle, Biologist

Geo-Logic Associates
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Richard A. Mitchell, PG, CEG, Principal Engineering Geologist

H.T. Harvey & Associates
Ecological Consultants
Steve Rottenborn, Project Manager/Senior Wildlife Ecologist

Illingworth & Rodkin, Inc.
Air Quality Consultants
James Reyff, President
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