SECTION 2.0 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION

In accordance with Section 15143 of the CEQA Guidelines, the discussion in this EIR is focused on the significant effects on the environment resulting from the proposed Serramonte Views project.

Implementation of the proposed project would result in redevelopment of the project site with 323 condominium units and 176 hotel rooms. Mitigation measures are identified for all significant project impacts. "Mitigation Measures" are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines 15370). Each impact is numbered using an alpha-numerical system that identifies the environmental issue. For example, Impact GEO-1, denotes the first significant impact discussed in the geology and soils section. Mitigation measures (MM) are also numbered to correspond to the impact they address. For example, MM AQ-2.2 refers to the third mitigation measure for the second impact in the air quality section. The letter codes used to identify environmental issues are listed below.

Letter Code	**Environmental Issue**
AES	Aesthetics
AIR	Air Quality
C	Cumulative
EN	Energy
GEO	Geology and Soils
GHG	Greenhouse Gas Emissions
LU	Land Use
TRAN	Transportation

2.1 AESTHETIC AND VISUAL RESOURCES

2.1.1 Setting

2.1.1.1 *Regulatory Framework*

City of Daly City General Plan

The City of Daly City General Plan includes a Visual Quality section under the Resources Management Element. General Plan policies and tasks relevant to the Project with regards to aesthetics are listed below.

Policy	Description
Task CE-20.7	As a part of all new development, require, where appropriate, the provision of pedestrian-oriented signs, pedestrian-scaled lighting, benches, and other street furniture so as to make non-motorized forms of travel comfortable and attractive alternatives to the automobile. Where necessary in new development, the City may require additional sidewalk and/or right-of-way width to accommodate these amenities.
Policy LU-16	Regulate of the size, quantity, and location of signs to maintain and enhance the visual appearance of Daly City.
Policy RME-20	Recognize the physical differences between different parts of the City and regulate land uses within these areas accordingly.
Task RME-20.4	Incorporate design features in new development that reflect the character of the neighborhood, to ensure that new construction is compatible with existing development.
Policy LU-17	Ensure that private development is responsible for providing any on-or off-site improvements related to and/or mitigating the impacts it causes.

2.1.1.2 *Existing Conditions*

The 6.07-acre project site is located in an urban, developed area of Daly City. The project site is bounded by Serramonte Boulevard and Serramonte Shopping Center to the north, commercial and retail buildings to the east and west, single-family attached residences to the southeast, and a Chinese cemetery to the south (refer to Figure 1.1-3).

The project is located on an undeveloped hillside and is mostly visible from surrounding roadways (e.g., Serramonte Boulevard, Gellert Boulevard, and Callan Boulevard), and SR 1 and I-280 freeways. The site is covered with lush vegetation and mature trees.

Views of the project site and area are shown in Figures 2.1-1 to 2.1-6 beginning on page 25.

Surrounding Visual Character

As described above, the project site is surrounded by development. The Serramonte Shopping Center located north of the site consists of storefront signs, minimal landscaping, expansive parking lots, and older one- and two-story commercial buildings. The commercial uses to the east and west

of the site consist of a fast-food restaurant with a drive-through and two gas stations. The cemetery is immediately south of the project site and located on the down sloping, southward facing portion of the hillside.

Scenic Vistas and Resources

San Bruno Mountain reaches approximately 1,000 feet in elevation and is visible from various locations throughout the City, including the project site. Views of the coastline are not visible from the project site. The project site has remained vacant and undeveloped and no scenic resources, such as rock outcroppings or historic buildings (refer to *Section 2.8 Cultural Resources*), are present on the site or in the project area, other than numerous mature trees.

The California Scenic Highways Program, maintained by the California Department of Transportation (Caltrans), designates scenic highways and routes with the intention of protecting and enhancing the scenic beauty of the highways, routes, and adjacent corridors. Designation ensures that new development projects along recognized scenic corridors are designed to maintain the route's scenic potential. There are three eligible State scenic highways within the City of Daly City, although none are officially designated; Skyline Boulevard (State Route (SR) 35), Cabrillo Highway (SR 1), and Junipero Serra (Interstate 280 (I-280)). Scenic potential along these corridors is related to the views of the coast and San Bruno Mountain. I-280 is located east of the project site and provides views of San Bruno Mountain. State Route 1 runs northwest of the project site and provides oblique views of the project site and San Bruno Mountain.

The project site is not visible from any state or County designated scenic highways or roadways.

2.1.2 Visual and Aesthetic Impacts

2.1.2.1 *Thresholds of Significance*

For the purposes of this EIR, a visual and aesthetic impact is considered significant if the project would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- Substantially degrade the existing visual character or quality of the site and its surroundings; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Aesthetic values are, by their nature, subjective. Opinions as to what constitutes a degradation of visual character will differ among individuals. The primary criteria that are considered in this assessment include: 1) the spatial relationship of the proposed structures to neighboring land uses; 2) the mass, scale, and height of the proposed structures and their visibility from the surrounding areas; 3) the degree to which the project would contrast with the surrounding development in design and

materials; and 4) whether the project is likely to result in visual impacts including glare, nighttime lighting, or provide elevated views of nearby residences.

2.1.2.2 *Change in Visual Character*

The project proposes to construct three condominium buildings (Buildings A, B and C) with 323 units on the eastern and central portion of the property, and one 12-story, 176-room hotel (Building D) on the western portion of the site. Refer to the conceptual site plan and elevations shown in Figures 1.2-1, 1.2-5, 1.2-6, 1.2-7, and 1.2-9.

The proposed residential structures would be setback from approximately 48 feet (Building C) to 145 feet (Building A) along the southern property line. Building A would be set back approximately nine feet from the street frontage along Serramonte Boulevard. The above-grade portions of Buildings B and C would be set back approximately 61 feet from Serramonte Boulevard. The proposed hotel would be set back approximately 17 feet from the southern property line and approximately nine feet from the street frontage along Serramonte Boulevard.

The project site is heavily vegetated and wooded. Trees will be retained primarily along the southern portion of the property, separating the Chinese Cemetery visually from the project site. All other trees on-site will be removed that are in conflict with the proposed grading and building footprints. Planters would be located north of Buildings B and C. Landscaped areas would be located along the north side of the property adjacent to Serramonte Boulevard.

Existing: View of the project site looking southwest from the Serramonte Shopping Center parking lot.

Proposed: View of the proposed Serramonte Views project looking southwest from the Serramonte Shopping Center parking lot.

PHOTOSIMULTATION - VIEW 1

Existing: View of the project site looking west from the intersection of Serramonte and Gellert Boulevards.

Proposed: View of the proposed Serramonte Views project looking west from the intersection of Serramonte and Gellert Boulevards.

PHOTOSIMULATION - VIEW 2

Existing: View of the project site looking east from the intersection of Serramonte and Callan Boulevards.

Proposed: View of the proposed Serramonte Views project looking east from the intersection of Serramonte and Callan Boulevards.

PHOTOSIMULATION - VIEW 3

Existing: View of the project site looking north from the Chinese Cemetery entrance on Callan Boulevard.

Proposed: View of the proposed Serramonte Views project looking north from the Chinese Cemetery entrance on Callan Boulevard.

PHOTOSIMULATION - VIEW 4

Existing: View of the project site looking south from the Serramonte Shopping Center driveway.

Proposed: View of the proposed Serramonte Views project driveway looking south from the Serramonte Shopping Center driveway.

PHOTOSIMULATION - VIEW 5

As illustrated in the photosimulations, development of the proposed project would change the visual character of the site. Compared to the undeveloped and heavily woody conditions on-site, the proposed development would transform the site into a high-density residential and commercial use. The City's General Plan policies and actions, which express the aesthetic values of the community, do not address the loss of trees on private property, therefore the loss of trees as a visual resource is considered to be a less than significant impact.

According to the City's General Plan and General Plan EIR, there are no policies in place that would prohibit the development of properties on vacant hillsides, or the removal of trees on private property. Since the majority of Daly City is built out, the proposed project will be infill development. The City's General Plan establishes a comprehensive approach towards infill development through policies that protect the character of existing neighborhoods while providing guidance for future development (such as the proposed project) by ensuring compatibility with existing development and minimizing height impacts.

The proposed project is located in an urban neighborhood with tall buildings in the vicinity. The hotel would extend above the height of the existing ridgeline when viewed from the south by approximately 40 feet (refer to Photosimulation 4). The condominium towers would extend approximately 20 feet over the existing ridgeline. While the visual character of the site would change, the change is not considered a substantial degradation due to the urban environment in the vicinity of the project site, which includes a major regional mall, condominium residential buildings, and commercial thoroughfare development. Construction of the proposed condominium buildings and hotel would help visually connect the existing residential and commercial developments on either side of the project site. For these reasons, construction of the proposed project would not substantially degrade the existing visual character of the site and its surroundings. **(Less Than Significant Impact)**

2.1.2.3 *Impacts to Scenic Vistas and Resources*

The City's General Plan does not identify any State or County designated scenic highways located in Daly City. However, several roadways have been recognized as having scenic quality. The General Plan identifies John Daly and Lake Merced Boulevard as scenic corridors, however, these roadways are not located within the vicinity of the project site. There are three eligible State scenic highways within the City of Daly City, though none are officially designated. These highways include Skyline Boulevard (SR 35), Cabrillo Highway (SR 1), and Junipero Serra (I-280). Scenic potential along these corridors is related to the views of the coast and San Bruno Mountain. I-280 is located to the east of the project site and provides views of San Bruno Mountain. State Route 1 runs west of the project site and provides views of San Bruno Mountain and oblique views of the project site.

The residential structures will be constructed partially into the hillside. The hotel would extend above the ridgeline by approximately 40 feet. This view will not obscure views of San Bruno Mountain or the coast from either SR 1 or I-280. The property is not visible from SR 35. **(Less Than Significant Impact)**

2.1.2.4 *Light and Glare Impacts*

Since the City of Daly City is primarily built out, the light and glare that exists within the city is typical of that in an urban setting. Nighttime lighting impacts are considered significant when they interfere with or intrude into neighboring residences. Light pollution is typically related to the use of high voltage light fixtures with inadequate shields and improper positioning or orientation. Compliance with the Design Review process outlined in the City's Zoning Ordinance, which requires that general architectural considerations such as exterior lighting are compatible with the design and character of other adjacent buildings, and proposed General Plan policies requiring design compatibility will reduce light and glare impacts to less than significant. Furthermore, the project would be constructed with materials such as concrete and stucco, which are generally non-reflective materials and, therefore, would not create a new source of glare. For these reasons, the proposed project would not result in significant light and glare impacts. **(Less Than Significant Impact)**

2.1.2.5 *Consistency with Relevant Plans, Policies, and Regulations*

As discussed above, project lighting and other architectural and design features shall be in conformance with General Plan policies and tasks to ensure that the design guidelines and the Zoning Ordinance adequately addresses pertinent issues related to the construction of the mixed-use development both within existing neighborhoods and when higher-density development is proposed adjacent to lower-density neighborhoods.

The project, therefore, would be consistent with the City's General Plan and Municipal Code policies related to aesthetics and light and glare.

2.1.3 Conclusion

The proposed project would not result in significant visual or aesthetic impacts. **(Less Than Significant Impact)**

2.2 AIR QUALITY

The following discussion is based upon an Air Quality and Greenhouse Gas Emissions Assessment prepared by *Illingworth & Rodkin, Inc.* in October 2017. A copy of this report is included in this EIR as Appendix C.

2.2.1 Existing Setting

2.2.1.1 *Regulatory Framework*

The federal Clean Air Act governs air quality in the United States. In addition to being subject to federal requirements, air quality in California is also governed by more stringent regulations under the California Clean Air Act. At the federal level, the United States Environmental Protection Agency (USEPA) administers the federal Clean Air Act. The California Clean Air Act is administered by the California Air Resources Board (CARB) at the state level and by the Air Quality Management Districts at the regional and local levels. The Bay Area Air Quality Management District (BAAQMD) regulates air quality at the regional level, which includes the nine-county Bay Area.

United States Environmental Protection Agency and
National Ambient Air Quality Standards

The USEPA is responsible for enforcing the federal Clean Air Act and establishing the National Ambient Air Quality Standards (NAAQS). NAAQS are required under the 1977 Clean Air Act and subsequent amendments. The ambient air quality in a given area depends on the quantities of pollutants emitted within the area, transport of pollutants to and from surrounding areas, local and regional meteorological conditions, as well as the surrounding topography of the air basin. Air quality is described by the concentration of various pollutants in the atmosphere. Units of concentration are generally expressed in parts per million (ppm) or micrograms per cubic meter ($\mu g/m^3$).

As required by the federal Clean Air Act, NAAQS have been established for six major air pollutants: carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter, including PM_{10} and $PM_{2.5}$, sulfur oxides, and lead. The "primary" standards have been established to protect the public health. The "secondary" standards are intended to protect the nation's welfare and account for air pollutant effects on soil, water, visibility, materials, vegetation and other aspects of the general welfare. The NAAQS are summarized in Table 2.2-1.

The USEPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain types of locomotives. The agency has jurisdiction over emission sources outside state waters (e.g., beyond the outer continental shelf) and establishes various emission standards, including those for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission standards established by CARB.

Table 2.2-1:
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards	National Standards[a]	
			Primary[b,c]	**Secondary**[b,d]
Ozone (O_3)	8-hour	0.07 ppm	0.075 ppm	Same as primary
	1-hour	0.09 ppm	---[e]	Same as primary
Carbon Monoxide (CO)	8-hour	9.0 ppm	9 ppm	---
	1-hour	20 ppm	35 ppm	---
Nitrogen Dioxide (NO_2)	Annual	0.030 ppm	0.053 ppm	Same as primary
	1-hour	0.18 ppm	0.100 ppm[f]	---
Sulfur Dioxide (SO_2)	Annual	---	---[g]	---
	24-hour	0.04 ppm	---[g]	---
	3-hour	---	---	0.5 ppm
	1-hour	0.25 ppm	0.075 ppm[g]	---
PM_{10}	Annual	20 µg/m^3	---	Same as primary
	24-hour	50 µg/m^3	150 µg/m^3	Same as primary
$PM_{2.5}$	Annual	12 µg/m^3	15 µg/m^3	---
	24-hour	---	35 µg/m^3	---
Lead	Calendar quarter	---	1.5 µg/m^3	Same as primary
	30-day average	1.5 µg/m^3	---	

Notes: ppm = parts per million, µg/m3 = micrograms per cubic meter.
[a] California standards for ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are not to be exceeded. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year.
[b] Concentrations are expressed first in units in which they were promulgated.
[c] Primary Standards: the levels of air quality necessary, with an adequate margin of safety to protect the public health. Each state must attain the primary standards no later than three years after that state's implementation plan is approved by the EPA.
[d] Secondary Standards: the levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
[e] The national 1-hour ozone standard was revoked by USEPA on June 15, 2005. A new 8-hour standard was established in May 2008.
[f] The form of the 1-hour NO_2 standard is the three year average of the 98th percentile of the daily maximum 1-hour average concentration.
[g] The annual PM_{10} standard was revoked by USEPA on September 21, 2006 and a new $PM_{2.5}$ 24-hour standard was established.

California Air Resources Board and California Ambient Air Quality Standards

CARB, which is part of the California Environmental Protection Agency (CalEPA), is responsible for meeting the state requirements of the federal Clean Air Act, administering the California Clean Air Act, and establishing the California Ambient Air Quality Standards (CAAQS). The California Clean Air Act requires all air districts in the state to endeavor to achieve and maintain the CAAQS. CARB regulates mobile air pollution sources, such as motor vehicles. CAAQS are generally the same or more stringent than NAAQS. The CAAQS are summarized in Table 2.2-1.

The agency is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB has established passenger vehicle fuel specifications and oversees the function of local air pollution control districts

and air quality management districts, which in turn administer air quality activities at the regional and county level. CARB also conducts or supports research into the effects of air pollution on the public and develops innovative approaches to reducing air pollutant emissions.

Bay Area Air Quality Management District

The BAAQMD is the regional agency tasked with managing air quality in the region. The BAAQMD is primarily responsible for assuring that the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. Air quality standards are set by the federal government (the 1970 Clean Air Act and its subsequent amendments) and the state (California Clean Air Act and its subsequent amendments). Regional air quality management districts such as BAAQMD must prepare air quality plans specifying how state standards would be met. The BAAQMD's most recently adopted Clean Air Plan is the 2017 Clean Air Plan (2017 CAP). To protect the climate, the plan defines a vision for transitioning the region to a post-carbon economy needed to achieve ambitious greenhouse gas reduction targets for 2030 set by SB 32 and 2050, and provides a regional climate protection strategy that will put the Bay Area on a pathway to achieve those GHG reduction targets. The BAAQMD has published CEQA Air Quality Guidelines that are used in this assessment to evaluate air quality impacts of projects.

2.2.1.2 *Background Information and Existing Conditions*

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.

Regional and Local Criteria Pollutants

Major criteria pollutants, listed in "criteria" documents by the USEPA and CARB include ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, and suspended particulate matter. These pollutants can have health effects such as respiratory impairment and heart/lung disease symptoms.

Ambient air quality standards have been established at both the state and federal level (refer to Table 2.2-1). Violations of ambient air quality standards are based on air pollutant monitoring data and are judged for each air pollutant. Areas with air quality that exceed adopted air quality standards are designated as "nonattainment" areas for the relevant air pollutants. Nonattainment areas are sometimes further classified by degree (marginal, moderate, serious, severe, and extreme for ozone, and moderate and serious for carbon monoxide and PM_{10}) or status ("nonattainment-transitional"). Areas that comply with air quality standards are designated as "attainment" areas for the relevant air pollutants. "Unclassified" areas are those with insufficient air quality monitoring data to support a designation of attainment or nonattainment, but are generally presumed to comply with the ambient air quality standard. State Implementation Plans must be prepared by states for areas designated as federal nonattainment areas to demonstrate how the area will come into attainment of the exceeded federal ambient air quality standard.

The Bay Area is considered a non-attainment area for ground-level ozone and fine particulate matter ($PM_{2.5}$) under both the federal Clean Air Act and the California Clean Air Act. The area is also considered non-attainment for respirable particulates or particulate matter with a diameter of less than 10 micrometers (PM_{10}) under the California Clean Air Act, but not the federal act.

High ozone levels are caused by the cumulative emissions of reactive organic gases (ROG) and nitrogen oxides (NO_x). These precursor pollutants react under certain meteorological conditions to form high ozone levels. Controlling emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce ozone levels. High ozone levels aggravate respiratory and cardiovascular diseases, reduced lung function, and increase coughing and chest discomfort.

Elevated concentrations of $PM_{10,}$ and $PM_{2.5}$ are the result of both region-wide (i.e. cumulative) emissions and localized emissions. High particulate matter levels aggravate respiratory and cardiovascular diseases, reduce lung function, increase mortality (e.g., lung cancer), and result in reduced lung function growth in children.

Local Community Risk/Toxic Air Contaminants and Fine Particulate Matter

Toxic air contaminants (TACs) are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer) and include, but are not limited to, the criteria air pollutants listed above. TACs are found in ambient air and are caused by industry, agricultural, 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]. Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs (based on the Bay Area average). According to CARB, diesel exhaust is a complex mixture of gases, vapors and fine particles. CARB has adopted and implemented a number of regulations for stationary and mobile sources to reduce emissions of diesel particulate matter (DPM). Refer to Appendix B for more information regarding the regulatory programs in place to reduce DPM emissions.

Fine particulate matter ($PM_{2.5}$) is a complex mixture of substances that includes elements such as carbon and metals; compounds such as nitrates, organics, and sulfates; and complex mixtures such as diesel exhaust and wood smoke. Long-term and short-term exposure to $PM_{2.5}$ can cause a wide range of health effects.

Sensitive Receptors

There are groups of people more affected by air pollution than others. The BAAQMD defines sensitive receptors as facilities where sensitive receptor population groups (children, the elderly, the acutely ill, and the chronically ill) are likely to be located. These lands uses include residences, schools playgrounds, child-care centers, retirement homes, convalescent homes, hospitals, and medical clinics.

Sensitive receptors near the project site include residences directly to the northwest and southeast of the site (refer to Figure 1.1-3).

2.2.2 Air Quality Impact

2.2.2.1 *Thresholds of Significance*

For the purposes of this EIR, an air quality impact is considered significant if the project would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

In June 2010, BAAQMD adopted thresholds of significance to assist in the review of projects under CEQA. Thresholds were designed to establish the level at which BAAQMD believed air pollution emissions would cause significant environmental impacts under CEQA. The significance thresholds identified by BAAQMD and used in this analysis are summarized in Table 2.2-2 below.

Table 2.2-2:
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	54	54	10
NO_x	54	54	10
PM_{10}	82	82	15
$PM_{2.5}$	54	54	10
CO	Not Applicable	9.0 ppm (8-hour avg.) or 20.0 ppm (1-hour avg.)	
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices	Not Applicable	
Health Risks and Hazards for New Sources			
Excess Cancer Risk	10 per one million	10 per one million	
Chronic or Acute Hazard Index	1.0	1.0	
Incremental Annual Average $PM_{2.5}$	0.3 µg/m^3	0.3 µg/m^3	
Health Risks and Hazards for Sensitive Receptors and Cumulative Thresholds for New Sources			
Excess Cancer Risk	100 per one million		
Chronic Hazard Index	10.0		
Annual Average $PM_{2.5}$	0.8 µg/m^3		
Greenhouse Gas Emissions			
GHG Annual Emissions	1,100 metric tons or 4.6 metric tons per capita		

Notes: ROG = reactive organic gases, NO_x = nitrogen oxides, PM_{10} = course particulate matter or particulates with an aerodynamic diameter of 10 micrometers (µm) or less, $PM_{2.5}$ = fine particulate matter or particulates with an aerodynamic diameter of 2.5 (µm) or less, and GHG = greenhouse gas.

2.2.2.2 *Criteria Air Pollutant Emissions*

As part of an effort to attain and maintain ambient air quality standards for ozone, PM_{10}, and $PM_{2.5}$, the BAAQMD has established thresholds of significance for air pollutants and their precursors. These thresholds (refer to Table 2.2-2) are for ozone precursor pollutants (ROG and NO_x), PM_{10}, and $PM_{2.5}$ and apply to both construction and operational air pollutant emissions impacts. Project construction and operational period emissions were modeled using the California Emission Estimator Model (CalEEMod) and the results are discussed below. Refer to Appendix C for model inputs and assumptions.

Construction-Related Emissions

Construction emissions would occur as exhaust emissions from construction equipment, truck travel and worker traffic, and from fugitive dust emission associated with demolition and ground disturbance. These two types of emissions (fugitive dust and criteria air pollutant emissions) are discussed below.

Construction Fugitive Dust

Construction activities, particularly 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 soil. Fugitive dust emissions would vary depending on the nature and magnitude of construction activity, soil conditions and properties, and local meteorological conditions. Large dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site. Nearby residents could be adversely affected by dust generated during construction activities. The BAAQMD considers construction fugitive dust impacts to be less than significant if best management practices are employed to reduce these emissions.

Impact AQ-1: The project would generate significant dust during construction activities that would affect nearby sensitive receptors, if best management practices are not implemented. **(Significant Impact)**

Mitigation Measure: The project proposes to implement the following best management practices identified by the BAAQMD to reduce fugitive dust emissions impacts to a less than significant level:

MM AQ-1.1: 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 Daly City 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 Impact with Mitigation Incorporated)**

Construction Criteria Pollutant Emissions

Construction of the project is anticipated to begin in 2018 and last through 2019. Construction of the project would occur in phases and include: site preparation, grading/excavation, trenching, building (exterior), building (interior)/architectural coating, and paving. It is estimated that approximately 171,757 cubic yards of soil export for the underground parking excavation would be exported from the project site during grading. The project's estimated average daily emissions are summarized in Table 2.2-3 below. Average daily emissions were computed by dividing the total construction period emissions by the number of anticipated construction days.

As shown in Table 2.2-3, construction exhaust emissions would not exceed BAAQMD thresholds for significance for NO_x emissions (an ozone precursor), reactive organic gases, PM_{10} exhaust, or $PM_{2.5}$ exhaust.

Table 2.2-3:
Project Average Daily Construction Emissions

	Reactive Organic Gases (ROG)	**Nitrogen Oxides** (NO_x)	**PM_{10} Exhaust**	**$PM_{2.5}$ Exhaust**
Average Daily Emissions (pounds per day)	38.3	47.7	1.8	1.7
BAAQMD Thresholds (pounds per day)	*54*	*54*	*82*	*54*
Exceeds Threshold?	No	No	No	No

Operational Criteria Pollutant Emissions

Operational period air pollutant emissions associated with the full occupancy of the proposed project were calculated using the CalEEMod along with project vehicle trip generation rates. Model inputs and assumptions, including year of analysis, land use descriptions and assumptions, trip generation rates, travel distances, and area sources, are described in Appendix C. The project's predicted average daily operational emissions and annual operational emissions are summarized in Table 2.2-4.

As shown in Table 2.2-4, the project's average daily and annual operational emissions would not exceed the BAAQMD significance thresholds. The project, therefore, would not contribute

substantially to existing or projected violations of ROG, NO_x, or particulate matter. **(Less Than Significant Impact)**

Table 2.2-4:
Daily and Annual Project Operational Pollution Emissions

	Reactive Organic Gases (ROG)	Nitrogen Oxides (NO_x)	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
Annual Project Emissions				
Residential Component Operational Emissions (tons)	4.12	1.91	1.68	0.50
Hotel Component Operational Emissions (tons)[1]	1.21	0.95	0.80	0.23
Residential Emergency Generator	<0.01	0.19	<0.01	<0.01
Hotel Emergency Generator	<0.01	0.07	<0.01	<0.01
Total Project Operational Emissions (tons)	5.35	3.12	2.50	0.75
Annual Emission Thresholds (tons per year)	*10*	*10*	*15*	*10*
Exceeds Threshold?	**No**	**No**	**No**	**No**
Daily Project Emissions				
Average Daily Net Project Operational Emissions (pounds)[2]	29.3	17.1	13.7	4.1
Annual Emission Thresholds (pounds per day)	*54*	*54*	*82*	*54*
Exceed Threshold?	No	No	No	No

Notes: [1] Assumes 80 percent occupancy.
[2] Assumes 365-day operation.

Carbon Monoxide Emissions

Carbon monoxide emissions from vehicular traffic generated by the project would be the pollutant of greatest concern at the local level. Congested intersections with a large volume of traffic have the greatest potential to cause high-localized concentrations of carbon monoxide. Air pollutant monitoring data indicate that carbon monoxide levels have been at healthy levels (i.e. below state and federal standards) in the Bay Area since the early 1990s. As a result, the region has been designated as attainment for the standard.

Nevertheless, the project would generate traffic that could affect local carbon monoxide levels. BAAQMD screening guidance indicates that projects would have a less than significant impact to carbon monoxide levels if project generated traffic would not increase at any affected intersection to more than 44,000 vehicles trips per hour. The project would generate a relatively small amount of traffic: a net increase of 274 trips during the busiest hour, while the busiest roadway in the vicinity of the site, Serramonte Boulevard, carries an average of 18,000 vehicles daily. Intersections affected by the project site, therefore, would have traffic volumes less than the BAAQMD screening criteria. The project would not violate the ambient air quality standard for carbon monoxide. **(Less Than Significant Impact)**

2.2.2.3 *Toxic Air Contaminant and Fine Particulate Matter Health Risks*

Operation of the project is not expected to cause any localized emissions that could expose sensitive receptors to unhealthy air pollutant levels. Project construction activities, however, would emit diesel exhaust which poses a health risk to nearby sensitive receptors. Project construction-related health impacts are discussed below.

Construction TAC Emissions

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust (DPM), which is a known TAC. Diesel exhaust could pose both a health and nuisance impact to nearby receptors, including the existing residences to the northwest and southeast of the site (refer to Figure 1.1-3).

A health risk assessment of the project construction activities was completed to evaluate potential health effects to nearby sensitive receptors from construction emissions of DPM. The CalEEMod model was used to predict annual construction emissions and a dispersion model was used to predict the off-site DPM concentrations at nearby residences from project construction. The models, data input, and assumptions are described in detail in Appendix C.

Results of the health risk assessment indicate that the incremental residential cancer risk at the maximally exposed individual receptor would be 26.2 in one million for infant exposure, and 0.5 in one million for an adult exposure. The maximum residential excess cancer risk would be greater than the BAAQMD significance threshold of 10 in one million or greater. The maximum modeled annual residential concentration of DPM (i.e. from construction exhaust) was 0.1201 micrograms per cubic meter ($\mu g/m^3$). The maximum computed hazard index (HI) based on this DPM concentration is 0.02, which is much lower than the BAAQMD significance criterion of a HI greater than 1.0. The maximum HI for a school child would be 0.02, which is also below the BAAQMD significance threshold.

The maximum modeled annual $PM_{2.5}$ concentration was 0.20 $\mu g/m^3$. This $PM_{2.5}$ concentration does not exceed the BAAQMD significance threshold of 0.3 $\mu g/m^3$ and is, therefore, considered a less than significant impact.

Impact AQ – 2: Project construction could result in excess residential cancer risks of 26.2 in one million for infant exposure. **(Significant Impact)**

Mitigation Measures: With the implementation of MM AQ-1.1 (above) and AQ-3.1 (below), residential cancer risks would be reduced to a less than significant level.

MM AQ-2.1: All mobile diesel-powered off-road equipment larger than 25 horsepower and operating on the site for more than two days shall meet, at a minimum, U.S. EPA particulate matter emissions standards for Tier 4 engines or equivalent. Note that the construction contractor could use other measures to minimize construction period DPM emission to reduce the predicted cancer risk below the thresholds. The use of equipment that includes CARB-certified Level 3

Diesel Particulate Filters[2] or alternatively-fueled equipment (i.e., non-diesel) would meet this requirement. Other measures may be the use of added exhaust devices, or a combination of measures, provided that these measures are approved by the City and demonstrated to reduce community risk impacts to less than significant.

Implementation of MM AQ – 1.1 is considered to reduce exhaust emissions by five percent. Implementation of MM AQ – 2.1 would further reduce on-site diesel exhaust emissions, and accordingly would reduce the cancer risk to less than 1.7 in one million, well below the ten cases per million threshold. After implementation of these mitigation measures, the project would have a less than significant impact with respect to community risk caused by construction activities. **(Less Than Significant Impact With Mitigation)**

Local Sources of TAC Emissions

The proposed project would locate new residences near several stationary sources of TAC emissions, (such as Serramonte Boulevard). Proximity to busy surface streets is also associated with exposure to TACs or $PM_{2.5}$, predominantly from diesel exhaust emissions. The health risks associated with these TAC sources are discussed below.

The exposure level is determined by the modeled concentration; however, it has to be averaged over a representative exposure period. The averaging period is dependent on many factors, but mostly the type of sensitive receptor that would reside at a site. The health risk assessment for the project conservatively assumed long-term residential exposures. BAAQMD has developed exposure assumptions for typical types of sensitive receptors, including nearly continuous exposures of 70 years for residences. The cancer risk calculations for 70-year residential exposures reflect the use of BAAQMD's most recent cancer risk calculation method that uses age sensitivity factors in calculating cancer risks. Age-sensitivity factors reflect the greater sensitivity of infants and small children to cancer causing TACs.

Proposed Emergency Diesel Generators

The only sources of TACs identified with build-out of the project are assumed to be two emergency back-up generators. The hotel back-up generator is anticipated to have a power rating of 350 kilo-volt-ampere (kVA) and the residential back-up generator is anticipated to have a rating of 500 kVA. It is assumed that the generators would be powered by diesel-fueled engines.

The emergency back-up generators would be used for backup power in emergency conditions. It is assumed that the generator will be operated for testing and maintenance purposes, with a maximum of 50 hours each per year of non-emergency operation under normal conditions allowed by BAAQMD. During testing periods, the engine would typically be run for one hour or less. The engine would be required to meet CARB and U.S. EPA emission standards. The engines would run on commercially available California low-sulfur diesel fuel.

[2] See http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm

The generators would require permits from the BAAQMD since the engine would exceed 50 horsepower. In order to obtain BAAQMD permits for the generators, a risk assessment prepared by BAAQMD would need to verify that cancer risks would not exceed 10.0 in one million and that the project includes Best Available Toxics Control Technology that would set limits for diesel particulate matter emissions. Sources of air pollutant emissions complying with all applicable BAAQMD regulations would not be considered to have a significant air quality community risk impact.

Emissions from the testing and maintenance of the generators were calculated to be 0.006 pounds of DPM per day from the residential back-up generator and 0.0057 pounds of DPM per day from the hotel back-up generator. The residential generator at Building A would result in approximately 8.8 cancer cases per million, $PM_{2.5}$ concentrations of 0.01 $\mu g/m^3$, and HI of less than 0.01, which would be below BAAQMD thresholds of significance both on-site affecting project residences and at nearby sensitive receptors.

Screening excess cancer risk from the hotel Building D generator was estimated to be 8.3 cases in one million, with $PM_{2.5}$ concentration of 0.01 $\mu g/m^3$ and HI of <0.01. Because the hotel generator would be located more than 1,000 feet from receptors affected by the proposed residential generator, the combined effect would be negligible. Therefore, since the generators would comply with applicable BAAQMD regulations and emit negligible quantities of TACs, the impact to sensitive receptors and on-site project residences would be less than significant. **(Less Than Significant Impact)**

Permitted Stationary Sources Community Risk Impacts

Permitted stationary sources of air pollution near the project site were identified using the BAAQMD's Stationary Source Risk and Hazard Analysis Tool. The following sources presented some measurable risk or hazard and were identified within 1,000 feet of the site:

- Nella Oil Company gas station located at 501 Serramonte Boulevard;
- Target Store #1407 located at 133 Serramonte Boulevard;
- Daly City Serramonte Center LLC located at 3 Serramonte Center;
- KNK Petroleum Inc. Triton gas station located at 4698 Callan Boulevard

As shown in Table 2.2-5, the stationary sources within 1,000 feet of the project site were identified to have maximum reported risks or $PM_{2.5}$ concentrations below the BAAQMD thresholds and therefore, considered a less than significant impact. Refer to Appendix C for details regarding the location of the nearby stationary sources and the screening level excess cancer risk to future residents on-site.

Table 2.2-5:
Local Community Risks and Hazards from Local Roadways and Stationary Sources

Source	Maximum Cancer Risk (per million)	$PM_{2.5}$ Concentration ($\mu g/m^3$)	Non-Cancer Hazard Index
Project Emergency Generators	8.8	0.01	<0.01
Serramonte Boulevard	7.4	0.261	<0.03
Nella Oil Company Gas Station	9.0	--	0.03
Target Store #1407	<0.1	0.0	<0.01
Daly City Serramonte Center LLC	<0.1	0.0	<0.01
Triton Gas Station	1.3	--	0.01
BAAQMD Single-source Threshold	*10 in one million*	*0.3 $\mu g/m^3$*	*1.0*
Significant?	*No*	*No*	*No*
Cumulative Total	26.7	0.271	<0.10
BAAQMD Cumulative Source Threshold	*100 in one million*	*0.8 $\mu g/m^3$*	*10.0*
Significant?	*No*	*No*	*No*

Local Roadway Community Risk Impacts

The BAAQMD provides Roadway Screening Analysis Tables that can be used to assess potential excess cancer risk and annual $PM_{2.5}$ concentrations from surface streets for each Bay Area county. Serramonte Boulevard is the highest volume roadway within 1,000 feet of the project site. SR 1 and I-280 are not TAC risks for the project site as they are greater than 1,000 feet of the project site.

The Average Daily Trip (ADT) volume on Serramonte Boulevard is estimated to be approximately 18,000 ADT. Using the BAAQMD *Roadway Screening Analysis Calculator* for San Mateo County for east-west directional roadways and at a distance of approximately 25 feet south of the roadway to the nearest proposed residences, estimated cancer risk from Serramonte Boulevard at the project site would be 7.4 per million (below BAAQMD's ten cases per million threshold) and $PM_{2.5}$ concentration would be 0.261 $\mu g/m^3$, below the threshold of 0.3 $\mu g/m^3$. **(Less Than Significant Impact)**

2.2.2.4 *Odors*

The project would generate localized emissions of diesel exhaust during construction equipment operation and truck activity. These emissions may be noticeable from time to time by adjacent receptors. However, they would be localized and not likely to adversely affect people off-site by resulting in confirmed odor complaints. Occupancy of the residential building and hotel would not generate odors that would result in complaints. There were no identified odor sources that would affect the project in terms of generating frequent odor complaints. **(Less Than Significant Impact)**

2.2.2.5 *Consistency with Applicable Plans, Policies, and Regulations*

Bay Area 2017 Clean Air Plan

On April 19, 2017, the BAAQMD Board of Directors adopted a new air quality plan, called the 2017 Clean Air Plan, *Spare the Air, Cool the Climate* (2017 CAP). This plan updates the previous Bay Area 2010 Clean Air Plan and focuses on two closely-related goals: protecting public health and

protecting the climate. To protect the climate, the plan defines a vision for transitioning the region to a post-carbon economy needed to achieve ambitious greenhouse gas reduction targets for 2030 set by SB 32 and 2050, and provides a regional climate protection strategy that will put the Bay Area on a pathway to achieve those GHG reduction targets.

The 2017 CAP includes a wide range of control measures designed to decrease emissions of methane and other "super-GHGs" that are potent climate pollutants in the near-term; and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

Determining consistency with the 2017 CAP involves assessing whether applicable control measures contained in the 2017 CAP are implemented. Implementation of control measures improve air quality and protect public health. These control measures are organized into five categories: Stationary Source Measures, Mobile Source Measures, Transportation Control Measures (TCMs), Land Use and Local Impact Measures, and Energy and Climate Measures. Applicable control measures and the project's consistency with them are summarized in Table 2.2-6 below.

The proposed project would not conflict with the 2017 CAP because: the project is consistent with applicable control measures (see Table 2.2-6), operational project emissions would be well below the BAAQMD screening threshold (as discussed in *Section 2.2.2.2* above), the project is an urban infill development, and the project is located near employment centers, shopping, and transit facilities.

Table 2.2-6:
Bay Area 2017 Clean Air Plan Applicable Control Measures

Control Measures	Description	Project Consistency
Transportation Control Measures		
TR:9 Bicycle and Pedestrian Access and Facilities	Encourage planning for bicycle and pedestrian facilities in local plans, e.g., general and specific plans, fund bike lanes, routes, paths and bicycle parking facilities.	The project proposes bicycle parking facilities for residents and guests, and a bike repair station on-site. As described in *Section 2.7 Transportation*, the project site is served by existing pedestrian, bicycle, and transit facilities. The project proposes sidewalk improvements along project frontages and would provide pedestrian access through the project site between Serramonte Boulevard and the Serramonte Shopping Center. For these reasons, the project is consistent with this control measure.
TR10: Land Use Strategies	Support implementation of Plan Bay Area, maintain and disseminate information on current climate action plans and other local best practices, and collaborate with regional partners to identify innovative funding mechanisms to help local governments address air quality and climate change in their general plans.	The project is not consistent with the General Plan as it proposes a higher density (over 50 dwelling units/acre) than what is currently designated for the project site (up to 50 dwelling units/acre) under the General Plan. However, the proposed density complies with land use policies discussed in *Section 2.6 Land Use*.

Table 2.2-6:
Bay Area 2017 Clean Air Plan Applicable Control Measures

Control Measures	Description	Project Consistency
Energy and Climate Measures		
EN2: Decrease Electricity Demand	Work with local governments to adopt additional energy-efficiency policies and programs. Support local government energy efficiency program via best practices, model ordinances, and technical support. Work with partners to develop messaging to decrease electricity demand during peak times.	The project site is served by existing pedestrian, bicycle, and transit facilities. In addition, the project would be constructed in conformance with the 2016 California Green Building Standards and Daly City's Green Vision. The project, therefore, would be consistent with this control measure.
BL4: Urban Heat Island Mitigation	Develop and urge adoption of a model ordinance for "cool parking" that promotes the use of cool surface treatments for new parking facilities, as well existing surface lots undergoing resurfacing. Develop and promote adoption of model building code requirements for new construction or reroofing/ roofing upgrades for commercial and residential multi-family housing.	While the project does not propose the use of cool roofing or paving, it includes trees and other landscaping that would reduce the urban heat island effect. The project is, therefore, consistent with this control measure.
NW2: Urban Tree-Planting	Develop or identify an existing model municipal tree planting ordinance and encourage local governments to adopt such an ordinance. Include tree planting recommendations, BAAQMD's technical guidance, best management practices for local plans, and CEQA review.	While existing trees on-site would be removed as a result of project construction, new trees would be planted and several planters are proposed. For this reason, the project is consistent with this control measure.

2.2.3 Conclusion

Impact AQ – 1: The project, with the implementation of the standard BAAQMD dust control measures identified in mitigation measure MM AQ-1.1, would not result in significant dust impacts. **(Less Than Significant Impact with Mitigation Incorporated)**

Impact AQ – 2: With the implementation of MM AQ-1.1 and MM AQ-2.1, residential cancer risks would be reduced to a less than significant level. **(Less Than Significant Impact with Mitigation Incorporated)**

The proposed project would not result in other significant impacts to air quality. **(Less Than Significant Impact)**

2.3 ENERGY

This section was prepared pursuant to CEQA Guidelines Section 15126(c) and Appendix F (Energy Conservation of the Guidelines), which require that EIRs include a discussion of the potential energy impacts of proposed projects with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. The information in this section is largely based on data and reports produced by the California Energy Commission and Energy Information Administration of the US Department of Energy.

2.3.1 Existing Setting

Energy consumption is analyzed in an EIR because of the environmental impacts associated with its production and usage. Such impacts include the depletion of nonrenewable resources (oil, natural gas, coal, etc.) and emissions of pollutants during both the production and consumption phases.

Energy usage is typically quantified using the British Thermal Unit (BTU). The BTU is the amount of energy that is required to raise the temperature of one gallon of water by one degree Fahrenheit. As points of reference, the approximate amount of energy contained in a gallon of gasoline, a cubic foot of natural gas, and a kilowatt hour (kWh) of electricity are 123,000 BTU, 1,000 BTU, and 3,400 BTU, respectively. Natural gas usage is expressed in terms of therms. A therm is equal to 100,000 BTU.

Electrical energy is expressed in units of kilowatts (kW = 1,000 watts),[3] megawatts (MW = 1,000 kW), gigawatts (GW = one million kW), or terawatts hours (TW = one billion kW). One kilowatt hour (kWh) is equal to 1,000 watts supplied or consumed over the period of an hour. For example, running a 1,000-watt hand-held hair dryer for one hour consumes one kWh.

Total energy usage in California was approximately 7578 trillion BTUs in the year 2014 (the most recent year for which this specific data was available).[4] The breakdown by sector was approximately 19 percent for residential uses, 19 percent for commercial uses, 24 percent for industrial uses, and 38 percent for transportation.[5]

The project site is currently vacant and undeveloped.

Electricity

The electricity supply in California involves a complex grid of power plants and transmission lines. In 2014, California produced approximately 75 percent of the electricity it consumed; it imported the remaining 25 percent from 11 western states, Canada, and Mexico. Recent drought-related decreases in hydroelectric generation resulting from lower precipitation in California and the northwest was

[3] Under the International System of Units (SI), one kWh is equivalent to 3.6 megajoules, which is the amount of energy converted if work is done at an average rate of one thousand watts for one hour.
[4] U.S. EIA. California Energy Consumption Estimates 2013. Accessed October 4, 2017. http://www.eia.gov/state/?sid=CA#tabs-2.
[5] U.S. EIA. California Energy Consumption by End-Use Sector, 2013. Accessed October 4, 2017. http://www.eia.gov/beta/state/seds/data.cfm?incfile=/state/seds/sep_sum/html/sum_btu_1.html&sid=CA.

made up for by an increase in renewable energy generation, specifically utility-scale solar photovoltaic, solar thermal, and wind generation.

The bulk of California's electricity comes from power plants. In 2014, 45 percent the state's electricity was generated by natural gas, nine percent by nuclear, five percent by large hydroelectric, and six percent by coal. Renewable sources such as rooftop photovoltaic systems, biomass power plants, and wind turbines, accounted for 20 percent of California's electricity. Fifteen percent of California's power comes from unspecified sources.[6]

In 2014, total electrical system power for California was 293,268 gigawatt-hours (GWh), about one percent lower than 2013. California's in-state electricity production remained virtually unchanged from 2013 levels at 198,908 GWh, a difference of less than one percent compared to the year before. Growth in annual electricity consumption was flat or declining in 2014 reflecting continued slow economic growth in California, particularly in Southern California. It is estimated that future demand in California for electricity will grow at approximately one percent each year through 2025, and that 320,862 GWh of electricity would be utilized in the state in 2025.[7]

Natural Gas

In 2013, approximately ten percent of California's natural gas supply came from in-state production, while 90 percent was imported from other western states and Canada.[8] In 2015, approximately 36 percent of the natural gas delivered for consumption in California was for electricity generation, 35 percent for industrial uses, 18 percent for residential uses, 10 percent for commercial uses, and less than one percent for transportation. As with electricity usage, natural gas usage depends on the type of uses in a building, the type of construction materials used, and the efficiency of gas-consuming devices. In 2015, the State of California consumed approximately 2.3 trillion cubic feet of natural gas, or 2.41 billion MBtu.[9][10]

Overall demand for direct-service natural gas in the commercial and residential sectors California is expected to flatten or decrease as a result of overall energy efficiency. Demand for natural gas at power plants for electricity generation is also expected to decrease by one percent by 2025 (as compared to 2013 demand rates). This decrease is a result of increases in renewable power generation.[11]

[6] CEC, Energy Almanac, Total Electricity System Power. Accessed October 3, 2017. Available at: http://www.energy.ca.gov/almanac/electricity_data/total_system_power.html
[7] CEC. California Energy Demand Updated Forecast 2015-2025. Accessed October 3, 2017. http://www.energy.ca.gov/2014publications/CEC-200-2014-009/CEC-200-2014-009-SD.pdf
[8] CEC. Natural Gas Supply by Region. 2011. Accessed October 3, 2017. Available at: http://www.energyalmanac.ca.gov/naturalgas/natural_gas_supply.html.
[9] U.S. EIA. Natural Gas Summary. Accessed October 3, 2017. http://www.eia.gov/dnav/ng/ng_sum_lsum_dcu_SCA_a.htm.
[10] U.S. EIA. Natural Gas Conversion Calculator. Accessed October 3, 2017. https://www.eia.gov/kids/energy.cfm?page=about_energy_conversion_calculator-basics#natgascalc.
[11] CEC. *2013 Natural Gas Issues Trends, and Outlook*. Accessed October 3, 2017. http://www.energy.ca.gov/2014publications/CEC-200-2014-001/CEC-200-2014-001-SF.pdf.

Fuel Supply and Demand

More than 40 percent of all energy used in California is for the transportation of people and goods. Transportation fuels (including gasoline and diesel) are produced by refining crude oil. Approximately 38 percent of crude oil used in California is produced in-state, while 14 percent comes from Alaska and 48 percent from foreign sources.[12]

In 2015, California ranked third in the nation in crude oil production and refining capacity, with a combined capacity of almost two million barrels from its 18 operable refineries, despite an overall decline in production rates since the mid-1980s.[13]

In recent years, Californians consumed approximately 16 billion gallons of gasoline and four billion gallons of diesel annually. Overall, California is experiencing a downward trend in sales for gasoline, diesel, and jet fuel. It is anticipated that this downward trend would continue due to high fuel prices, efficiency gains, competing fuel technologies, and mandated increases of alternative fuel use. For example, the average fuel economy for the fleet of model year 2013 light-duty vehicles (autos, pickups, vans, and SUVs) was 24.1 mpg, which is 0.5 mpg higher than model year 2012 vehicles.[14]

According to the 2013 Integrated Energy Policy Report, California is projected to experience a two-billion-gallon decline in gasoline consumption from 14.6 billion gallons in 2012 to 12.7 billion gallons by 2022.[15] In contrast, alternative fuels, including liquid and gaseous biofuels and electricity, are anticipated to increase in production and usage in the coming years.

The project site is currently vacant and undeveloped and therefore does not utilize fuel for on-site activities.

2.3.1.1 *Regulatory Framework*

Many federal, state, and local statutes and policies address energy conservation. At the federal level, energy standards apply to numerous products (e.g., the *EnergyStar*™ program) and transportation (fuel efficiency standards). At the state level, Title 24 of the California Administrative Code sets forth energy standards for buildings, rebates/tax credits are provided for installation of renewable energy systems, and the *Flex Your Power* program promotes conservation in multiple areas. In addition, in January 2010, the State of California adopted the California Green Building Standards Code (CALGreen) that establishes mandatory green building standards for all buildings in California. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and indoor environmental quality.

[12] California Energy Almanac. "California Petroleum Statistics and Data." Accessed October 3, 2017. Available at: < http://energyalmanac.ca.gov/petroleum/>

[13] United States Energy Information Administration. "California: Profile Overview." Accessed October 3, 2017. Available at: < http://www.eia.gov/state/?sid=CA>.

[14] United States Environmental Protection Agency. 2014. *Light Duty Automotive Technology, Carbon Dioxide Emissions, and Fuel Economy Trends: 1975 through 2014.* Available at: <http://www.epa.gov/otaq/fetrends.htm>. Accessed October 3, 2017.

[15] California Energy Commission. *2013 Integrated Energy Policy Report*. 2013.

These standards include a mandatory set of minimum guidelines, as well as more rigorous voluntary measures, for new construction projects to achieve specific green building performance levels. The current version of the Code is the 2016 California Green Building Standards.

Renewable Energy Standards

In 2002, California established its Renewables Portfolio Standard (RPS) 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 2006, California's 20 percent by 2010 RPS goal was codified under Senate Bill 107. Under the provisions of SB 107 (signed into law in 2006), investor-owned utilities were required to generate 20 percent of their retail electricity using qualified renewable energy technologies by the end of 2010. In 2008, Executive Order S-14-08 was signed into law and required that retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. As described previously, PG&E's (the electricity provider to the project site) 2015 electricity mix was 30 percent renewable.

In October 2015, Governor Brown signed SB 350 to codify California's climate and clean energy goals. A key provision of SB 350 for retail sellers and publicly owned utilities, requires them to procure 50 percent of the state's electricity from renewable sources by 2030.

Building Codes

At the state level, 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; the 2013 standards became effective July 1, 2014. The 2016 Title 24 updates went into effect on January 1, 2017.[16] Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.[17]

In January 2010, the State of California adopted the California Green Building Standards Code (CalGreen) that establishes mandatory green building standards for all buildings in California. CALGreen was also updated and went in to effect on January 1, 2017. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and indoor environmental quality.

City of Daly City General Plan

The City of Daly City's General Plan includes specific goals and policies to address energy conservation opportunities within the City. All new residential and nonresidential construction in the City must abide by the State of California's residential building standards for energy efficiency (Title

[16] California Building Standards Commission. 2016 Triennial Code Edition. Accessed October 3, 2017. http://www.bsc.ca.gov/.
[17] CEC. Building Energy Efficiency Program. 2013. Accessed October 3, 2017. http://www.energy.ca.gov/title24/.

24 of the California Administrative Code). Title 24 Standards were established in 1978 to ensure that all new construction meets a minimum level of energy efficiency.

Policy	Description
Policy HE-23	Gradually increase energy and water efficiency standards for all new and existing housing while minimizing the costs of such standards.
Task HE-23.1	Develop enhanced residential energy efficiency standards (Title 24, California Administrative Code) in all new residential construction which exceeds State-mandated requirements by five percent in 2015, ten percent in 2020, and twenty percent in 2030.
Task HE-23.2	Establish energy and water efficiency upgrade programs that promote energy and water efficiency upgrades in all existing residential buildings. Energy efficiency upgrades promoted as part of this program could include upgrades such as attic insulation, programmable thermostats, heating duct insulation, and water heater insulation. Water efficiency upgrades could include the installation of low-flow shower heads, where feasible, and retrofit of existing toilets to meet low-flush requirements as established by the City. Examples of programs developed as a part of this task could provide financial incentives (e.g., rebates, appliance buy-back, and similar programs) aimed at providing strong incentives to residential building owners to use the programs.
Policy HE-24	Mandate the inclusion of green building techniques into most new construction.
Policy HE-28	Promote alternative sources of energy in all homes.

Daly City's Green Vision

Daly City's Green Vision, A Climate Action Plan (CAP) for 2011-2020 and Beyond, was adopted in December 2010. Daly City's Green Vision guides the City towards a sustainable future that reduces GHG emissions from current levels, while promoting economic prosperity for present and future generation. The Green Vision identifies ten goals and seeks to achieve these goals through cost-effective strategies by the year 2020. The GHG reduction goals include adopting a general plan with measurable policies for sustainable development, reducing energy use in buildings, reducing transportation emissions, reducing solid waste disposal, and GHG emissions reductions from municipal operations. Daly City recently completed an update to the General Plan which incorporated these goals in March 2013.

Green Building Ordinance

Daly City's Green Vision seeks to reduce the City operation's overall carbon footprint through a series of ten goals by the year 2020. The goals cover topics such as reducing solid waste, recycling and reuse of wastewater, preservation of urban forests, adoption of a master pedestrian and bicycle plan, reuse of biosolids, the use of green building standards, and community education.

City of Daly City Municipal Code

Recycling and Diversion of Construction and Demolition, (Municipal Code 15.64): This ordinance requires that construction and demolition projects recycle or reuse 60 percent of the waste generated from the project. This ordinance is consistent with the requirements for construction and demolition

debris diversion in CALGreen. Many of the construction materials, such as concrete, asphalt, asphalt singles, gypsum wallboard, wood and metals, can be reused or recycled, thus prolonging our supply of natural resources and potentially saving money in the process.

2.3.2 Energy Impacts

2.3.2.1 *Thresholds of Significance*

For the purposes of this EIR, an energy impact is considered significant if the project would:

- Result in a wasteful, inefficient, and unnecessary consumption of energy;
- Result in a substantial increase in demand upon energy resources in relation to projected supplies; or
- Result in longer overall distances between jobs and housing.

2.3.2.2 *Project Energy Consumption*

The project proposes to develop three condominium buildings comprised of 323 dwelling units, a 176-room hotel, and two parking podiums.

Energy would be consumed during both the construction and operational phases of the proposed project. Energy requirements throughout the construction phase include energy for the manufacturing and transportation of building materials, preparation of the site, and operation of construction equipment. The operation of the project would consume both electricity and natural gas for building heating and cooling, lighting, cooking, appliances, and water heating. Fuel would also be consumed during vehicle trips to and from the project site.

The proposed project is estimated to use approximately 4.2 GWh of electricity and 128,331 therms of natural gas per year. It is estimated that project-generated vehicle trips would use approximately 81,880 gallons of gasoline per year.[18] It is estimated that the proposed residential emergency generator would use approximately 30.3 gallons per hour of diesel, or up to 1,515 gallons per year if tested for 50 hours (maximum that BAAQMD allows). The proposed hotel emergency generator would use approximately 23.2 gallons per hour, or up to 1,160 gallons per year if tested for 50 hours. The project is required to comply with the City's Recycling and Diversion of Construction and Demolition Ordinance by recycling at least 60 percent of total waste during demolition or construction. In addition, as described in *Section 1.3 Project Description*, the project proposes to be constructed in compliance with the 2016 California Green Building Standards Code (Title 24), which requires features that reduce water and energy consumption.

Given the infill location of the project site, the existing pedestrian, bicycle, and transit services in the project area, and the project's compliance with the City's Recycling and Diversion of Construction and Demolition Ordinance and 2016 California Green Building Code, the proposed project would not

[18] The project's estimated energy use was derived from the air quality and greenhouse gas emissions modeling completed for the project and included in Appendix B of this EIR. The project's estimated gasoline consumption was based on the project's estimated average daily trips average fuel economy of 24.7 miles per gallon.

result in a wasteful, inefficient, and unnecessary consumption of energy. **(Less Than Significant Impact)**

2.3.2.3 *Project Demand Upon Energy Resources*

According to the 2013 Integrated Energy Policy Report, in order to meet future energy demand, the state needs sufficient, reliable, and safe energy infrastructure. This includes:

- Improving energy efficiency in California's existing buildings;
- Achieving 10-year energy efficiency targets;
- Inclusion of zero-net-energy buildings in state building standards;
- Overcoming challenges to increased use of geothermal heat and procurement of biomethane;
- Using demand response to meet California's energy needs
- Integrating renewable technologies;
- Developing bioenergy; and
- Evaluating the need for and developing new electricity, natural gas, and transportation fuel infrastructure to maintain energy reliability and support clean energy polices.

The project would result in an increase in demand on existing energy resources; however, the project is required to comply with applicable regulations and City policies (including the Recycling and Diversion of Construction and Demolition Ordinance) that would conserve energy and water, and reduce fuel consumption and waste generation.

California's overall electricity demand is anticipated to increase in the next decade, improvements in efficiency and production capabilities would help mitigate impacts resulting from increased demand. For example, the production of natural gas is anticipated to increase in the future due to recent technological advances and improvements in efficiency. In contrast, demand for natural gas is anticipated to decrease as more energy is generated from renewable sources and efficiency measures reduce the need for additional generation.[19] Based on the above discussion, the existing energy supply and demand described in *Section 2.3.1.2*, and the project's incremental demand, the proposed project is not anticipated to result in a substantial increase in demand on energy resources in relation to existing supplies. **(Less Than Significant Impact)**

2.3.2.4 *Impact to Overall Distances between Jobs and Housing*

The project site is an urban, infill site. As discussed in *Section 2.7 Transportation*, the project site is served by existing transit, bicycle, and pedestrian facilities. Given the accessibility of automobile-alternative modes of transportation, the project provides opportunities for alternatives to single-occupancy vehicle trips for future residents. The project site is located adjacent to existing residences and near existing jobs. For these reasons, the project would not result in substantially longer overall distances between jobs and housing. **(Less Than Significant Impact)**

[19] California Energy Commission. *2013 Integrated Energy Policy Report*. 2013.

2.3.2.5 *Consistency with Applicable Plans, Policies, and Regulations*

As discussed previously, the project shall comply with the City's Recycling and Diversion of Construction and Demolition Ordinance and implement green building measures. The project would also be constructed in compliance with the new 2016 California Green Building Standards Code (Title 24), which are more efficient than the 2013 standards.

In addition, as discussed in Sections *2.2 Air Quality* and *2.5 Greenhouse Gas Emissions*, the project would not conflict with the Bay Area 2017 CAP, Daly City's Green Vision, nor other applicable plans, policies, and regulations pertaining to the regulation of GHG emissions. Implementation of the project would result in less than significant GHG impacts and, therefore, no mitigation regarding energy efficiency and GHG emissions is required.

Based on the above discussion, the proposed project would not conflict with any applicable plans, policies, and regulations regarding energy.

2.3.3 Conclusion

The proposed project would not result in significant energy impacts. **(Less Than Significant Impact)**

2.4 GEOLOGY AND SOILS

The following discussion is based in part on a geotechnical investigation and preliminary geotechnical plan reviews prepared by Earth Investigations Consultants, Inc. in December 2014, May 2016, and August 2017, respectively. Copies of these reports are included in Appendix D of this EIR.

2.4.1 Setting

2.4.1.1 *Regulatory Framework*

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act, signed into law December 1972, requires the delineation of zones along active faults in California. The Alquist-Priolo Act regulates development on or near active fault traces to reduce the hazard of fault rupture and to prohibit the location of most structures for human occupancy across these traces. Cities and counties must regulate certain development projects within the delineated zones, and regulations include withholding permits until geologic investigations demonstrate that development sites are not threatened by future surface displacement. Surface fault rupture, however, is not necessarily restricted to the area within an Alquist-Priolo Zone.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 addresses non-surface fault rupture earthquake hazards, including liquefaction and seismically induced landslides, and its purpose is to protect public safety from the effects of strong ground shaking, liquefaction, landslides, other ground failure, and other hazards caused by earthquakes. The Act requires the State Geologist to delineate various seismic hazard zones and requires cities, counties, and other local permitting agencies to regulate certain development projects within these zones. Before a development permit is granted for a site within a seismic hazard zone, a geotechnical investigation of the site must be conducted and appropriate mitigation measures incorporated into the project design. Mapping of the San Francisco South Quadrangle in which Daly City is located is currently in progress by the California Department of Conservation under its Seismic Hazards Zonation Program.

2016 California Building Code

The State of California provides minimum standards for structural design and site development through the California Building Code [CBC – California Code of Regulations (CCR), Title 24, part 2]. Local codes are permitted to be more stringent than Title 24 but, at minimum, are required to meet all state standards and enforce the regulations of the 2016 CBC. The City's enforcement of its Building Code ensures the project would be consistent with the CBC.

Chapter 16 of the CBC deals with structural design requirements governing seismically resistant construction. Chapter 18 of the CBC includes the requirements for foundation and soil investigations; excavation, grading, and fill; allowable load-bearing values of soils; and design of

foundation walls, retaining walls, embedded post and poles. Chapter 33 of the CBC includes requirements for safeguards at work sites to ensure stable excavations and cut or fill slopes and the protection of pedestrians and adjoining properties from damage caused by such work. Appendix J of the CBC includes grading requirements for design of excavation of fills and for erosion control.

City of Daly City General Plan

The Seismic Safety Element, as well as the Safety Element of the City's General Plan contains policies, recommendations, and actions to avoid or mitigate geology and soils impacts resulting from development within the City. All future development allowed by the project would be subject to conformance with applicable General Plan policies, including those listed below.

Policy	Description
Policy SE-1.1	Continue to investigate the potential for seismic and geologic hazards as part of the development review process and maintain this information for the public record. Update Safety Element maps as appropriate.
Policy SE-1.2	Require site specific geotechnical, soils, and foundation reports for development proposed on sites identified in the Safety Element and its Geologic and Hazard Maps as having moderate or high potential for ground failure.
Policy SE-1.3	Permit development in areas of potential geologic hazards only where it can be demonstrated that the project will not be endangered by, nor contribute to, the hazardous condition on the site or on adjacent properties. All proposed development is subject to the City's Zoning Ordinance and Building Codes.
Policy SE-1.4	Prohibit development—including any land alteration, grading for roads and structural development—in areas of slope instability or other geologic concerns unless mitigation measures are taken to limit potential damage to levels of acceptable risk.
Policy SE-1.5	Design and improve all critical care facilities and services to remain functional following the maximum credible earthquake. Avoid placement of critical facilities and high-occupancy structures in areas prone to violent ground shaking or ground failure.
Policy SE-1.6	Work with San Mateo County, California Water Service Company, and the San Francisco Water Department to ensure that all water tanks and San Francisco's main water pipeline are capable of withstanding high seismic stress.
Policy SE-6.1	Regulate building construction practices to prevent hazardous structures and assure structural safety. Measures may include requiring conformance to an accepted set of construction standards, authorizing inspection of suspected dangerous structures, discontinuing improper construction activities, and eliminating hazardous conditions.
Policy SE-6.2	Support efforts to inform purchasers of existing buildings and structures that the City's building inspection services are available, upon request, to inspect structures, describe their condition and existing violations and provide construction history to the extent that such information is available.

2.4.1.2 *Existing Conditions*

Regional Geology

The project site and the surrounding parts of Daly City lie in the San Francisco Peninsula which is set within the Coast Ranges Geomorphic Province. The San Francisco Peninsula lies north of the Santa Cruz Mountains where it is flanked by the Pacific Ocean and San Francisco Bay to the west and east, respectively. The Coast Ranges Geomorphic Province is typified by northwest-southeast trending mountain ranges that stretch from the Oregon border to the north to Point Conception to the south. In the San Francisco Bay area, most of the Coast Ranges are underlain by tectonically complex, Jurassic- to Cretaceous-age bedrock of the Franciscan Complex.

The topography in the immediate vicinity of the project site is typified by undulating hills. Ground surface elevations near the project site generally range from 200 to 500 feet above mean sea level (amsl), whereas the San Bruno Mountains to the northeast locally attain elevations in excess of 1,300 feet amsl. Much of the runoff in the Project vicinity flows east to Colma Creek, whose southeast-trending drainage eventually discharges to San Francisco Bay. Based on the geologic mapping conducted by the USGS, the project site is immediately underlain by clastic sediments of the Pliocene to Pleistocene age (i.e., 5 million to 10,000 years before present) Merced Formation, described as medium-grey to yellowish orange, friable to firm sand, silt, and clay with minor amounts of gravel, lignite, and volcanic ash.

On-Site Geologic Conditions

Soils

The project site is mantled by a relatively thin (two- to five-foot thick) layer of generally loose silty and clayey sand derived from weathering of the underlying Merced Formation. Aside from the earthen berm constructed to direct surface runoff from the property, notable thicknesses of fill slopes were not readily apparent from surface morphology. However, downhill sides of the intermediate benches are likely to be underlain by wedges of undocumented fill.

Groundwater

Groundwater in the project area slopes gently to the northeast. Based on groundwater data on-site and in the area, it is estimated that the groundwater surface slopes from 39 feet below ground surface (bgs) at the northeast end of the site to 47 feet bgs at the southwest end of the project site.[20] Fluctuations in the level of subsurface water can occur due to variations in rainfall, temperature, and other factors.

[20] Earth Investigations Consultants, Inc. *Geotechnical Investigation Prepared for Serramonte Terraces, LLC.* December 2014.

Landslides

According to the General Plan EIR, there is a low potential for landslide risk on the project site. Based on the geotechnical investigation, an ancient landslide, mapped from aerial photographs between the project site and middle of the Serramonte Shopping Center, was effectively removed during mass grading in the 1960's. Therefore, there has not been observed evidence of active bedrock landsliding constraining the project site since the 1960's.

Seismicity and Seismic-Related Hazards

Seismic potential in the Daly City area is dominated by the nearby San Andreas Fault System that lies as close as 0.75 miles southwest of the project site. The faults that comprise this system are typified by right-lateral, strike-slip movement. Other active earthquake faults in the region include the Hayward and Calaveras Faults that lie roughly 18 to 24 miles to the east of the Project site, respectively, and the San Gregorio Fault, which passes as close as 8 miles to the southwest. The site is not within an Earthquake Fault Zone, as defined by the Alquist-Priolo Earthquake Fault Zoning Act, and no known active or potentially active faults exist on the site.

Liquefaction

Liquefaction is the result of seismic activity and is characterized as the transformation of loose water-saturated soils from a solid state to a liquid state during ground shaking. On-site soils were analyzed and found to have a very low potential for liquefaction (refer to Appendix D).

Lateral Spreading

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 face, such as the steep bank of a stream channel. Considering the absence of a free face on or adjacent to the site, as well as the depth and relative thickness of the potentially liquefiable layers, the risk of lateral spreading on the site is low.

2.4.2 Geology and Soil Impacts

2.4.2.1 *Thresholds of Significance*

For the purposes of this EIR, a geology and soils impact is considered significant if the project would:

- Expose people or structures to 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; or
  - Landslides.
- Result in substantial soil erosion or the loss of topsoil;
- 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;
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property; or
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater.

2.4.2.2 *Soil and Groundwater Impacts*

Soil Impacts

The proposed grading plan for the proposed structures and subgrade parking garages is referred to as a "top-down" grading approach. This method involves sequentially grading the site from the top of the slope and reinforcing the vertical cuts into the slope with a four- to six-foot shotcrete wall supported by soil nails on the cut face prior to excavation of the lower lift. An engineering geologist would observe each cut face for potential instability, and evaluate the need for segmented excavation support for each cut lift. In order to avoid destabilizing the soil with project construction, a retaining wall would be constructed to support the sub-grade portions of the parking garages and landscaped areas on the project site. The retaining wall will be approximately 1,150 linear feet to support cuts of up to approximately 80 feet in height. Retaining walls shall be designed at specified pressures to support the slope of the site.

According to the geotechnical investigation, cemetery service road runoff onto the site has caused considerable erosion historically. Additionally, project excavation and grading will expose soils to wind and rain. Thus, there is potential for soil erosion on the project site.

Impact GEO – 1: The proposed project may result in soil erosion and the loss of topsoil. **(Significant Impact)**

Mitigation Measures: In conformance with standard practices in the City of Daly City, the proposed project shall implement the following measures to reduce adverse effects associated with soil erosion:

MM GEO – 1.1: Buildings shall be designed and constructed in accordance with a final design-level geotechnical investigation to be completed for the project by a qualified professional and submitted to the City of Daly City Planning Manager. The final design-level geotechnical investigation shall identify requirement for the placement of fill on the project site and building foundations.

MM GEO – 1.2: The civil engineer and the project landscape contractor shall implement a comprehensive erosion control plan to account for seasonal rainfall during and following construction. The project engineering geologist shall make periodic inspections of the site drainage and erosion control features for a period of two years.

Implementation of these measures would substantially reduce adverse effects associated with soil erosion on the site. **(Less Than Significant With Mitigation Incorporated)**

In general, expansive soils in Daly City are not prevalent. Based on the geotechnical report, the drilled borings revealed that expansive soils in the vicinity of the project do not exist. Therefore, potential risks associated with expansive soils are considered to be low, and the impact is less than significant. **(Less Than Significant Impact)**

The project does not propose the use of septic tanks or alternative wastewater disposal systems and, therefore, the last threshold is not discussed further. **(No Impact)**

2.4.2.3 *Seismicity and Seismic-Related Impacts*

While the likelihood of fault rupture at the project site is extremely low, the project site is located in a seismically active region and strong ground shaking would likely occur at the project site during seismic activity throughout the life of the project. If liquefaction were to occur in soils beneath the site, the ground surface would be susceptible to up to two inches of liquefaction-induced settlement, which could damage structures. Soils on the project site include clays which have varying soil moisture.

The project would conform to the standard engineering and building practices and techniques specified in the CBC. The proposed buildings would be designed and constructed in accordance with the recommendations of a design-level geotechnical report prepared for the site (refer to Appendix C), which identifies the specific design features related to geologic and seismic conditions. The buildings would meet the requirements of appropriate Building and Fire Codes, as adopted by the City of Daly City. The project would not result in significant impacts from seismicity and seismic-related hazards including ground shaking, liquefaction, and differential compaction.

According to the General Plan EIR, earthquake-induced landslides are unlikely to occur at the project site. Therefore, impacts associated with earthquake-induced landslides are less than significant. **(Less Than Significant Impact)**

2.4.2.4 *Construction-Related Impacts*

Compliance with the construction measures described in *Section 4.9 Hydrology and Water Quality* of the Initial Study (attached as Appendix A of this EIR) would reduce construction-related impacts to a less than significant level. **(Less Than Significant Impact)**

2.4.2.5 *Consistency with Applicable Plans, Policies, and Regulations*

2016 California Building Code

As discussed above, the project shall be constructed in accordance with the CBC. Therefore, the project would be consistent with the Code.

City of Daly City General Plan

The project would be consistent with General Plan policies SE-1.1, SE-1.2, SE-1.3, SE-1.4 in the Seismic Safety Element, as identified in *Section 2.4.1.1*, by incorporating mitigation measures to reduce geologic hazards (refer to mitigation measure MM GEO-1.1). According to mapped information in the General Plan, the site is not located in a seismic hazard or fault region zone, an area of high landslide potential or liquefaction hazards. The project, therefore, is consistent with applicable General Plan policies regarding geology and soils.

2.4.3 Conclusion

Construction of the proposed project, in conformance with the CBC as adopted by the City of Daly City and in accordance with the recommendations in the design-level geotechnical report (refer to Appendix D), would not result in significant soil, groundwater, or seismic and seismic-related impacts. **(Less Than Significant Impact with Mitigation Incorporated)**

The proposed project would not result in other significant geology and soil impacts. **(Less Than Significant Impact)**

2.5 GREENHOUSE GAS EMISSIONS

The following discussion is based in part on a greenhouse gas emissions assessment completed for the project by *Illingworth & Rodkin, Inc.* in October 2017. A copy of this assessment is included in Appendix C of this EIR.

2.5.1 Existing Setting

2.5.1.1 *Background Information*

Unlike emissions of criteria and toxic air pollutants, which are discussed in *Section 2.2 Air Quality* and have local or regional impacts, emissions of Greenhouse Gases (GHGs) have a broader, global impact. Global warming associated with the "greenhouse effect" is a process whereby GHGs accumulating in the atmosphere contribute to an increase in the temperature of the earth's atmosphere over time. The principal GHGs contributing to global warming and associated climate change are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated compounds. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial/manufacturing, utility, residential, commercial, and agricultural sectors.

2.5.1.2 *Regulatory Framework*

State of California

Assembly Bill 32 and Executive Order S-3-05

Assembly Bill 32 (AB 32), also known as the Global Warming Solutions Act, was passed in 2006 and established a goal to reduce GHG emissions to 1990 levels by 2020. Prior to the adoption of AB 32, the Governor of California also signed Executive Order S-3-05 into law, which set a long term objective to reduce GHG emissions to 90 percent below 1990 levels by 2050. The CalEPA is the state agency in charge of coordinating the GHG emissions reduction effort and establishing targets along the way.

In December 2008, CARB approved the *Climate Change Scoping Plan*, which proposes a comprehensive set of actions designed to reduce California's dependence on oil, diversify energy sources, save energy, and enhance public health, among other goals. Per AB 32, the Scoping Plan must be updated every five years to evaluate the mix of AB 32 policies to ensure that California is on track to achieve the 2020 greenhouse gas reduction goal. The First Update to the Scoping Plan was approved on May 22, 2014 and builds upon the Scoping Plan with new strategies and recommendations. The First Update defines CARB's priorities over the next five years and lays the groundwork to reach long-term goals set forth in Executive Order S-3-05.[21]

[21] California Environmental Protection Agency, Air Resources Board. *First Update to the AB 32 Scoping Plan*. May 2014.

Senate Bill 375

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 on AB 32 by requiring CARB to develop regional GHG reduction targets to be achieved from the automobile and light truck sectors for 2020 and 2035 in comparison to 2005 emissions. The per capita 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.[22] The four major requirements of SB 375 are:

1. Metropolitan Planning Organizations (MPOs) must meet greenhouse gas emission reduction targets for automobiles and light trucks through land use and transportation strategies.
2. MPOs must create a Sustainable Communities Strategy (SCS), to provide an integrated land use/transportation plan for meeting regional targets, consistent with the Regional Transportation Plan (RTP).
3. Regional housing elements and transportation plans must be synchronized on eight-year schedules, with Regional Housing Needs Assessment (RHNA) allocation numbers conforming to the SCS.
4. MPOs must use transportation and air emissions modeling techniques consistent with guidelines prepared by the California Transportation Commission (CTC).

MTC and ABAG adopted *Plan Bay Area* in July 2013 in response to SB 375. The strategies in the plan are intended to promote compact, mixed-use development close to public transit, jobs, schools, shopping, parks, recreation, and other amenities, particularly within Priority Development Areas (PDAs) identified by local jurisdictions. The project site is not located within a PDA.

Regional and Local

Bay Area 2017 Clean Air Plan

On April 19, 2017, the BAAQMD Board of Directors adopted a new air quality plan, called the 2017 Clean Air Plan, *Spare the Air, Cool the Climate* (2017 CAP). This plan updates the previous Bay Area 2010 Clean Air Plan and focuses on two closely-related goals: protecting public health and protecting the climate. To protect the climate, the plan defines a vision for transitioning the region to a post-carbon economy needed to achieve ambitious greenhouse gas reduction targets for 2030 set by SB 32 and 2050, and provides a regional climate protection strategy that will put the Bay Area on a pathway to achieve those GHG reduction targets.

The 2017 CAP includes a wide range of control measures designed to decrease emissions of methane and other "super-GHGs" that are potent climate pollutants in the near-term; and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

[22] The emission reduction targets are for those associated with land use and transportation strategies, only. Emission reductions due to the California Low Carbon Fuel Standards or Pavley emission control standards are not included in the targets.

City of Daly City

General Plan

The Housing Element of the City's General Plan contains policies, recommendations, and actions to promote energy conservation. Through energy conservation, GHG emissions are reduced. All future development allowed by the project would be subject to conformance with applicable General Plan policies, including the policy listed below.

Policy	Description
Policy HE-23	Gradually increase energy and water efficiency standards for all new and existing housing while minimizing the costs of such standards.
Policy HE-24	Mandate the inclusion of green building techniques into most new construction.
Policy HE-28	Promote alternative sources of energy in all homes.

Daly City's Green Vision

Daly City's Green Vision, A Climate Action Plan (CAP) for 2011-2020 and Beyond, was adopted in December 2010. Daly City's Green Vision guides the City towards a sustainable future that reduces GHG emissions from current levels, while promoting economic prosperity for present and future generations. The Green Vision identifies ten goals and seeks to achieve these goals through cost-effective strategies by the year 2020. The GHG reduction goals include adopting a general plan with measurable policies for sustainable development, reducing energy use in buildings, reducing transportation emissions, reducing solid waste disposal, and GHG emissions reductions from municipal operations. Daly City recently completed an update to the General Plan which incorporated these goals in March 2013.

Daly City's Ordinances

The following ordinances consistent with the goals of Daly City's Green Vision were adopted by the City Council in order to protect the environment and health of the community:

Green Building Standards Code (Municipal Code 15.22): The purpose of the ordinance is to adopt and incorporate the California Green Building Standards Code, 2013 edition, for the protection of the public health and safety of its inhabitants.

Recycling and Diversion of Construction and Demolition (Municipal Code 15.64): This ordinance requires that construction and demolition projects recycle or reuse 60 percent of the waste generated from the project. This ordinance is consistent with the requirements for construction and demolition debris diversion in CALGreen. Many of the construction materials, such as concrete, asphalt, asphalt singles, gypsum wallboard, wood and metals, can be reused or recycled, thus prolonging our supply of natural resources and potentially saving money in the process.

2.5.1.3 *Existing Conditions*

The project site is currently vacant and undeveloped. The site is covered with dense vegetation and mature trees. The site does not generate greenhouse gases associated with anthropogenic activities.

2.5.2 Greenhouse Gas Impacts

2.5.2.1 *Thresholds of Significance*

For the purposes of this EIR, a greenhouse gas emissions impact is considered significant if the project would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

GHG emissions worldwide cumulatively contribute to the significant adverse environmental impacts of global climate change. No single land use project could generate sufficient GHG emissions on its own to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects in Daly City, the entire state of California, across the nation, and around the world, contribute cumulatively to the phenomenon of global climate change and its associated environmental impacts.

BAAQMD Threshold of Significance

The BAAQMD May 2011 CEQA Guidelines included GHG emissions-based significance thresholds. These thresholds include a "bright-line" emissions level of 1,100 metric tons per year (MT/year) for land-use type projects and 10,000 MT/year for stationary sources. Land use projects with emissions above the 1,100 MT/year threshold would then be subject to a GHG efficiency threshold of 4.6 metric tons per year per capita (MT/year/capita). Projects with emissions above the thresholds would be considered to have an impact, which, cumulatively, would be significant.

2.5.2.2 *Project Emissions*

As recommended by the BAAQMD, the CalEEMod model was used to predict GHG emissions from project construction and operation. Details regarding the model and assumptions are included in Appendix C of this EIR.

Construction Emissions

GHG emissions associated with project construction activities (including operation of construction equipment, hauling truck trips, vendor truck trips, and worker trips) were estimated to be 2,094 MT of carbon dioxide equivalents (CO_2e) for the total construction period, or 18 months. The BAAQMD does not have an adopted threshold of significance for construction-related GHG emissions, though

total construction period emissions would exceed than the BAAQMD operational threshold of 1,100 MT CO_2e per year. The BAAQMD recommends quantifying emissions and disclosing that GHG emissions would occur during construction.

The BAAQMD also encourages the incorporation of best management practices, including recycling and reusing construction waste or demolition materials, and using local building materials of at least 10 percent. The project, in compliance with the City's Recycling and Diversion of Construction and Demolition Debris Ordinance, would recycle at least 60 percent of construction waste or demolition materials. **(Less Than Significant Impact)**

Operational Emissions

Project operation would generate GHGs primarily through electricity generation/use and generation of vehicle trips. At full buildout and occupancy, operational GHG emissions from the project are estimated to be 3,726 MT of CO_2e/year, which exceeds the BAAQMD threshold of 1,100 MT of CO_2e/yr. As discussed in *Section 2.5.2.1* above, land use projects with emissions above the 1,100 MT/year threshold are then subject to the GHG efficiency threshold of 4.6 metric tons per year per capita (MT/year/capita) to determine impact significance.

Based on the latest Department of Finance data for the City of Daly City, the average residents per household is 3.4. The project's emissions per capita, therefore, is 3.1 MT of CO_2e/year/capita.[23] The project's emissions per capita is below the BAAQMD efficiency threshold of 4.6 MT/year/capita and is considered a less than significant impact. **(Less Than Significant Impact)**

Proposed Emergency Generators

Emissions from testing and maintenance of the proposed project generators were estimated using the emission factors from the California Climate Action Registry General Reporting Protocol. Results indicate that GHG emissions from the two proposed generators would be approximately 27 MT of CO_2 annually, which is well below the BAAQMD threshold of 10,000 MT annually for stationary sources. **(Less Than Significant Impact)**

2.5.2.3 *Consistency with Applicable Plans, Policies, and Regulations*

Bay Area 2017 Clean Air Plan

As discussed in *Section 2.2 Air Quality*, the proposed project would not conflict with the 2017 CAP because the project is consistent with applicable control measures (see Table 2.2-6), project emissions would be well below the BAAQMD screening threshold (as discussed in *Section 2.2.2.2* above), the project is an urban infill development, and the project is located near employment centers, shopping, and transit facilities. The project would generate GHG emissions below 4.6 MT/year/capita.

[23] The project proposes 323 units and 176 hotel rooms. 323 units x 3.4 residents/unit = 1,098 residents. The number of future full-time hotel employees is estimated to be 100, for a total service population of 1,198. 3,726 MT of CO2e/year ÷ 1,198 residents = 3.1 MT of CO_{2e}/year/resident.

City of Daly City General Plan,
Green Vision, and Green Building Ordinance

The project would be consistent with the City's General Plan [specifically Policy HE-23 of increasing energy efficiency standards in new and existing housing developments], Green Vision, and Green Building Ordinance because the project proposes to be constructed in compliance with the 2016 California Green Building Standards Code (Title 24), which requires efficient windows, insulation, lighting, ventilation systems, and other features that reduce water and energy consumption.

The project would comply with the requirements of the Green Building Ordinance and the Title 24 Building Code, which requires proposed buildings to be constructed with high-efficiency water fixtures and water-efficient irrigation systems. For this reason, the project would be consistent with the City's General Plan, Green Vision, and Green Building Ordinance.

2.5.3 Conclusion

The proposed project would not result in significant GHG emission impacts. **(Less Than Significant Impact)**

2.6 LAND USE

2.6.1 Existing Setting

2.6.1.1 *Regulatory Framework*

Comprehensive Airport Land Use Compatibility Plan for the Environs of the San Francisco International Airport and Federal Aviation Regulations, Part 77

In 1967, the State legislature adopted legislation requiring the establishment of airport land use commissions in counties with one or more airports serving the general public. Amendments adopted by the legislature in 1970 required each commission to develop comprehensive airport land use compatibility plans (ALUCPs). The purpose of the ALUCPs is to provide for the orderly growth of airports and the surrounding areas to minimize the public's exposure to excessive noise and safety hazards.

The project site is located within the Airport Influence Area (AIA) of the San Francisco International Airport (SFO). Properties within the AIA may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (e.g., noise, vibration, and odors). The airport/land use compatibility of a proposed development or land use policy action shall be determined by comparing the proposed development or land use policy action with the safety compatibility criteria, noise compatibility criteria, and airspace protection/height limitation criteria in the ALUCP.

The ALUCP for SFO identifies safety zones where certain land uses are incompatible and should be avoided. The project site is located within Safety Compatibility Zone 3 (Inner Turning Zone), which is an area overflown by aircraft making turns at low altitude immediately after take-off. The compatibility criteria in Zone 3 are less restrictive because the area is subject to less accident risk by virtue of lower density of overflights in this area. In Zone 3, uses accommodating potentially vulnerable populations are incompatible. Hazardous uses and critical public utilities are not incompatible in Zone 3, but are classified as uses to be avoided. This means that they should not be permitted unless no feasible alternative is available.[24]

Furthermore, properties located within the 70 dB CNEL aircraft noise contour for SFO warrant land use controls to promote noise compatibility; additional information about the project's compatibility with the aircraft noise contour are discussed in *Section 4.12 Noise and Vibration* of the Initial Study (refer to Appendix B). The project site is not located within SFO's 70 dB CNEL aircraft noise contour.

The ALUCP also includes airspace protection/height limitation criteria based on Federal Avigation Regulations. Federal Aviation Regulations, Part 77, "Objects Affecting Navigable Airspace" (referred to as FAR Part 77) sets forth standards and review requirements for protecting the airspace

[24] San Francisco International Airport Land Use Commission. *Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport.* Page IV-32. July 2012.

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 ground. For the project site, any proposed structure of a height greater than approximately 200 feet above mean ground level is required under FAR Part 77 to be submitted to the FAA for review.

Any proposed land use policy actions, including the proposed General Plan amendment/rezoning, that affect properties within the ALUCP Area B boundary in Daly City, must be referred to the C/CAG Board for an ALUCP consistency review and determination. The Plan would first go to the C/CAG Airport Land Use Committee for review and a recommendation to the C/CAG Board. The Board will consider the ALUC recommendation and evaluate the consistency of the project with the relevant airport/land use compatibility policies and criteria contained in the adopted ALUCP. The C/CAG Board consistency determination must occur before the Daly City City Council can approve the proposed project. If the C/CAG Board determines the project inconsistent, the City Council can override the Board's determination with a supermajority vote.

City of Daly City General Plan

The project site is designated as *High Density Residential* and *Commercial – Retail and Office* in the City's General Plan. The Land Use Element of the City's General Plan contains policies, recommendations, and actions to avoid or mitigate land use impacts resulting from development within the City. All future development allowed by the project would be subject to conformance with applicable General Plan policies, including those listed below.

Policy	Description
Policy LU-1	Maintain and, where possible, encourage larger commercial development sites throughout the City.
Policy LU-4	Provide regulatory incentives for developers to construct higher-density mixed-use development along Mission Street, Geneva Avenue, and any other locations within close proximity to public transit.
Policy LU-10	Ensure that new single-family homes and duplexes complement the scale, character, and street relationship of existing homes of the neighborhood in which they are constructed.
Task HE-20.1	Amend the Zoning Ordinance non-conforming building regulations to allow the voluntary reconstruction, restoration, or rebuilding of any multifamily residential building with three or more units. Examples of non-conformity may include unit count, parking provision, and building setback and height. Such reconstruction, restoration, or rebuilding shall be limited for both single-family and multiple-family buildings in the ways described by California Government Code Section 65852.25.

City of Daly City Zoning Ordinance

The Zoning Ordinance is provided in Title 17 of the Daly City Municipal Code. The Zoning Ordinance helps promote public health, safety, morals, convenience, comfort, prosperity and general welfare of residents in the City.

The project site is zoned *Planned Development (PD-57)*. This district is designed to accommodate various types of development such as neighborhood and district shopping centers, professional and administrative areas, single-family and multiple-family residential development, commercial service centers and industrial parks or any other use of combination of uses which can appropriately be made a part of a planned development.[25] Currently, the PD-57 zoning district allows the construction of a 137-room hotel and 200 condominium units. The project proposes an amendment to the PD-57 zoning to increase the number of condominium units and hotel rooms to 323 and 176, respectively. Additionally, the project proposes an amendment to the PD-57 zoning to increase the allowed building heights to approximately 255 feet to accommodate the hotel and residential structures, as the current PD-57 zoning restricts building heights to 90 feet.

2.6.1.2 *Existing Conditions*

The project site is located in an urban area with commercial uses to the north, east, and west, multi-family residences to the southeast, and quasi-public uses to the south (refer to Figure 1.1-3). The project site is bounded by Serramonte Boulevard to the north, McDonald's to the east, a gas station to the west, and a Chinese cemetery to the south. The layout and design of the project does not include any features that would physically divide the community (e.g., impeding roadways or sidewalks).

The project site is currently undeveloped with lush vegetation and mature trees. The site is located approximately 1.5 miles southwest of the San Bruno Habitat Conservation Plan boundary. The site is not used for agricultural or forestry uses.

2.6.2 Land Use Impacts

2.6.2.1 *Thresholds of Significance*

For the purposes of this EIR, a land use impact is considered significant if the project would:

- Physically divide an established community;
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect;
- Conflict with any applicable habitat conservation plan or natural community conservation plan;

[25] City of Daly City Municipal Code Chapter 17.28

2.6.2.2 *Impacts to an Established Community*

The project site is located in a developed urban area with commercial uses to the north, east, and west, and residential uses to the southeast. Implementation of the proposed project would result in the construction of condominiums and a hotel on the site. The layout and design of the project does not include any features that would physically divide the community (e.g., impeding roadways or sidewalks). For these reasons, the project would not physical divide an established community. **(Less Than Significant Impact)**

2.6.2.3 *Consistency with Applicable Plans, Policies, and Regulations*

Comprehensive Airport Land Use Compatibility Plan for the Environs of the San Francisco International Airport and Federal Aviation Regulations, Part 77

As discussed previously, the project site is not located within the ALUCP 65 dB CNEL aircraft noise contour or safety zones for SFO. The project was found to be in general compliance with the ALUCP's critical airspace (refer to Appendix D); however, any structure exceeding 200 feet in height above ground would require submittal to the FAA for airspace safety review. Since the project would allow buildings of approximately 255 feet, notification to the FAA would be required. The project would be required to file Form 7460-1 for a determination of "no hazard" from the FAA for each structure exceeding 200 feet above grade and incorporate any conditions into the project prior to issuance of a building permit. For these reasons, the project would not conflict with the ALUCP or FAR Part 77.

City of Daly City General Plan

The project site is located in the Serramonte Planning Area, which is the newest large-scale subdivision in Daly City. The residential portion of the project site is designated in the General Plan as *High Density Residential,* which allows residential development between 35 and 50 dwelling units per acre. The hotel component of the project site is designated in the General Plan as *Commercial – Retail and Office,* which allows a Floor Area Ratio (FAR) of up to five (5) square feet of building area for each square foot of land area. In order for the proposed residential density of the project (68 dwelling units per acre) to comply with the General Plan, a General Plan Amendment is proposed to *Very High Density Residential* which allows residential development of more than 50 dwellings units per acre.

The project would be consistent with General Plan Policy LU-4, which encourages regulatory incentives for developers to construct higher-density mixed-use development in locations within close proximity to public transit. In addition, consistent with the City's Affordable Housing Ordinance approved in 2014, the developers must pay an affordable housing impact fee or provide below-market rate units to accommodate households of moderate income. Therefore, the project proposes a total of 56 units that would be sold at rates affordable to moderate income households. The proposed affordable units would qualify the project for a density bonus of 15 percent which allows for 42 additional units on the site than would otherwise be allowed.

Based on the above discussion, the project would be consistent with the City's General Plan and applicable land use policies.

City of Daly City Zoning Ordinance

The project site is zoned as *Planned Development (PD-57)*. The project proposes an amendment to the PD-57 zoning to increase the allowed building heights to accommodate the hotel and residential structures, as the current PD-57 zoning restricts building heights to 90 feet. The project would be consistent with the City's Zoning Ordinance with the amendment of *PD-57*.

Other

The project site is not located within an adopted habitat conservation plan or natural community conservation plan. **(No Impact)**

2.6.3 Conclusion

The proposed project would not result in significant land use impacts. **(Less Than Significant Impact)**

2.7 TRANSPORTATION

The following is based upon a Transportation Impact Analysis prepared for the project by *Kittelson & Associates, Inc.* in December 2017. A copy of the report is included in Appendix E of this EIR.

2.7.1 Setting

2.7.1.1 *Regulatory Framework*

San Mateo County Congestion Management Program

The City/County Association of Governments (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. Also included in the CMP is the Traffic Impact Analysis (TIA) Policy, which provides uniform procedures to analyze traffic impacts.

2.7.1.2 *Methodology*

Level of Service

Traffic conditions were evaluated using level of service (LOS). LOS is a qualitative description of operating conditions ranging from LOS A (free-flow conditions with little or no delay) to LOS F (jammed conditions with excessive delays). The analysis methods for signalized and unsignalized intersections are described below.

Signalized Intersections

The intersection analysis for signalized intersections is based on the *2010 Highway Capacity Manual* LOS methodology. This method evaluates signalized intersection operations on the basis of average control delay time for all vehicles at the intersection. The City's General Plan has established that if the addition of project traffic degrades an intersection LOS to below LOS D during weekday morning and evening peak traffic periods, the project would have a significant impact on traffic. For intersections operating at LOS E or F, any increase in delay is considered a significant impact.

The intersection of Serramonte Boulevard and Junipero Serra Boulevard is also located in the Town of Colma and, therefore, Colma's significance criteria were applied at this location. Colma's General Plan uses LOS D as the standard. LOS E is tolerated for the intersection of Serramonte Boulevard and Junipero Serra Boulevard.

Two intersections are located in the City of South San Francisco, and therefore, South San Francisco's significance criteria were applied at these two locations: Hickey Boulevard and Langford Drive, and Hickey Boulevard and Junipero Serra Boulevard. South San Francisco uses LOS D as the standard. If an intersection is operating at LOS E or F, total volumes passing through an intersection

by two percent or more would constitute a significant traffic impact. The correlation between the levels of service and average control delay for signalized intersections is shown in Table 2.7-1 below.

Table 2.7-1:
Signalized Intersection Level of Service Standards

Level of Service	Description	Average Control Delay Per Vehicle (seconds)
A	Signal progression is extremely favorable. Most vehicles arrive during the green phase and do not stop at all. Short cycle lengths may also contribute to the very low vehicle delay	10.0 or less
B	Operations characterized by good signal progression and/or short cycle lengths. More vehicles stop compared to LOS A, causing high levels of average vehicle delay.	10.1 to 20.0
C	Higher delays may result from fair signal progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, though may still pass through the intersection without stopping.	20.1 to 35.0
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable signal progression, long cycle lengths, or high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	This is considered to be the limit of acceptable delay. These high delay values generally indicate poor signal progression, long cycle lengths, and high V/C ratios. Individual cycle failures occur frequently.	55.1 to 80.0
F	This level of delay is considered unacceptable by most drivers. This condition often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. Poor progression and long cycle lengths may also be major contributing causes of such delay levels	Greater than 80.0

Unsignalized Intersections

According to Daly City's General Plan, the minimum acceptable standard for unsignalized intersection operations is LOS D. The correlation between the levels of service and average control delay for unsignalized intersections is provided in Table 2.7-2 below.

Table 2.7-2:
Unsignalized Intersection Level of Service Standards

Level of Service	Description	Average Control Delay Per Vehicle (seconds)
A	Little or no traffic delay	10.0 or less
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	Greater than 50.0

Study Intersections

The traffic analysis evaluated the impacts of the proposed project on 13 signalized intersections and three unsignalized intersections during the weekday AM and PM peak hour periods of traffic. The AM peak hour is between 7:00 AM and 9:00 AM and the PM peak hour period is between 4:00 PM and 6:00 PM. The study intersections are listed below and shown on Figure 2.7-1.

1. Clarinada Avenue & SR-1 SB Ramps
2. Serramonte Boulevard & SR-1 NB Ramps
3. Serramonte Boulevard & Callan Boulevard
4. Serramonte Boulevard & Serramonte Shopping Center Entrance & Project Driveway
5. Serramonte Boulevard & Gellert Boulevard
6. Serramonte Boulevard & I-280 SB Off-Ramp
7. Serramonte Boulevard & I-280 SB On-Ramp
8. Serramonte Boulevard & Junipero Serra Boulevard (Town of Colma)
9. Gellert Boulevard & Serramonte Plaza
10. Hickey Boulevard & Callan Boulevard
11. Hickey Boulevard & Gellert Boulevard
12. Hickey Boulevard & I-280 SB Ramps
13. Hickey Boulevard & I-280 NB Ramps
14. Hickey Boulevard & Kaiser Driveway
15. Hickey Boulevard & Langford Drive (City of South San Francisco)
16. Hickey Boulevard & Junipero Serra Boulevard (City of South San Francisco)

None of the study intersections are Congestion Management Program (CMP) intersections.

Freeway Mainline Segments

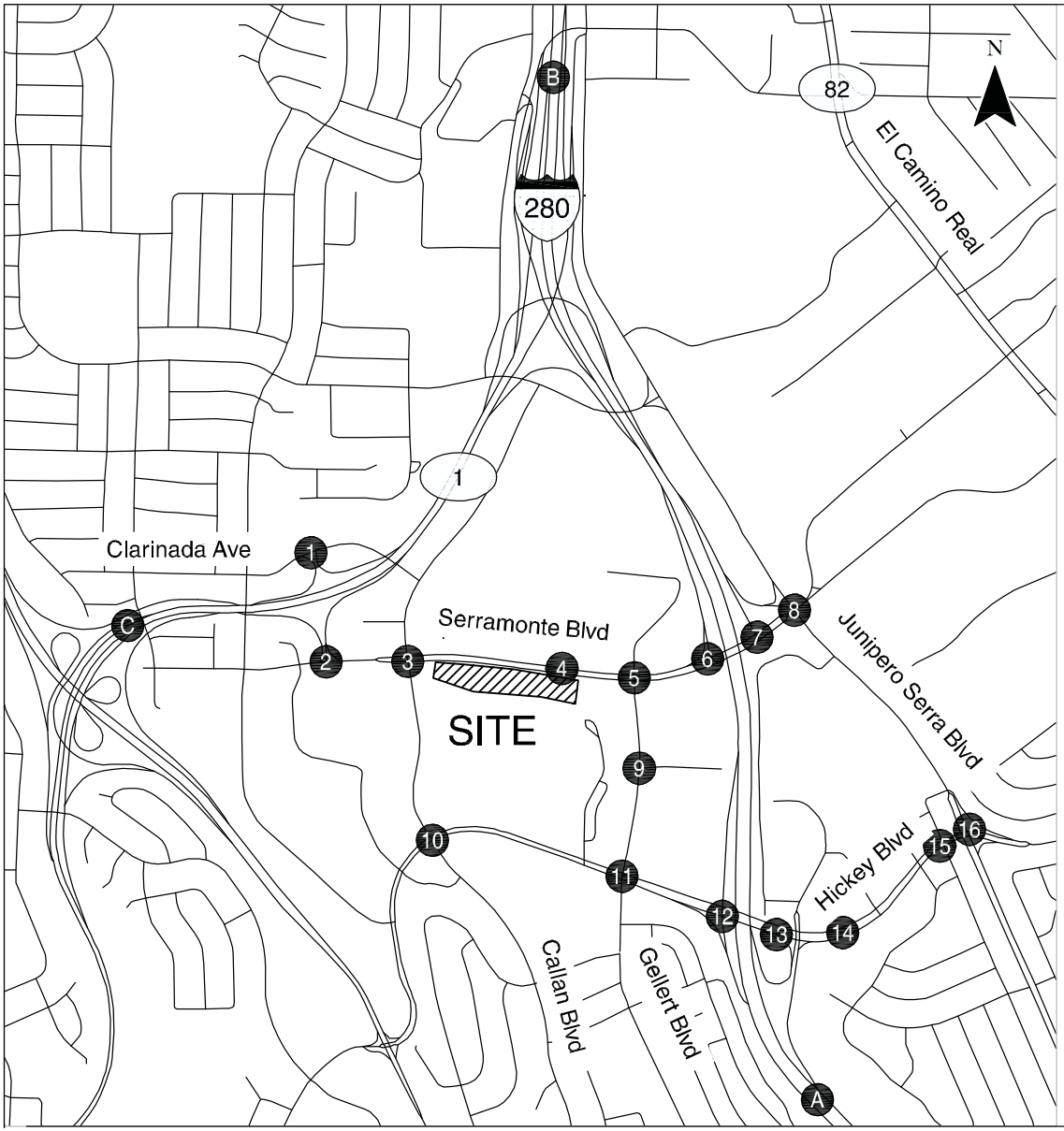
The freeway mainline segments studied in this analysis are listed below:

1. I-280 south of Hickey Boulevard
2. I-280 north of SR 1
3. SR 1 south of Serramonte Boulevard

A freeway weaving segment is analyzed on southbound I-280 between SR 1 and Serramonte Boulevard.

A queuing analysis at freeway off-ramps is analyzed at five of the 16 study intersections (listed below):

1. SR 1 Southbound Off-Ramp to Clarinada Avenue
2. SR 1 Northbound Off-Ramp to Serramonte Boulevard
3. I-280 Southbound Off-Ramp to Serramonte Boulevard
4. I-280 Southbound Off-Ramp to Hickey Boulevard
5. I-280 Northbound Off-Ramp to Hickey Boulevard



LEGEND

Study Intersections

1. SR-1 SB Ramps & Clarinada Ave
2. SR-1 NB Ramps & Serramonte Blvd
3. Callan Blvd & Serramonte Blvd
4. Serramonte Shopping Center Entrance & Serramonte Blvd & Project Driveway
5. Gellert Blvd & Serramonte Blvd
6. I-280 SB Off-Ramp & Serramonte Blvd
7. I-280 NB On-Ramp & Serramonte Blvd
8. Junipero Serra Blvd & Serramonte Blvd
9. Gellert Blvd & Serramonte Plaza
10. Callan Blvd & Hickey Blvd
11. Gellert Blvd & Hickey Blvd
12. I-280 SB Ramps & Hickey Blvd
13. I-280 NB Ramps & Hickey Blvd
14. Kaiser Driveway & Hickey Blvd
15. Longford Dr & Hickey Blvd
16. Junipero Serra Blvd & Hickey Blvd

Study Freeway Segments

- A - I-280 South of Hickey Blvd
- B - I-280 North of SR-1
- C - SR-1 South of Serramonte Blvd

Source: Kittelson & Associates, Inc., Dec 2017.

EXISTING ROADWAY NETWORK AND STUDY INTERSECTIONS FIGURE 2.7-1

Traffic Scenarios Analyzed

Traffic conditions at study intersections were evaluated for two scenarios: existing conditions and existing plus project. Table 2.7-3 below describes each scenario.

Cumulative traffic scenarios are discussed in *Section 4.0 Cumulative Impacts*.

Table 2.7-3:
Traffic Scenarios Analyzed

Scenario	Description
Existing Conditions	Existing conditions are represented by existing peak hour traffic volumes on the existing roadway network.
Existing Plus Project Conditions	Existing plus project conditions were estimated by adding projected project peak hour trips generated by the proposed residential project to the existing condition. Project generated traffic was estimated using the vehicular trip generation rates recommended by the Institute of Transportation Engineers manual entitled *Trip Generation, 9th Edition*.

2.7.1.3 *Existing Conditions*

Roadway Network

Regional access to the project site is provided by Interstate 280 (I-280) and State Route 1 (SR-1). Local access to the project site is provided via State Highway 82 (El Camino Real), Junipero Serra Boulevard, Southgate Avenue, Serramonte Boulevard, Callan Boulevard, Hickey Boulevard, Clarinada Avenue, and Gellert Boulevard. The existing roadway network is described in more detail below and shown on Figure 2.7-1.

Regional Access

Interstate 280 (I-280) is an eight- to twelve-lane freeway with a posted speed limit of 65 miles per hour. The north-south freeway connects Daly City with nearby cities, such as San Francisco and San Bruno, and regional destinations, such as San Jose. It also provides access to the greater freeway network with direct connections to Interstates 680 and 880, U.S. Highway 101, and State Routes 1, 92, and 85. The Project is served by interchanges at Serramonte Boulevard and Hickey Boulevard. The Serramonte Boulevard interchange contains a southbound off-ramp and a northbound on-ramp to I-280. The Hickey Boulevard interchange provides full access with on- and off-ramps to both northbound and southbound I-280.

State Route 1 (SR 1) is a four- to eight-lane freeway in the vicinity of the Project with a posted speed limit of 65 miles per hour. The north-south freeway connects Daly City with nearby cities, such as San Francisco and Pacifica, and regional destinations along the coast. The Project is served by interchanges at Serramonte Boulevard and Clarinada Avenue. The Serramonte Boulevard interchange provides access to and from SR-1 northbound while the Clarinada Avenue interchange provides access to and from SR 1 southbound.

Local Access

State Highway 82 (El Camino Real) is a four- to six-lane, north-south road that extends between San Francisco and San Jose. On-street parking is generally allowed but is often not utilized due to the small number of business frontages. Sidewalks are present on the east side and intermittently available on the west side of the roadway in the vicinity of the Project.

Junipero Serra Boulevard is a four-lane, north-south roadway with a posted speed limit of 40 miles per hour near the project site. The facility extends from Daly City to South San Francisco. On-street parking is prohibited and a sidewalk is present along the east side of the street in the vicinity of the Project.

Serramonte Boulevard is a four-lane, east-west roadway with a posted speed limit of 30 miles per hour that provides access to mostly residential land uses west of the Project and serves major regional roadways to the east such as Junipero Serra Boulevard and El Camino Real. Near the Project, sidewalks are primarily provided on the south side of the street with intermittent sidewalk on the north side. On-street parking is not allowed except for a small area located near St. Francis Boulevard.

Gellert Boulevard is a two- to six-lane, north-south road with a posted speed limit of 30 miles per hour that provides access between Serramonte Boulevard and King Drive, within the City of Daly City. On-street parking is not allowed in the project area but is allowed south of Hickey Boulevard. Sidewalks are provided on both sides of the street.

Hickey Boulevard is a four-lane, east-west road with a posted speed limit of 35 miles per hour. Hickey Boulevard primarily serves as a connection between major regional facilities to the east (I-280, Junipero Serra Boulevard, and El Camino Real) and residential land uses to the west.

Callan Boulevard is a four-lane, north-south roadway that connects Southgate Avenue, Serramonte Boulevard, and residential land uses to the south of Hickey Boulevard. Within the vicinity of the Project, parking is allowed in the east side of the roadway and sidewalks are present along both sides of the street.

Clarinada Avenue is a two- to four-lane roadway that connects residential land uses to the west with Serramonte Center and the major regional roadways to the east. It also serves the SR-1 southbound ramps. Parking is allowed on both sides of the street, and sidewalks are provided along both the north and south sides.

Freeway Mainline Segments

For both circulation system performance and congestion management program (CMP) analyses, the methodology outlined in the Highway Capacity Manual (HCM) (Transportation Research Board, Washington, D.C., 2010) as implemented by the Highway Capacity Software (HCS) tool were used to calculate the density in terms of passenger cars per mile per lane for the study freeway segments and to determine the LOS threshold from A to F as shown in Table 2.7-4 below.

For the weaving analysis, the HCM 2010 methodology as implemented by the HCS software tool was used. Freeway weaving conditions are dependent upon traffic volumes and the weaving length between the interchanges; lane configurations, and free-flow speed of the freeway segment. A weaving analysis is typically applicable for freeway segments where the distance between an on-ramp and a downstream off-ramp is less than 2,500 feet.

The correlation between the levels of service and average control delay for freeway density is provided in Table 2.7-4 below.

Table 2.7-4:
Freeway Mainline Segment Level of Service Standards

Level of Service	Description	**Density** (passenger vehicles per mile per lane)
A	Little or no traffic delay	≤11
B	Short traffic delays	>11-18
C	Average traffic delays	>18-26
D	Long traffic delays	>26-35
E	Very long traffic delays	>35-45
F	Extreme traffic delays	>45 Demand exceeds capacity

Pedestrian and Bicycle Facilities

Pedestrian facilities in the project vicinity are very limited. Partial five foot sidewalks border the project to the west along Serramonte Boulevard and east of the proposed driveway entrance. There is no sidewalk connection on the north side of the project site along Serramonte Boulevard. Additionally, the intersection that accesses the project site does not have a striped crosswalk on the east leg.

According to the Daly City Bicycle and Pedestrian Master Plan[26], the Town of Colma General Plan[27], and the City of South San Francisco General Plan[28], the following bikeways are currently present within the study area:

- Callan Boulevard between Serramonte Boulevard and King Drive
- Gellert Boulevard between Hickey Boulevard and King Drive
- Southgate Avenue west of St. Francis Boulevard
- Junipero Serra Boulevard south of D Street
- Southgate Avenue between Junipero Serra Boulevard and St. Francis Boulevard
- Callan Boulevard between Southgate Avenue and Serramonte Boulevard
- Gellert Boulevard between Serramonte Boulevard and Hickey Boulevard

[26] City of Daly City, *Daly City Bicycle and Pedestrian Master Plan*. Adopted February 2013.
[27] Town of Colma, *2014 Circulation Element Town of Colma General Plan.* Adopted September 2014
[28] City of South San Francisco, *South San Francisco General Plan*, Adopted October 1999.

Transit Service

Existing transit service in the project area is provided by Bay Area Rapid Transit (BART) and the San Mateo County Transit District (SamTrans). These services are further described below and shown in Figure 2.7-2.

Bay Area Rapid Transit (BART)

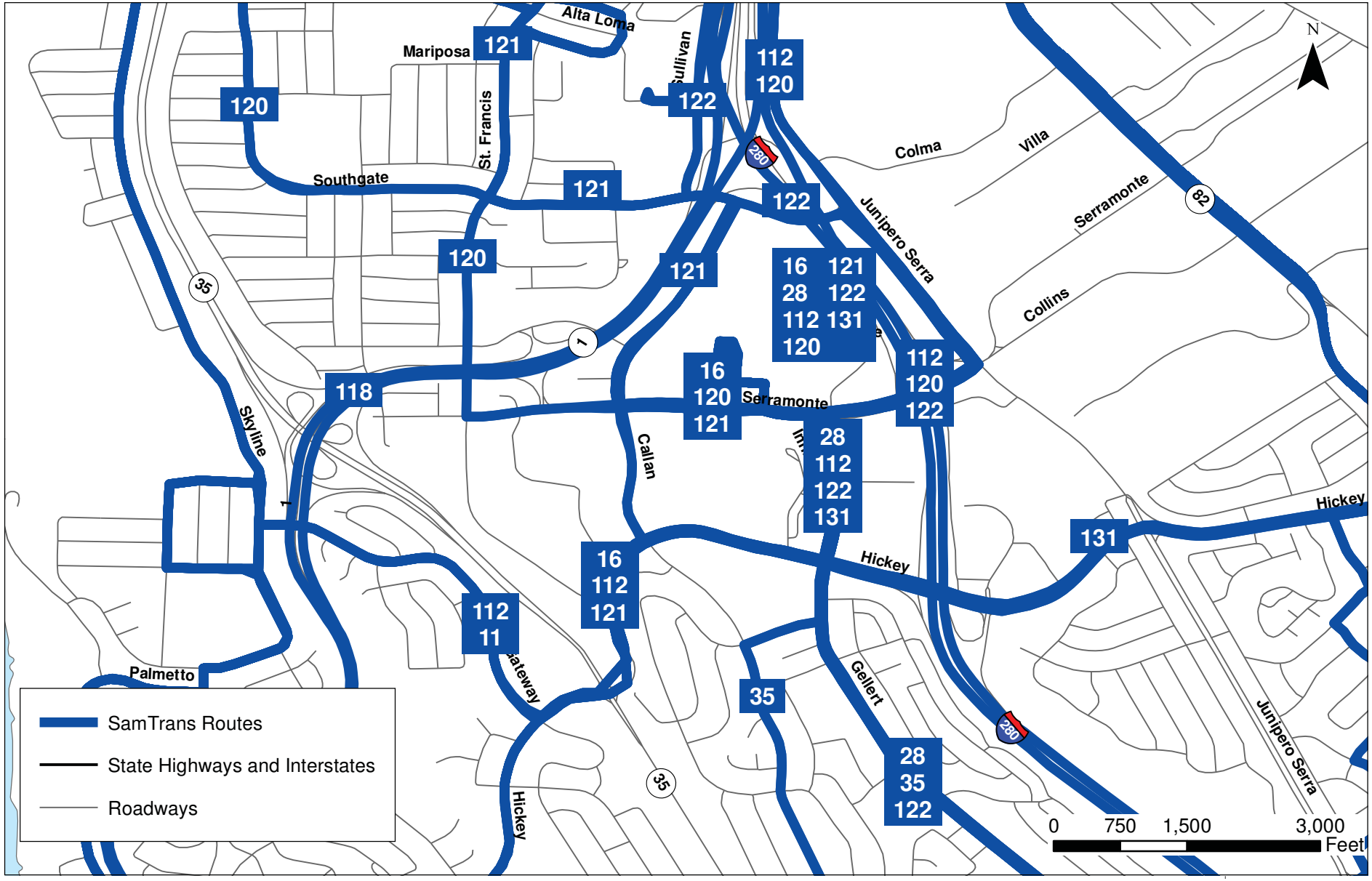
The Bay Area Rapid Transit District (BART) provides heavy-rail, regional transit service to Alameda, San Francisco, Contra Costa, and San Mateo counties. The nearest station is the Colma BART Station, located near Albert M. Teglia Boulevard and El Camino Real about 1.8 miles from the Project. BART's direct service from this station includes the Pittsburg-Bay Point line and the Richmond-Daly City/Millbrae line. BART trains operate on 15-minute headways during peak commute periods.

SamTrans

SamTrans is the administrative body for the principal public transit and transportation programs in San Mateo County. SamTrans operates seven routes that serve the study area, and the closest bus stops are located at the Serramonte Shopping Center, north of the project and adjacent to the Triton Gas Station, west of the project site. Five routes provide local service (Routes 112, 120, 121, 122, and 131) while the other two routes serve public high schools on school days (Route 16 & 28). Routes 112 and 122 serve the Colma BART station while routes 120 and 121 serve both the Daly City and Colma BART stations. A description of these routes are provided in Table 2.7-5.

Table 2.7-5:
Existing SamTrans Bus Service near the Project Site

Bus Route	Serving	Headway During Peak Periods (minutes)
16	Daly City, Pacifica, and Terra Nova High School	Limited service on school days only.
28	Daly City, South San Francisco, and South San Francisco High School	Limited service on school days only.
112	Colma BART and Linda Mar Park & Ride	1 per hour on weekdays and weekends.
120	Brunswick/Templeton and Colma BART	4-6 per hour on weekdays, and 3-4 per hour on weekends.
121	Lowell/Hanover and Skyline College	2 per hour on weekdays, and 1 per hour on weekends.
122	South San Francisco BART and Stonestown/SF State	2 per hour on weekdays and weekends.
131	Airport/Linden and Serramonte Center	4 per hour on weekdays, 2 per hour on weekends.



Source: Kittelson & Associates, Inc., Dec. 2017.

EXISTING TRANSIT

FIGURE 2.7-2

Existing Intersection Levels of Service

The results of the intersection LOS analysis under existing conditions are summarized in Table 2.7-8. The results show that all study intersections in the project area currently operate at LOS D or better during both AM and PM peak hours, except for the intersection of the Northbound SR-1 Ramps and Serramonte Boulevard which operates at LOS E during the AM Peak Hour. Additional information about existing levels of service, including the level of service calculation sheets, are included in Appendix E of this EIR.

Existing Freeway Levels of Service

Traffic volumes for the subject freeway segments were obtained from the *2011 CMP Annual Monitoring Report*. The results of the analysis are summarized in Table 2.7-6. The results show that the mixed-flow lanes on one of the seven directional freeway segments analyzed currently operate at an unacceptable LOS E during at least one of the peak hours.

Table 2.7-6:
Existing Freeway Segment Levels of Service

Freeway Segment		Peak Hour	Mixed-Flow Lanes	
			Density	LOS
Northbound	I-280 South of Hickey Boulevard	AM	25.2	C
		PM	28	D
	I-280 North of SR 1	AM	18.2	C
		PM	24.1	C
	SR 1 South of Serramonte Boulevard	AM	14.5	B
		PM	13.6	B
Southbound	I-280 South of Hickey Boulevard	AM	32.4	D
		PM	28	C
	I-280 North of SR 1	AM	23.5	C
		PM	21.6	C
Southbound	SR 1 South of Serramonte Boulevard	AM	5.3	A
		PM	7.5	A
	I-280 Southbound between SR 1 and Serramonte Boulevard	AM	33.9	D
		PM	**40.8**	**E**

BOLD indicates an unacceptable LOS.

Existing Queuing Analysis at Freeway Off-Ramp Intersections

A queuing analysis for the freeway off-ramp intersections was performed to determine the impacts on state highways using the Vistro analysis software program. The queuing analysis assessed whether the queue length at the off-ramp's approach to the controlling intersection would extend beyond available storage on each analysis off-ramp. This analysis was done using the 95th percentile queue length, which indicates the maximum queue length likely to be experienced under normal conditions. Under existing conditions, all freeway off-ramps have sufficient storage to accommodate the off-ramp queues during both the AM and PM peak hours.

2.7.2 Transportation Impacts

2.7.2.1 *Thresholds of Significance*

For the purposes of this EIR, a transportation impact is considered significant if the project would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- Result in inadequate emergency access; or
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

2.7.2.2 *Project Trip Estimates*

The magnitude of traffic produced by a new development and the locations where that traffic would appear are estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the magnitude of traffic entering and exiting the site is estimated for the AM and PM peak hours. As part of the project trip distribution, an estimate is made of the directions to and from which the project trips would travel. In the project trip assignment, the project trips are assigned to specific streets. These procedures are summarized below and described in more detail in Appendix E of this EIR.

Trip Generation

Peak hour trip generation estimates for the proposed project are based on trip rates obtained from the Institute of Transportation Engineers' (ITE) publication *Trip Generation* (9th Edition, 2012). It is estimated that the proposed project would generate approximately 3,315 trips on a typical weekday. Of these new trips, 235 trips would occur during the weekday AM pear hour and 274 trips would occur during the weekday PM peak hour. The project trip generation is presented in Table 2.7-7 below.[29]

[29] The project trip generation and results of the TIA are conservative since this analysis considered 11 additional hotel rooms on the project site than currently proposed.

Trip Distribution Pattern and Trip Assignment

The trip distribution pattern for the project was estimated based on existing travel patterns on the surrounding roadway system and the locations of complementary land uses. The peak hour vehicle trips generated by the project were assigned to the roadway network in accordance with the trip distribution pattern. The trip distribution patterns for the proposed project are included in Appendix E of this EIR.

Table 2.7-7:
Project Trip Generation Estimates

	Dwelling Units/Rooms	AM Peak Hour			PM Peak Hour			Weekday Daily Total
		In	Out	Total	In	Out	Total	
Proposed Uses								
Condo[1]	323	24	118	142	113	55	168	1,877
Hotel[2]	187	55	38	93	54	52	106	1,438
Total Project Trips		***79***	***156***	***235***	***167***	***107***	***274***	***3,315***

Sources/Notes:
[1] Residential Condominium Townhouse (230) ITE Trip Generation, 9th Edition, regression equations.
[2] Hotel (310) ITE Trip Generation, 9th Edition, regression equations.

2.7.2.3 *Existing Plus Project Conditions*

Existing Plus Project Transportation Network

It is assumed that the transportation network under existing plus project conditions would be the same as the existing conditions with the exception of a new westbound left-turn pocket and south leg at the intersection of Serramonte Boulevard/Serramonte Shopping Center/Project Driveway.

Existing Plus Project Traffic Volumes

The net peak hour trips for the project were added to the existing traffic volumes to obtain the existing plus project volumes. Refer to Appendix E of this EIR for a tabulation of the existing plus project traffic volumes.

Existing Plus Project Intersection Levels of Service

The intersection of Serramonte Boulevard/Serramonte Shopping Center Driveway/Project Driveway is currently a three-way intersection with the north leg serving the Serramonte Shopping Center. With the project, a south leg would be added to this intersection, which would serve as the only driveway for the project. This intersection is currently a signalized intersection, with a protected eastbound left-turn lane into the Serramonte Shopping Center. For the westbound direction, this intersection currently has two westbound through lanes and an exclusive right-turn lane.

With the addition of the project, the need for an exclusive westbound left-turn lane into project driveway was analyzed. According to the Highway Capacity Manual (HCM), the presence of exclusive left-turn lanes should be determined based on the volume of left-turn traffic, opposing

volumes and safety considerations. A minimum of 100 left-turn vehicles per hour warrants an exclusive left-turn lane. The project would generate 113 westbound left-turn vehicles during the PM peak hour. Therefore, an exclusive westbound left-turn lane is proposed at this intersection.

To improve the proposed driveway operations, the following intersection improvements are recommended at the intersection of Serramonte Boulevard/Serramonte Shopping Center Driveway/Project Driveway:

- Re-stripe the westbound approach on Serramonte Boulevard to provide a left-turn lane, two through lanes, and one right-turn lane. Reconfigure the signal to allow for a protected left-turn for the westbound approach, and split phasing for the northbound and southbound approaches. This is a required modification of the existing median island east of the intersection.

The results of the intersection LOS analysis under existing plus project conditions are summarized in Table 2.7-8 below and show that all of the study intersections would operate at an acceptable LOS D or better during the AM and PM peak hours of traffic, except for the intersection of SR-1 Northbound Ramps and Serramonte Boulevard. This intersection would continue to operate at an unacceptable LOS E during the AM peak hour with the addition of project traffic. The addition of project traffic at this intersection would increase the average delay from 40.0 seconds to 42.2 seconds, resulting in a significant impact.

Impact TRANS – 1: The project would add delay to the intersection of SR 1 Northbound Ramps and Serramonte Boulevard, which currently operates at a deficient level of service without the project. **(Significant Impact)**

Mitigation Measures: The following mitigation measure would reduce the average delay time between SR 1 Northbound Ramps and Serramonte Boulevard to 26.7 seconds during the AM peak hour. Under the existing plus project condition, the average delay time is 42.2 seconds during the AM peak hour (as shown in Table 2.7-8 below). After implementing the recommended mitigation measure, the intersection would improve its speed and functionality by reducing its average delay by 15.5 seconds. The intersection would be improved from an LOS E to an acceptable LOS C standard.

MM TRANS – 1.1: The City of Daly City shall install a traffic signal at the intersection. This intersection currently meets the peak hour signal warrant during the AM peak hour, without or with the project. Signalizing this intersection would improve the average intersection delay to LOS C. The installation of a traffic signal and turning lanes at this intersection is a planned intersection improvement under the Daly City General Plan, anticipated within a 10-year time frame (and therefore the interim LOS E congestion with and without the project traffic is considered acceptable until the City installs the traffic signal according to General Plan Circulation Element Task CE-1.6). The project shall contribute a proportional share to the cost of the improvements.

With the implementation of the above mitigation measure, the traffic impacts would be less than significant. **(Less Than Significant With Mitigation Incorporated)**

Table 2.7-8:
Existing and Existing Plus Project Intersection Levels of Service – Signalized Intersections

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	SR 1 SB Ramps & Clarinada Avenue	AM	13.4	B	13.6	B	+0.2
		PM	23.9	C	24.5	C	+0.6
2	SR 1 NB Ramps & Serramonte Boulevard	AM	**40.0**	**E**	***42.2***	**E**	**+2.2**
		PM	15.7	C	16.0	C	+0.3
3	Callan Boulevard & Serramonte Boulevard	AM	14.5	B	14.5	B	N/A
		PM	14.0	B	14.4	B	+0.4
4	Serramonte Center Driveway/ Project Driveway & Serramonte Boulevard	AM	8.1	A	22.6	C	+14.5
		PM	13.0	B	33.5	C	+20.5
5	Gellert Boulevard & Serramonte Boulevard	AM	11.9	B	12.7	B	+0.8
		PM	46.8	D	50.1	D	+3.3
6	I-280 SB Off-Ramp & Serramonte Boulevard	AM	7.1	A	7.3	A	+0.2
		PM	16.0	B	16.2	B	+0.2
7	I-280 NB Off-Ramp & Serramonte Boulevard	AM	1.7	A	1.9	A	+0.2
		PM	4.1	A	4.3	A	+0.2
8[2]	Junipero Serra Boulevard & Serramonte Boulevard	AM	27.0	C	27.8	C	+0.8
		PM	28.4	C	29.0	C	+0.6
9	Gellert Boulevard & Serramonte Plaza	AM	24.6	C	24.6	C	N/A
		PM	32.6	C	32.8	C	+0.2
10	Callan Boulevard & Hickey Boulevard	AM	17.7	B	17.8	B	N/A
		PM	22.5	C	22.8	C	+0.3
11	Gellert Boulevard & Hickey Boulevard	AM	29.7	C	30.0	D	+0.3
		PM	49.4	D	50.3	D	+0.9
12	I-280 SB Ramps & Hickey Boulevard	AM	9.2	A	9.2	A	N/A
		PM	10.5	B	10.5	B	N/A
13	I-280 NB Ramps & Hickey Boulevard	AM	26.9	C	27.0	C	+0.1
		PM	24.0	C	24.2	C	+0.2
14	Kaiser Driveway & Hickey Boulevard	AM	11.3	B	11.2	B	-0.1
		PM	17.3	B	17.3	B	N/A

Table 2.7-8:
Existing and Existing Plus Project Intersection Levels of Service – Signalized Intersections

Study Intersection		Peak Hour	Existing Condition		Existing Plus Project Condition		
			Average Delay (sec.)[1]	**LOS**	**Average Delay** (sec.)[1]	**LOS**	**Increase in Avg. Delay**
15[3]	Langford Drive & Hickey Boulevard	AM	52.4	D	52.5	D	+0.1
		PM	51.8	D	51.8	D	N/A
16[3]	Junipero Serra Boulevard & Hickey Boulevard	AM	43.3	D	43.6	D	+0.3
		PM	51.4	D	51.7	D	+0.3

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.
[2] Intersection under Town of Colma Jurisdiction
[3] Intersections under City of South San Francisco Jurisdiction

Existing Plus Project Conditions Freeway Analysis

Under the Existing Plus Project freeway conditions, all freeway segments would operate at LOS D or better, except for the weaving segment on I-280 southbound between SR 1 and Serramonte Boulevard, which would operate at LOS E without and with the project during the PM peak hour. The addition of project traffic would cause the Volume/Capacity (V/C) ratio for this segment to increase by more than one percent (from 0.969 to 0.986) during the weekday AM peak hour. Therefore, the project impact is considered to be significant.

Impact TRANS – 2: The project would add traffic constituting more than one percent of capacity to the I-280 southbound weaving segment between SR 1 and Serramonte Boulevard, which would operate at a deficient level of service without the project. **(Significant Impact)**

Mitigation Measures: The following mitigation measure would likely reduce freeway density impacts to a less than significant level. However, because I-280 and SR-1 are under Caltrans' jurisdiction, the City of Daly City does not have the authority to implement the mitigation and therefore impacts would remain significant and unavoidable.

MM TRANS – 2.1: Caltrans is planning to implement improvements on the weaving section on I-280 southbound between the SR 1 northbound off-ramp and the Serramonte Boulevard off-ramp, as included in the Daly City General Plan. Construction of these improvements would likely reduce the proposed project's impact to less than significant. However, because the freeway is under Caltrans' jurisdiction, the implementation and timing of the improvements to the affected

segment are not under the City's control, therefore, the impact would remain significant and unavoidable. **(Significant Unavoidable Impact)**

2.7.2.4 *Vehicular Access*

Vehicular access to the project would be provided via a driveway on Serramonte Boulevard. An emergency access road and pedestrian walkway would connect Serramonte Boulevard.

Parking for the proposed condominiums is proposed in a partially sub-grade, stepped parking podium garage. Vehicles would be able to access the parking garages via one driveway on Serramonte Boulevard.

The intersection of Serramonte Boulevard/Serramonte Shopping Center Driveway/Project Driveway is currently a three-way intersection with the north leg serving the Serramonte Shopping Center. With the project, a south leg would be added to this intersection, which would serve as the only driveway for the project. This intersection is currently a signalized intersection, with a protected eastbound left-turn lane into Serramonte Shopping Center. For the westbound direction, this intersection currently has two westbound through lanes and an exclusive right-turn lane.

Since the project would generate more than 100 left-turn vehicles per hour, an exclusive westbound left-turn lane is proposed to improve the project driveway operations. **(Less Than Significant Impact)**

2.7.2.5 *Impacts to Pedestrian and Bicycle Facilities*

Pedestrian facilities in the project vicinity are very limited. Partial five foot sidewalks border the project to the northwest along Serramonte Boulevard and east of the proposed driveway entrance. There is a sidewalk on the north side of Serramonte Boulevard between Gellert Boulevard and Callan Boulevard. Additionally, the intersection that accesses the project site has a crosswalk on the west and northern legs but does not have a striped crosswalk on the east leg. The project would create an additional sidewalk along the street frontage of Serramonte Boulevard and a crosswalk between the project driveway and the Serramonte Shopping Center (due to the addition of a south leg to the Serramonte Boulevard/Serramonte Shopping Center Driveway/project driveway intersection). Therefore, the proposed project would not conflict with or decrease the performance or safety of existing or planned pedestrian facilities.

There are existing Class II bike routes on Callan Boulevard between Serramonte Boulevard and King Drive, Gellert Boulevard between Hickey Boulevard and King Drive, Southgate Avenue west of St. Francis Boulevard, and Junipero Serra Boulevard south of D Street. Class III bike routes are present on Southgate Avenue between Junipero Serra Boulevard and St. Francis Boulevard, Callan Boulevard between Southgate Avenue and Serramonte Boulevard, and Gellert Boulevard between Serramonte Boulevard and Hickey Boulevard.

The Daly City Bicycle and Pedestrian Master Plan proposes a number of improvements to better connect the existing bicycle networks in the City. Within the project vicinity, several bicycle paths

are proposed including: Class II bicycle lanes on St. Francis Boulevard between Southgate Avenue and Serramonte Boulevard and on Serramonte Boulevard between St. Francis Boulevard and Callan Boulevard, and Class III bicycle routes on Hickey Boulevard between State Route 35 (SR 35) and Junipero Serra Boulevard.

As described in *Section 1.2 Project Description*, the project proposes to retain the existing bicycle lane on the south side of Serramonte Boulevard. The bicycle demand created by the proposed project would not result in adverse impacts to existing or planned bicycle facilities.

Based on the above discussion, the project would not result in significant impacts to pedestrian or bicycle facilities. **(Less Than Significant Impact)**

2.7.2.6 *Impacts to Transit Service*

Transit service in the project vicinity is provided by BART and SamTrans. The nearest BART station is the Colma station, located near Albert N. Teglia Boulevard and El Camino Real about 1.8 miles from the project site. SamTrans operates seven routes that serve the project area, and the closest bus stop is located at the Serramonte Shopping Center, north of the project site and adjacent to the Triton Gas Station, west of the project site. Given the existing transit service in the project area, the existing transit facilities would be adequate to serve the project's estimated transit demand. For these reasons, the proposed project would not have a significant impact on transit services or facilities. **(Less Than Significant Impact)**

2.7.2.7 *Other Transportation Impacts*

Construction Traffic Generation

The number of trips generated by project-related construction vehicles during the construction phase of the project was estimated to evaluate the impacts of construction vehicles on traffic operations in the project vicinity. Over a 60-day grading period, approximately 14,300 truck trips would be required in order to off-haul all the soil from excavation at the project site.[30] Assuming a nine-hour workday over a 60-day grading period, there would be an estimated 27 off-haul round trips per hour.

The proposed truck route would use the I-280 interchange at Hickey Boulevard and Gellert Boulevard to and from the project site. Figure 2.7-3 shows the proposed vehicle route and the resulting numbers of peak hour truck trips added to each intersection approach. As shown in Figure 2.7-3, the construction vehicles would access the project site from South San Francisco via northbound I-280, exiting and making a left-turn at Hickey Boulevard, a right-turn at Gellert Boulevard, a left-turn at Serramonte Boulevard, and a left-turn into the project site. The construction vehicles would depart the site using a reversed route. Based on this travel path, construction vehicles would travel through the following six study intersections:

4. Serramonte Boulevard & I-280 SB On-Ramp

[30] This traffic report evaluated a larger version of the project that assumed 325,000 cubic yards of soil off-haul. The current project proposes approximately 171,757 cubic yards of soil export from the site.

5. Serramonte Boulevard & Gellert Boulevard
9. Gellert Boulevard & Serramonte Plaza
11. Gellert Boulevard & Hickey Boulevard
12. Hickey Boulevard & I-280 SB Ramps
13. Hickey Boulevard & I-280 NB Ramps

The results of the intersection LOS analysis under the Existing and Existing plus Construction conditions are summarized in Table 2.7-9, for the AM and PM peak hour, respectively.

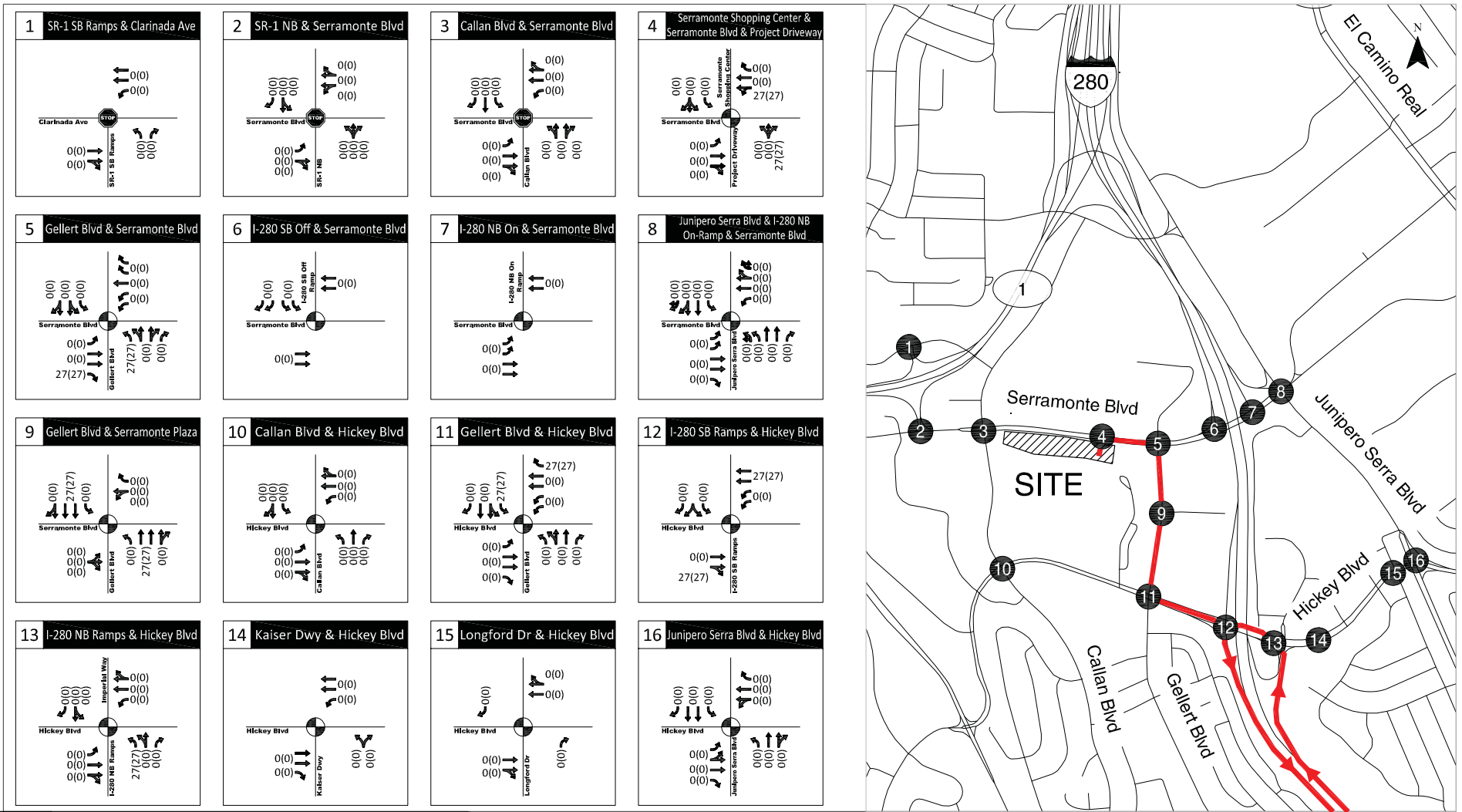
Table 2.7-9:
Existing and Existing Plus Project Construction Traffic

Study Intersection		Peak Hour	Existing Condition		Existing Plus Project Condition		
			Average Delay (sec.)[1]	LOS	Average Delay (sec.)[1]	LOS	Increase in Avg. Delay
4	Serramonte Center Driveway/Project Driveway & Serramonte Boulevard	AM	8.1	A	9.0	B	+0.9
		PM	13.0	B	14.5	B	+1.5
5	Gellert Boulevard & Serramonte Boulevard	AM	11.9	B	12.3	B	+0.4
		PM	46.8	D	52.6	D	+5.8
9	Gellert Boulevard & Serramonte Plaza	AM	24.6	C	24.6	C	N/A
		PM	32.6	C	32.5	C	-0.1
11	Gellert Boulevard & Hickey Boulevard	AM	29.7	C	30.0	D	+0.3
		PM	49.4	D	53.2	D	+3.8
12	I-280 SB Ramps & Hickey Boulevard	AM	9.2	A	9.2	A	N/A
		PM	10.5	B	10.6	B	+0.1
13	I-280 NB Ramps & Hickey Boulevard	AM	26.9	C	27.0	C	+0.1
		PM	24.0	C	24.7	C	+0.7

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.
[2] Intersection under Town of Colma Jurisdiction
[3] Intersections under City of South San Francisco Jurisdiction

Air Traffic Patterns

As discussed in *Section 2.6 Land Use*, the proposed project would not affect air traffic patterns or result in substantial aviation-related safety risks. **(Less Than Significant Impact)**



Source: Kittelson & Associates, Inc., Dec. 2017.

PROJECT CONSTRUCTION VEHICLE TRIP GENERATION

FIGURE 2.7-3

Sight Distance and Emergency Vehicle Access

An emergency vehicle access lane will be located on the western portion of the property along Serramonte Boulevard. The design of the project would comply with the City's standards for emergency vehicle access (including providing adequate points of access, vertical clearance, and turning radius) and therefore, would not result in inadequate emergency access.

As noted above, the proposed project will modify the project driveway to provide an exclusive west-bound left turn into the site, ensuring safety of vehicles entering the driveway. Based on the discussion above, the proposed project would not result in a substantial hazard from a design feature or inadequate emergency vehicle access. **(Less Than Significant Impact)**

2.7.2.8 *Consistency with Applicable Plans, Policies, and Regulations*

San Mateo County Congestion Management Program

As the Congestion Management Agency (CMA) for San Mateo County, the City/County Association of Governments (C/CAG) is responsible for maintaining the performance standards of the Congestion Management Program (CMP) roadway network. The CMP requires new development projected to add 100 or more peak hour trips to the CMP roadway network to implement Travel Demand Management (TDM) measures that would reduce project impacts. In the vicinity of the project site, facilities that are part of the CMP network include SR 1 and I-280. The freeway mainline segments and freeway weaving section listed above are compliant with CMP standards, with the exception of the weaving section on I-280 southbound between SR 1 northbound off-ramp and the Serramonte Boulevard off-ramp (refer to Impact TRANS – 2).

2.7.3 Conclusion

Impact TRANS – 1: The project would add delay to the intersection of SR 1 Northbound Ramps and Serramonte Boulevard, which currently operates at a deficient level of service without the project. The City of Daly City shall install a traffic signal at the intersection of SR 1 Northbound Ramps and Serramonte Boulevard. This intersection currently meets the peak hour signal warrant during the AM peak hour, without or with the project. Signalizing this intersection would improve the average intersection delay to LOS C. The installation of a traffic signal and turning lanes at this intersection is a planned intersection improvement under the Daly City General Plan, within a 10-year time frame, and therefore, this interim congestion is considered acceptable by City policy. The project shall contribute a proportional share to the cost of the improvements. **(Less Than Significant With Mitigation Incorporated)**

Impact TRANS – 2: The project would add traffic constituting more than one percent of capacity to the I-280 southbound weaving segment between SR 1 and Serramonte Boulevard, which would operate at a deficient level of

service without the project. Caltrans is planning to implement improvements on the weaving section on I-280 southbound between the SR 1 northbound off-ramp and the Serramonte Boulevard off-ramp, as included in the Daly City General Plan. Because the freeway is under Caltrans' jurisdiction, the implementation and timing of the improvements are not under the City's control. The project impact, therefore, would remain significant and unavoidable. **(Significant Unavoidable Impact)**