
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

The Tapestry by Hilton Hotel and Restaurant Project



Prepared for: City of Santa Ana



Prepared by: Circlepoint

October 2020

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1 Project Information

Project Title	Tapestry by Hilton Hotel and Restaurant Project
Lead agency name and address	City of Santa Ana Planning and Building Agency, M20 20 Civic Center Plaza Santa Ana, CA 92701
Contact person and phone number	Selena Kelaher, AICP and Ali Pezeshkpour, AICP (714) 667-2740 and (714) 647-5882
Project Location	1580 East Warner Avenue (also referred to as 1570 Brookhollow Drive)
Site size	2.8 acres
File Number	Development Project No. 2017-36
Project Sponsor's Name and Address	Moda Hotels, LLC 17510 Pioneer Boulevard, Suite 221-A Artesia, CA 90701
Assessor's Parcel Numbers	016-221-27, 016-221-28, and 016-221-29
Existing General Plan Designation	Professional Administrative Office (PAO)
Existing Zoning Designation	Specific Development No. 8, Zone III (SD-8) http://santa-ana.org/pba/planning/documents/SD8.NS-1360.pdf
Description of Project	The project would construct a new 6-story (82 feet in height), 139 room hotel and a detached 2,000 square-foot restaurant. The project would provide 142 onsite parking spaces.
Surrounding Land Uses and Setting	Commercial, business park and light industrial properties are located northwest of the project across Grand Avenue and directly north and south of the project. Costa Mesa Freeway (SR-55) bounds the eastern side of the project. Directly across Grand Avenue to the west, seven other hotels are located within approximately one square mile.
Discretionary Applications	<ul style="list-style-type: none"> • Zoning Ordinance Amendment to SD-8 to add 'hotel' as a conditionally permitted use • Conditional Use Permit for a hotel and Parking Modification • Planning Commission and City Council approval
Other public agencies whose approval is required (e.g. permits, financial approval, or participation agreements)	None

1.1 Project Location and Setting

The project is located at 1580 East Warner Avenue (also known as 1570 Brookhollow Drive) on the eastern border of the City of Santa Ana (City) between the Costa Mesa (SR-55) Freeway and South Grand Avenue, adjacent to the southbound Dyer Road freeway off-ramp in the central part of Orange County, California (**Figure 1**). The 2.8-acre (123,042 square-foot) project site is currently vacant but was previously developed as a restaurant/bar and parking area. Approximately 0.2 acres of the project site is paved with an asphalt parking lot populated with non-native, irrigated ornamental turf and trees, and there are overhead utilities that run through the project site. The Costa Mesa Freeway bounds the eastern edge of the project site, which is surrounded by commercial and industrial properties to the north, south, and northwest, across South Grand Avenue. Directly across South Grand Avenue to the west, seven other hotels are located within approximately 1 mile of the project. According to the *City of Santa Ana General Plan*¹, the site's land use designation is Professional Administrative Office (PAO) and zoning is SD-8, Zone III (**Figure 2** and **Figure 3**). Adjacent to the project, commercial and light industrial properties have a land use designation of Professional and Administrative Office (PAO), General Commercial (GC), and Industrial (IND) uses.

1.2 Project Description

Development of the project would entail construction of a six-story, 79,375 square-foot hotel with 139 rooms and a separate 2,000 square-foot restaurant (**Figure 4** and **Figure 5**). The hotel building footprint would be approximately 13,400 square feet. The hotel would be 82 feet tall while the restaurant would be a free-standing single-story building located at the corner of the lot next to Grand Avenue. In addition, 142 parking spaces would be provided onsite in paved, surface lots. Six bicycle parking spaces would also be provided separate from the vehicle parking lot. Access to the project would be provided via two driveways on Brookhollow Drive. The zoning requires 169 parking spaces; therefore, an administrative minor exception to allow a reduction in onsite parking is proposed.

Hotel

The proposed hotel would be six stories tall with a generally rectangular appearance. The building would be located directly east and south of the Dyer Road West offramp from the southbound Costa Mesa Freeway. The hotel would be southwest facing, surrounded by onsite parking on three sides. A marquee would shelter the main entrance where loading, unloading, and guest check-in would take place. The landscaping would include trees, shrubs, and perennials, which would be planted between rows of parking spaces and line walkways.

The first floor of the hotel would consist of the lobby, a small hotel-serving restaurant, kitchen, restrooms, meeting rooms, laundry, and rooms for employee-use only (maintenance and break rooms, storage, offices, etc.). On the second floor, the project would feature an outdoor pool, deck, and patio area on the roof of the marquee. The deck would be partially shielded from view by glass screening,

¹ City of Santa Ana, 2010

however ornamental plantings would be visible. Guest rooms would be located on floors two through six. An outdoor roof terrace would provide landscaped lounge areas restrooms and storage areas.

The hotel would be designed to complement surrounding hotel, commercial, and light industrial land uses with a façade comprising blue, metallic grey, and beige plaster with glass siding featuring vertical metal accents.

Restaurant

The freestanding restaurant would be located in the western corner of the project site, across the parking lot from the hotel. The restaurant would be one story and about 30 feet high at its tallest point, with a footprint of 2,000 square feet. There would be an outdoor seating patio on the north side. The stand-alone restaurant would have a slightly modern, industrial themed design featuring an angled roof and corrugated metal siding that would complement both the hotel and the surrounding light industrial and commercial land uses. Similar landscaping to the hotel would line the northern and western edges of the site.

Landscaping

The vacant project site currently contains 14 trees, all of which are located along the perimeter of the site. With implementation of the project, approximately 39 new trees would be planted around the project perimeter, and 21 new trees would be planted throughout the new parking lots. Additional ornamental plantings would be featured between the western parking lots and the hotel building.

1.3 Proposed Land Use Actions

The project site's existing land use designation is Professional and Administrative Office (PAO). Based on the City's Development Intensity Standards, the floor area ratio (FAR)² for PAO ranges from 0.5 to 1.0. The proposed project has a FAR of 0.66³ and is consistent with the designated PAO FAR range. The site is zoned as Specific Development No. 8, Zone III (SD-8) (**Figure 2**). However, the expressly permitted and conditionally permitted uses for the SD8 Zone III do not include hotels. Therefore, the project would require a Zoning Ordinance Amendment to SD-8 Zone III to add "hotel" as a conditionally permitted use, as well as a Conditional Use Permit for the hotel. In addition, the project would require a minor exception to parking requirements.

² The intensity standards for non-residential development are expressed as floor area ratio or FAR. FAR is the measurement of a building's floor area in relation to the size of the lot/parcel on which the building is located. FAR is expressed as a decimal number and is calculated by dividing the total area of the building by the total area of the parcel (building area ÷ lot area).

³ Hotel 79,375 square feet + Restaurant 2,000 square feet = 81,375 square feet, $81,375 \div 123,042.5 = 0.66$



Figure 1 Regional Setting



Legend








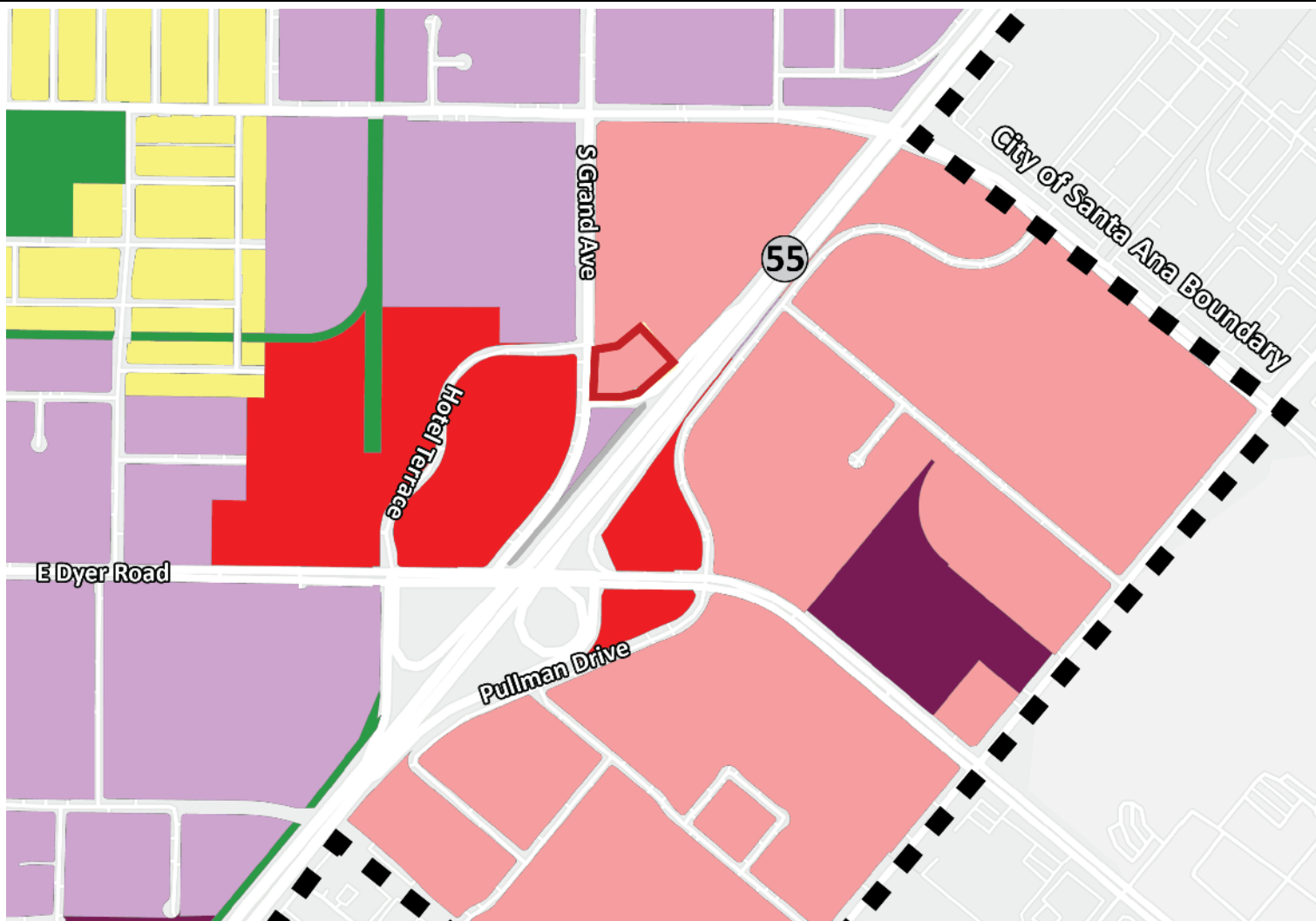
 Project Site	 C1 (Community Commercial)	 M2 (Heavy Industrial)
 R1 (Single-Family Residential)	 SD (Specific Development)	 O (Open Space Land)
 R2 (Two-Family Residential)	 M1 (Light Industrial)	 C5 (Open Space Land)



Figure 2 Zoning Map

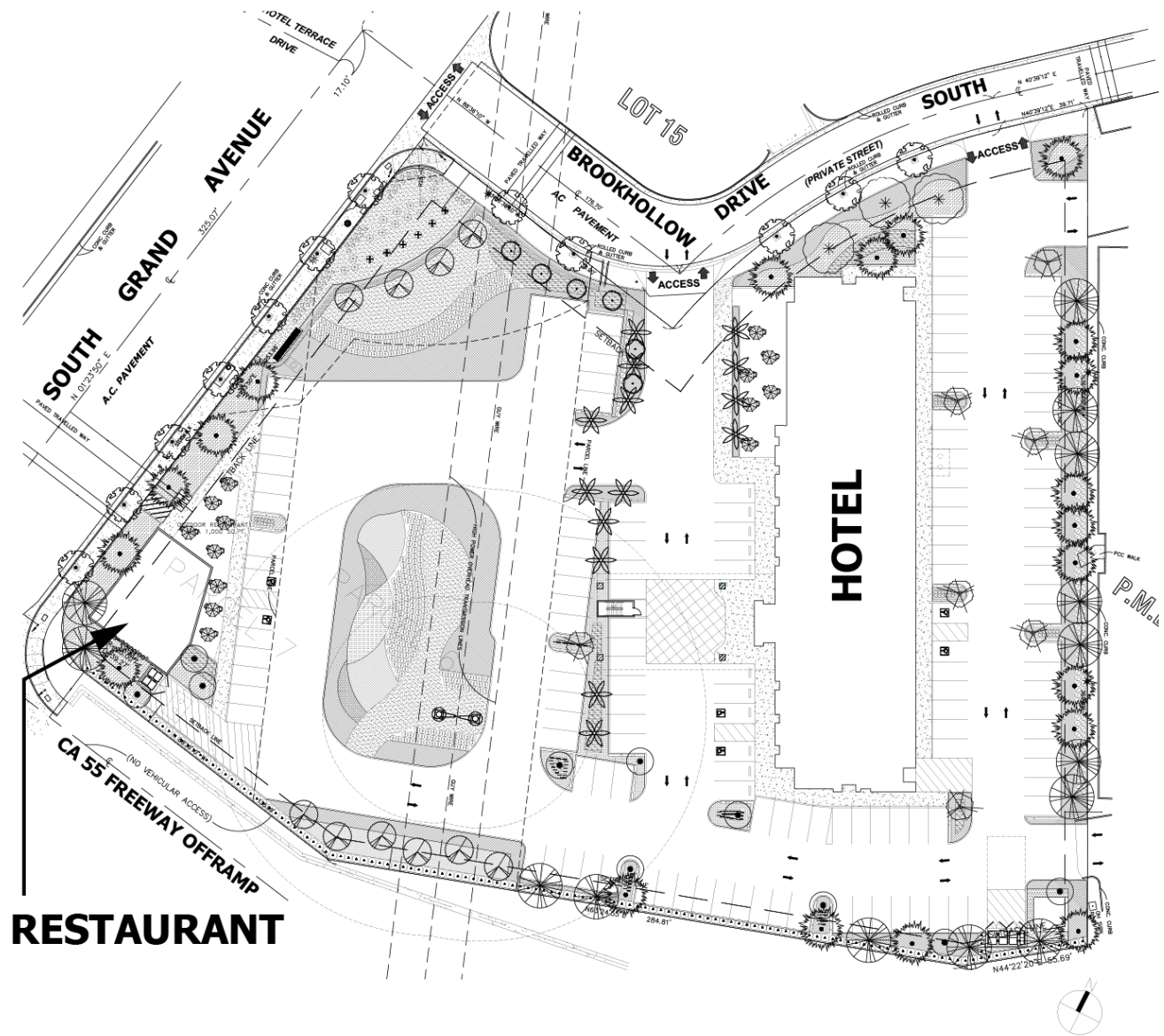


Legend

- | | | |
|---|--|--|
|  Project Site |  O (Open Space Land) |  PAO (Professional and Administration Office) |
|  GC (General Commercial) |  LR-7 (Low Density Residential) | |
|  IND (Industrial) |  DC (District Center) | |



Figure 3 General Plan Land Use Map



Source: Alajajian Marcoosi Architects Inc., 2019

Figure 4 Project Site Plan



GROUND LEVEL SITE ENTRY VIEW



AERIAL POOL VIEW



NORTH - WEST ELEVATION



SOUTH - WEST ELEVATION



SOUTH - EAST ELEVATION

Source: Alajajian Marcoosi Architects Inc., 2019

Figure 5 Project Elevations

2 Evaluation of Environmental Impacts

This Initial Study evaluates impacts based on the California Environmental Quality Act (CEQA) Guidelines Appendix G Environmental Checklist:

- No Impact indicates that there is no impact.
- Less than Significant Impact indicates that, while there is some impact, the impact does not exceed identified thresholds or that the application of laws, regulations and standard conditions would ensure that the impact remains below the identified thresholds.
- Less than Significant with Mitigation Incorporated indicates that a potentially significant and/or significant impact has been identified in the course of this analysis and mitigation measures have been provided to reduce a potentially significant impact and/or significant impact to a less-than-significant level.
- Significant Impact indicates that not all impacts have been reduced to less-than-significant and an Environmental Impact Report (EIR) will be required. As noted previously, mitigation measures developed for this project reduce any significant impacts to a less-than-significant level and an EIR will not be required.
- Section XVIII, Mandatory Findings, discusses cumulative impacts. Cumulative impacts are two or more individual effects, which when combined, are considerable or which compound or increase other environmental impacts. Cumulative impacts can result from individually minor but collectively significant projects taking place over time. If a significant cumulative impact is identified, the project's contribution to the significant cumulative impact is considered.

The environmental factors checked below would be potentially affected by the project, involving at least one impact that is a potentially significant or significant impact as indicated by the checklist on the following pages.

- | | |
|--|---|
| <input checked="" type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture & Forestry Resources |
| <input type="checkbox"/> Air Quality | <input checked="" type="checkbox"/> Biological Resources |
| <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology & Soils | <input type="checkbox"/> Greenhouse Gas Emissions |
| <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology & Water Quality |
| <input type="checkbox"/> Land Use & Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population & Housing |
| <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Transportation | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities & Service Systems | <input type="checkbox"/> Wildfire |
| <input checked="" type="checkbox"/> Mandatory Findings of Significance | |

Determination

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that the proposed project COULD have a significant effect on the environment, but mitigations identified in this Initial Study will reduce these impacts to a less than significant level, and a MITIGATED NEGATIVE DECLARATION will be prepared.

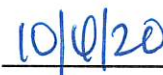
I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

I find that the proposed project MAY have a significant effect(s) on the environment, but at least one effect has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project.



Selena Kelaher, Associate Planner



Date

2.1 Aesthetics

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including but not limited to: trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

According to the Santa Ana General Plan, scenic resources in the City include views of the Santa Ana Mountains, Santa Ana River, and Santiago Creek. The project site is located in an urbanized area adjacent to Costa Mesa Freeway. The adjacent commercial, industrial, and freeway uses generate light and glare along all sides of the project site.

Regulatory Setting

City of Santa Ana General Plan

Various policies in the General Plan have been adopted for the purpose of avoiding or mitigating visual and aesthetic impacts resulting from planned development within the City. All future development allowed by the proposed land use designations would be subject to the visual and aesthetic policies listed in the General Plan, including the following:

Policy LU 3.1: Support new development which provides a net community benefit and contributes to neighborhood character and identity

Policy LU 3.2: Facilitate community engagement and dialogue in policy decisions and outcomes affecting land use and development

Policy LU 3.3: Maintain a robust and proactive code enforcement program that partners with community stakeholders and is responsive to community needs

Policy LU 3.4: Ensure that the scale and massing of new development is compatible and harmonious with the surrounding built environment

Policy LU 4.2: Maintain and improve the public realm through quality architecture, street trees, landscaping, and other pedestrian-friendly amenities

Impact Discussion

a) Have a substantial adverse effect on a scenic vista?

Less than significant impact. The project site is located in an urbanized area of the City that supports a mix of commercial, industrial, and office land uses. The project site is not located within the vicinity of the Santa Ana River or Santiago Creek, which are both over 4 miles away. The Santa Ana Mountains are located approximately 10 miles northeast from the project site, and intermittent views of the Santa Ana Mountains are occasionally available from public viewpoints adjacent to the project site. Overall, the project's massing and height would resemble surrounding development in the area, which comprises multistory hotel and commercial structures. The project would reflect the surrounding neighborhood's architectural style, composition, landscaping, and character. Therefore, the project would not substantially affect scenic vistas, and this impact would be less than significant.

b) Substantially damage scenic resources, including but not limited to: trees, rock outcroppings, and historic buildings within a State scenic highway?

No impact. According to California's Scenic Highway Mapping System, there are no designated State Scenic Highways adjacent to the project site.⁴ A portion of State Route 55 is a designated State Scenic Highway, but the project site is located 1.5 miles from the portion of State Route 55 designated as a State Scenic Highway. There are no rock outcroppings visible from the project site. Because the project is located within a built-up urban environment, existing views of trees and the Santa Ana Mountains would not be affected by the project. No impact would occur.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that area experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than significant impact. The project site is located in an urbanized area of the City that supports a mix of commercial, industrial, and office land uses. Currently, the project site is vacant, as depicted in **Figure 6** through **Figure 8**. The existing visual character of the area surrounding the project site includes commercial, light industrial, and office development. The project site is near Hotel Terrace, which is designated as a landmark which are elements of the urban form that contain design features that

⁴ California Department of Transportation. 2020. List of eligible and officially designated State Scenic Highways. Available: <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>. Accessed April, 2020.

reinforce uniqueness and memorability according to the City's Urban Design Element of the Santa Ana General Plan. T

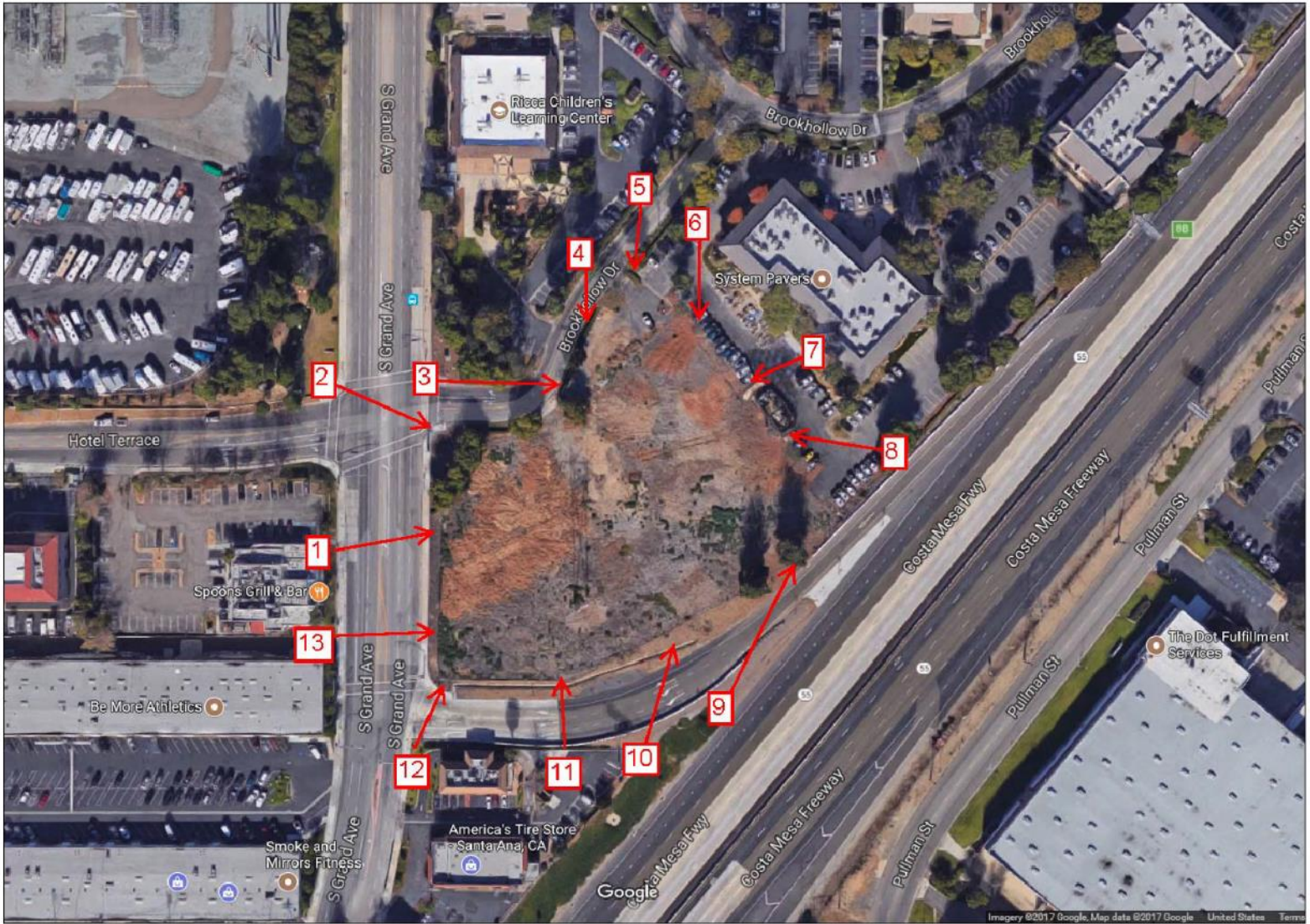
The project would introduce new urban development into the vacant project site, as discussed in **Section 1.2, Project Description** and depicted in **Figure 5**. Project structures would be designed to complement surrounding hotel, commercial, and light industrial land uses of the Hotel Terrace landmark with a façade comprising blue, metallic gray, and beige plaster with glass siding featuring vertical metal accent strips. The stand-alone restaurant would have a modern, industrial theme featuring an angled roof and corrugated metal siding that would complement both the hotel and the surrounding light industrial and commercial land uses.

Overall, the project would be consistent with the existing developed character of the surrounding area, and would be consistent with the Urban Design Element of the General Plan. This impact would be less than significant.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than significant with mitigation. The area surrounding the project site is currently developed and urbanized. Streetlights, exterior commercial lighting, and vehicular lights exist in the surrounding area and along adjacent corridors. The new hotel and restaurant buildings would contribute additional sources of light that may adversely affect nighttime views in the area. This is considered a potentially significant impact, reduced to a less-than-significant level with incorporation of **Mitigation Measure AES-1**.

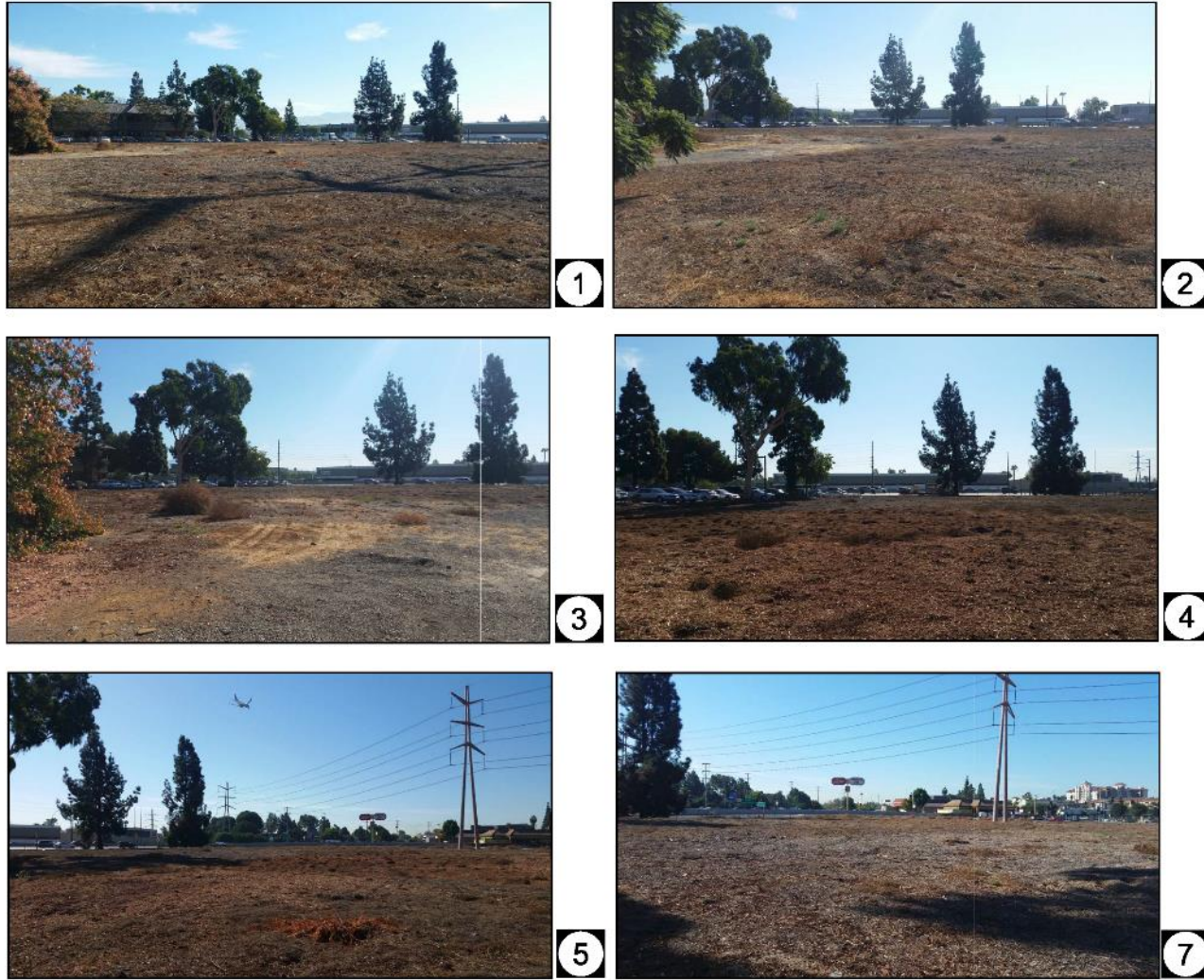
Mitigation Measure AES-1: The project developer shall install low-profile, low-intensity lighting directed downward to minimize light and glare. Exterior lighting shall be low mounted, downward casting, and shielded. In general, the light footprint shall not extend beyond the periphery the property. Implementation of exterior lighting fixtures on all buildings shall also comply with the standard California Building Code (CBC) (Title 24, Building Energy Efficiency Standards) to reduce the lateral spreading of light to surrounding uses. In addition, lighting fixtures shall not be located more than 9 feet above adjacent grade or required landing; walls or portions of walls shall not be floodlit; and only shielded light fixtures which focus light downward shall be used, except for illuminated street numbers required by the fire department.



Source: Alajajian Marcoosi Architects Inc., 2019



Figure 6 Existing Visual Setting (1/3)



Source: Alajajian Marcoosi Architects Inc., 2019

Figure 7 Existing Visual Setting (2/3)



6



8



9



10



11



12



13

Source: Alajajian Marcoosi Architects Inc., 2019

Figure 8 Existing Visual Setting (3/3)

2.2 Agriculture and Forest Resources

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or with a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Regulatory Setting

The California Land Conservation Act

The California Land Conservation Act of 1965, also referred to as the Williamson Act, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value. The project site is not under a Williamson Act contract.⁵

Farmland Mapping and Monitoring Program

The California Department of Conservation Farmland Mapping and Monitoring Program (FMMP) was established by the California Legislature in 1982 to assess the location, quality, and quantity of

⁵ California Department of Conservation. *Orange County Williamson Act 2015/2016 Map*. Available: <ftp://ftp.consrv.ca.gov/pub/dlrp/wa/>. Accessed: January, 2020.

agricultural lands and conversion of these lands over time. The FMMP has established five farmland categories:

- *Prime Farmland* is farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. This land must have been used for irrigated agricultural production at some time during the last four years before the mapping date and have the ability to store moisture in soil well.
- *Farmland of Statewide Importance* is similar to Prime Farmland but contains greater slopes and a lesser ability to store soil moisture.
- *Unique Farmland* is usually irrigated but may include non-irrigated orchards or vineyards as found in some climate zones in California. This land must still have been cropped some time during four years prior to the mapping date.
- *Farmland of Local Importance* is important to the local agricultural economy as determined by each county's board of supervisors and local advisory committee.
- *Grazing Land* is land on which the existing vegetation is suited to the grazing livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities.

The City is designated Urban and Built-Up Land by the FMMP, which is defined as land that is occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately six structures to a 10-acre parcel.⁶

California Public Resource Code/California Government Code

- Public Resources Code Section 12220(g) identifies forest land as land that can support a 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefit.
- Public Resources Code Section 4526 identifies timberland as land, other than land owned by the federal government and land designated by the State Board of Forestry and Fire Protection as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis.
- Government Code Section 51104(g) identifies timberland production zones as areas which have been zoned and are devoted to and used for growing and harvesting timer, or for growing and harvesting timber and compatible uses.

⁶ California Department of Conservation. *Orange County Important Farmland Map 2016 Map*. Available: <https://maps.conservation.ca.gov/dirp/cliff/>. Accessed: January, 2020.

Impact Discussion

a) **Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?**

and

b) **Conflict with existing zoning for agricultural use, or with a Williamson Act contract?**

No impact. According to the FMMP, there is currently no protected farmland within the City, which is classified as “Urban and Built-Up”. According to the Santa Ana General Plan and Zoning Map, the proposed project site is designated as Professional and Administrative Office (PAO) and zoned Specific Development 8, Zone III (SD-8), which does not permit agricultural land uses. Furthermore, the project site is not subject to a Williamson Act contract. Therefore, no impact would occur.

c) **Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?**

and

d) **Result in the loss of forest land or conversion of forest land to non-forest use?**

No impact. The project site is located in an urban area and does not contain forest land, timberland, or timberland zoned Timberland Production. Therefore, no impact would occur.

e) **Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

No impact. As discussed above, there is no farmland or forest land within the vicinity of the project site, which is located in an urban built-up area in the City. The project would not induce the conversion of farmland to non-agricultural uses or the conversion of forest land to non-forest use. Therefore, no impact would occur.

2.3 Air Quality

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

an applicable federal or State ambient air quality standard?

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| c) Expose sensitive receptors to substantial pollutant concentrations? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
-

Environmental Setting

This section is based on Air Quality and Greenhouse Gas Study (Rincon, 2020, refer to **Appendix A**). The project site is in the South Coast Air Basin (SCAB), which is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east, and includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area in Riverside County. The regional climate within the SCAB is considered semi-arid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity. The air quality within the SCAB is primarily influenced by meteorology and a wide range of emissions sources, such as dense population centers, substantial vehicular traffic, and industry.

Air pollutant emissions in the SCAB are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat. Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products. Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles.

Regulatory Setting

The federal and State governments have established ambient air quality standards for the protection of public health. The United State Environmental Protection Agency (U.S. EPA) is the federal agency designated to administer air quality regulation, while the California Air Resources Board (CARB) is the State equivalent within the California EPA (CalEPA). County-level Air Quality Management Districts (AQMD) provide local management of air quality. CARB has established air quality standards and is responsible for the control of mobile emission sources, while the local AQMDs are responsible for enforcing standards and regulating stationary sources. CARB has established 15 air basins statewide, including SCAB.

The U.S. EPA has set primary national ambient air quality standards (NAAQS) for ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter with a diameter of up to ten microns (PM₁₀) and up to 2.5 microns (PM_{2.5}), and lead (Pb). Primary standards are those levels of air quality deemed necessary, with an adequate margin of safety, to protect public health. In addition,

California has established health-based ambient air quality standards for these and other pollutants, some of which are more stringent than the federal standards.

Air Quality Management

The South Coast Air Quality Management District (SCAQMD) is the designated air quality control agency in the SCAB. The SCAB is designated nonattainment for the federal and State one-hour and eight-hour ozone standards, the State PM₁₀ standard, the federal 24-hour PM_{2.5} standard, and the State and federal annual PM_{2.5} standard. Areas of SCAB located in Orange County are also in nonattainment for lead (SCAQMD 2016a). The SCAB is designated unclassifiable or in attainment for all other federal and State standards. Characteristics of O₃, CO, NO₂, and suspended particulate matter are described below.

Air Pollutants of Concern

The federal and State Clean Air Acts (CAA) mandate the control and reduction of certain air pollutants. Under the CAAs, the United States Environmental Protection Agency (USEPA), and the CARB have established ambient air quality standards for certain criteria pollutants. The rates and distributions of corresponding air pollutant emissions, as well as by the climatic and topographic influences discussed above, affect ambient air pollutant concentrations. Proximity to major sources is the primary determinant of concentrations of non-reactive pollutants (such as carbon monoxide [CO] and suspended particulate matter). Usually, ambient CO levels closely follow when and where vehicular traffic is distributed. A discussion of the primary criteria pollutants follows.

Ozone

Ozone is a colorless gas with a pungent odor. Most ozone in the atmosphere forms because of the interaction of ultraviolet light with reactive organic gases (ROG) and oxides of nitrogen (NO_x) (USEPA 2016). ROG (defined as any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, etc.) is primarily composed of non-methane hydrocarbons. NO_x is made of different chemical combinations of nitrogen and oxygen, mainly nitric oxide and nitrogen dioxide (CARB 2004). Ozone is a highly reactive molecule that readily combines with many different components of the atmosphere. Consequently, high levels of ozone tend to exist only while high ROG and NO_x levels are present to create the ozone formation process (USEPA 2018). Once ROG, NO_x and other the precursors have been depleted, ozone levels rapidly decline. Because these reactions occur on a regional rather than local scale, ozone is considered a regional pollutant.

Carbon Monoxide

CO is an odorless, colorless gas. CO causes a number of health problems including fatigue, headache, confusion, and dizziness (University of Rochester Medical Center 2020). The incomplete combustion of petroleum fuels in on-road vehicles and at power plants is a major cause of CO. Wood stoves and fireplaces produce CO during the winter (CARB 2020). CO tends to dissipate rapidly into the atmosphere; consequently, violations of the State's CO standard are generally associated with major roadway intersections during peak-hour traffic conditions. Localized CO "hotspots" can occur at intersections with heavy peak-hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local CO concentration exceeds the National Ambient Air Quality Standards of 35.0 parts per million (ppm) or the State Ambient Air Quality Standards of 20.0 ppm.

Nitrogen Dioxide

Nitrogen dioxide (NO₂) is a by-product of fuel combustion, with the primary source being motor vehicles and industrial boilers and furnaces. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), but NO reacts rapidly to form NO₂, creating the mixture of NO and NO₂ commonly called NO_x (USEPA 1999). NO₂ is an acute irritant. A relationship between NO₂ and chronic pulmonary fibrosis may exist (Conti, et al. 2018), and an increase in bronchitis in young children may occur at concentrations below 0.3 ppm. NO₂ absorbs blue light and causes a reddish-brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of fine particulate matter and acid rain.

Suspended Particulates

PM₁₀ is small particulate matter measuring no more than 10 microns in diameter, while PM_{2.5} is fine particulate matter measuring no more than 2.5 microns in diameter (USEPA 2018). Suspended particulates are mostly dust particles, nitrates, and sulfates. They are a by-product of fuel combustion, wind erosion of soil and unpaved roads, and are emitted directly into the atmosphere through these processes. Chemical reactions create suspended particulates in the atmosphere. The characteristics, sources, and potential health effects associated with the small particulates (those between 2.5 and 10 microns in diameter) and PM_{2.5} can be very different. The small particulates generally come from windblown dust and dust kicked up from mobile sources. PM_{2.5} is associated generally with combustion processes, and form in the atmosphere as a secondary pollutant through chemical reactions. PM_{2.5} is more likely to penetrate deeply into the lungs and poses a serious health threat to all groups, but particularly to the elderly, children, and those with respiratory problems (USEPA 2018). More than half of the small and fine particulate matter inhaled into the lungs remains there and can cause permanent lung damage (American Lung Association 2020). These materials can damage health by interfering with the body's mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance (USEPA 2018).

Lead

Lead is a metal found naturally in the environment, as well as in manufacturing products. The major sources of lead emissions historically have been mobile and industrial sources. Because of the phase-out of leaded gasoline, as discussed below, metal processing currently is the primary source of lead emissions. The highest level of lead in the air is found near lead smelters. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers.

In the early 1970s, the USEPA set national regulations to reduce the lead content in gasoline gradually. In 1975, unleaded gasoline was introduced for motor vehicles equipped with catalytic converters. The USEPA completed the ban prohibiting the use of leaded gasoline in highway vehicles in December 1995. As a result of the USEPA's regulatory efforts to remove lead from gasoline, lead concentrations have declined substantially over the past several decades. The most dramatic reductions in lead emissions occurred prior to 1990 due to the removal of lead from gasoline sold for most highway vehicles. Lead emissions were further reduced substantially between 1990 and 2008, with reductions occurring in the

metals industries at least in part because of national emissions standards for hazardous air pollutants (USEPA 2013).

Toxic Air Contaminants

Toxic air contaminants (TAC) 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. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, 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 impacts, 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 the California Air Resources Board (CARB), diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health impacts of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the State's Proposition 65 or under the Federal Hazardous Air Pollutants programs. Long-term and short-term exposure to PM_{2.5} can cause a wide range of health effects. Common stationary sources of TACs and PM_{2.5} include gas stations, dry cleaners, and diesel backup generators. The other, more significant, common source is motor vehicles on roadways and freeways.

Air Quality Management Plan

Under State law, the SCAQMD is required to prepare a plan for air quality improvement for pollutants for which the District is in non-compliance. The SCAQMD updates the plan every three years. Each iteration of the SCAQMD's Air Quality Management Plan (AQMP) is an update of the previous plan and has a 20-year horizon. The latest AQMP, the 2016 AQMP, was adopted on March 3, 2017. It incorporates new scientific data and notable regulatory actions that have occurred since adoption of the 2012 AQMP, including the approval of the new federal 8-hour ozone standard of 0.070 ppm that was finalized in 2015. The Final 2016 AQMP addresses several State and federal planning requirements and incorporates new scientific information, primarily in the form of updated emissions inventories, ambient measurements, and updated meteorological air quality models.

The Southern California Association of Government's (SCAG) socio-economic (e.g., population, housing, employment by industry) and transportation activities projections from the 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) are integrated into the 2016 AQMP. This Plan builds upon the approaches taken in the 2012 AQMP for the attainment of federal PM and O₃ standards and highlights the significant amount of reductions to be achieved. It emphasizes the need for interagency planning to identify additional strategies to achieve reductions within the timeframes allowed under the federal Clean Air Act, especially regarding mobile sources. The 2016 AQMP also includes a discussion of emerging issues and opportunities, such as fugitive toxic particulate emissions, zero-emission mobile source control strategies, and the interacting dynamics among climate, energy,

and air pollution. The Plan also demonstrates strategies for attainment of the new federal 8-hour O₃ standard and vehicle miles travelled (VMT) emissions offsets, as per recent U.S. EPA requirements (SCAQMD 2016b).

Air Emission Thresholds

Regional Significance Thresholds

The General Conformity rule states if an action is in a nonattainment area and the total emissions are below de minimis levels, a determination of whether the project is regionally significant is still needed. If it is not regionally significant, then the conformity requirements do not apply to this project based on its projected emissions.

SCAQMD has established daily emissions thresholds for construction of a proposed project in the Basin. The emissions thresholds were established based on the attainment status of the Basin with regard to air quality standards for specific criteria pollutants. It also provides thresholds for operational emissions. **Table 1** lists the CEQA significance thresholds for construction and operational emissions established for the Basin. The SCAQMD recommends the quantitative regional significance thresholds for temporary construction activities and long-term project operation within the SCAB (SCAQMD 2015) shown in **Table 1**.

Table 1 Regional Significance Thresholds

Pollutant/ Precursor	Construction Emissions (average lbs/day) ¹	Operational Emissions (average lbs/day)
ROG	75	55
NO _x	100	55
CO	550	550
SO _x	150	150

Source: Rincon, 2020.

Localized Significance Thresholds

In addition to the above thresholds, the SCAQMD has developed Localized Significance Thresholds (LSTs) in response to the Governing Board’s Environmental Justice Enhancement Initiative (1-4), which was prepared to update the *CEQA Air Quality Handbook*. LSTs were devised in response to concern regarding exposure of individuals to criteria pollutants in local communities and have been developed for NO_x, CO, PM₁₀, and PM_{2.5}. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or State ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), distance to the sensitive receptor, and project size; LSTs have been developed for emissions within construction areas up to five acres in size. However, LSTs only apply to emissions within a fixed stationary location and are not applicable to mobile sources, such as cars on a roadway (SCAQMD 2008a). As such, LSTs are typically applied only to construction emissions as the majority of operational emissions are associated with project-generated vehicle trips.

The project site is located in Source Receptor Area 17 (SRA 17), Central Orange County, and is 2.82 acres in size (SCAQMD 2008a). The SCAQMD provides LSTs for one-, two-, and five-acre project sites at distances of 82 to 1,640 feet (25 to 500 meters) from the project site boundary. The project site is greater than 2 acres; accordingly, this analysis uses LSTs for construction on a site that is 5 acres (see **Table 4**). The sensitive receptors closest to the project site are the Ricca Children’s Learning Center approximately 230 feet north of the project site. According to the SCAQMD Final Localized Significance Threshold Methodology (2008), projects with boundaries located closer than 656 feet (200 meters) to the nearest receptor should use the LSTs for receptors located at 656 feet (200 meters). Therefore, for the purpose of this analysis, it is assumed that the nearest receptor is located at a distance of 656 feet. Based on SCAQMD's Final LST Methodology, LSTs for a 2.82-acre project site were estimated based on the 5-acre LSTs, shown in **Table 2**.

Table 2 SCAQMD LSTs for Construction (SRA-17)

Pollutant/ Precursor	Allowable Emissions from a 5-Acre Site in SRA -17 for a Receptor 656 Feet Away (average lbs/day) ¹
Gradual Conversion of NO _x to NO ₂	202
CO	4,018
PM ₁₀	88
PM _{2.5}	32

Source: Rincon, 2020.

Impact Discussion

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than significant impact. A project is considered consistent with the AQMP if the population, housing, or employment growth that it generates is within forecasts used in the development of the AQMP. The 2016 AQMP relies on forecasts prepared by SCAG, which are incorporated in the 2016 RTP/SCS. Therefore, the proposed project would be consistent with the AQMP if it would result in population, housing, and employment growth consistent with SCAG population forecasts presented in the 2016 RTP/SCS.

The proposed project involves the construction of a 79,375 square-foot, 6-story hotel and a 2,000 square-foot restaurant. The hotel would include 139 units, a pool, gym, roof deck and two natural gas fireplaces. The project does not include any residences; therefore, it would not involve any direct growth in population or housing.

According to the project applicant, the project would employ approximately 66 people, including restaurant and hotel staff. Projections for the City of Santa Ana estimate that employment will increase from 154,800 in 2012 to 166,000 by 2040 (RTP/SCS), for a total growth of 11,200 employees. Therefore, the 66 new employees would contribute less than one percent to the City’s projected employment growth. The project would be consistent with employment growth in the City of Santa Ana and was anticipated in SCAG’s long-term employment forecasts. Because project employment would be within

the growth projections contained in the AQMP, the project would not conflict with or obstruct implementation of the AQMP.

b) 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?

Construction Activity Impacts

Less than significant impact. Table 3 summarizes the estimated maximum daily emissions (lbs) of pollutants associated with construction of the proposed project. As shown therein, ROG, NO_x, CO, PM₁₀, and PM_{2.5} emissions would not exceed SCAQMD’s recommended regional construction thresholds or LSTs. Therefore, the project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Table 3 Project Construction Emissions

YEAR	Maximum Daily Emissions (lbs/day)				
	ROG	NO _x	CO	PM ₁₀	PM _{2.5}
2020	4.2	42.5	22.2	10.5	6.5
2021	4.0	40.6	21.8	<0.1	6.4
2021	36.6	17.9	18.7	<0.1	1.0
SCAQMD Regional Threshold	75	100	550	150	55
Threshold Exceeded?	No	No	No	No	No
Maximum On-site	36.6	42.5	22.2	10.5	6.5
SCAQMD Thresholds	N/A	202	4,018	88	32
Threshold Exceeded?	No	No	No	No	No

All emissions modeling was completed using CalEEMod. See **Appendix A** for modeling results. Some numbers may not add up due to rounding. Emission data is pulled from “mitigated” results that include compliance with regulations and project design features that will be included in the project. Emissions presented are the highest of the winter and summer modeled emissions. Source: Rincon, 2020.

CalEEMod calculated particulate matter impacts assuming the application of required SCAQMD Rule 403 regarding fugitive dust. SCAQMD Rule 403 is shown below and will be included in the project as a standard condition. In addition, SCAQMD Rule 1113 is also required regarding the reduction of VOC in paints and architectural coatings.

SC AQ-1: Rule 403.

The following measures shall be incorporated into construction plans and specifications as implementation of Rule 403:

- All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 mph per SCAQMD guidelines in order to limit fugitive dust emissions.
- The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered at least three (3) times daily during dry weather. Watering, with complete

coverage of disturbed areas, shall occur at least three times a day, preferably in the mid-morning, afternoon, and after work is done for the day.

- The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are reduced to 15 miles per hour or less.

SC AQ-2: Rule 1113.

The following measure shall be incorporated into construction plans and specifications as implementation of Rule 1113. The Project shall only use “Low-Volatile Organic Compounds (VOC)” paints (no more than 50 gram/liter of VOC) consistent with SCAQMD Rule 1113.

Operational Impacts

Less than significant impact. Table 4 summarizes the proposed project’s operational emissions by emission source. The majority of project-related operational emissions would be due to vehicle trips to and from the site. Emissions produced by fireplaces in the hotel were modeled separately and added to the overall project emissions. As shown in Table 6, the net increase in emissions would not exceed SCAQMD regional thresholds for criteria pollutants. Therefore, the project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. In addition, because criteria pollutant emissions and regional thresholds are cumulative in nature, the project would not result in a cumulatively considerable net increase of any criteria pollutant.

Table 4 Project Operational Emissions

	Maximum Daily Emissions (lbs/day)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Maximum Daily Emissions	1.8	<0.1	<0.1	0.0	<0.1	<0.1
Energy	0.1	1.3	1.1	<0.1	<0.1	<0.1
Mobile	2.0	10.0	22.2	<0.1	6.8	1.9
Total Project Emissions	4.0	11.3	233	<0.1	6.8	1.9
SCAQMD Thresholds	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

All emissions modeling was completed using CalEEMod. See Appendix A for modeling results. Some numbers may not add up due to rounding. Emission data is pulled from “mitigated” results that include compliance with regulations and project design features that will be included in the project. Emissions presented are the highest of the winter and summer modeled emissions. Source: Rincon, 2020.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact.

Localized Carbon Monoxide Hotspot Impact

A carbon monoxide (CO) hotspot is a localized concentration of CO that is above a CO ambient air quality standard. Localized CO hotspots can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that

the local CO concentration exceeds the federal one-hour standard of 35.0 parts per million (ppm) or the federal and State eight-hour standard of 9.0 ppm (CARB 2016a).

The entire SCAB is in conformance with State and federal CO standards and most air quality monitoring stations no longer report CO levels. No stations within the vicinity of the project site have monitored CO in the last six years. In 2012, the Anaheim-Pampas Lane Station, the nearest station to the project site, detected an 8-hour maximum CO concentration of 2.3 ppm (U.S. EPA 2017). This level is substantially below the State and federal standard of 9 ppm. In addition, as shown in **Table 6**, the net increase of daily CO emissions would be approximately 23.3 pounds, which is well below the SCAQMD threshold of 550 pounds and the project would not exceed the LST threshold for CO. Both the SCAQMD's regional thresholds and LSTs are designed to be protective of public health. Based on the low background level of CO in the project area, ever-improving vehicle emissions standards for new cars in accordance with state and federal regulations, and the project's low level of operational CO emissions, the project would not create new hotspots or contribute substantially to existing hotspots. Localized air quality impacts related to CO hot spots would not occur.

Toxic Air Contaminants

CARB has identified diesel particulate matter as the primary airborne carcinogen in the State (CARB 2016b). A primary source of diesel particulate matter is exhaust from vehicle traffic on highways. CARB's 2005 Air Quality and Land Use Handbook: A Community Health Perspective recommends against siting sensitive land uses within 500 feet of a freeway or urban roads with more than 100,000 vehicles per day. The project site is located approximately 85 feet north of the Costa Mesa Freeway (Route 55) and 25 feet north of the nearest freeway offramp. The other nearest major roadway within 500 feet of the project site is South Grand Avenue, which is approximately 25 feet west of the project site. Despite its proximity to two major roadways, the proposed hotel and restaurant project are not defined by CARB as sensitive land uses, which include schools, residences, and medical facilities frequented by vulnerable populations. Therefore, the proposed project would not expose sensitive populations to substantial pollutant concentrations from freeway or roadway sources.

With respect to stationary sources, a review of SCAQMD's Facility Information Detail (F.I.N.D.) database indicates that there are a commercial printing facility (Vanier Graphics Corp.), three restaurants (Crazy Horse Steakhouse, The Flame Broiler, and Spoons Grill and Bar), and one motel (Super 8 Lodge) within 1,000 feet of the project site. All facilities are listed as active, though none have listed emissions. Only one restaurant, Spoons Grill and Bar, has listed stationary equipment (natural gas charbroiler) requiring a permit for emissions, and its permit is currently inactive. Therefore, no facility is a source of toxic air contaminants in the vicinity of the project site. Due to the lack of operating stationary sources within 1,000 feet of the project site, the proposed hotel and restaurant would not be exposed to substantial pollutant concentrations from stationary sources.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

No impact. The SCAQMD's 1993 *CEQA Air Quality Handbook* identifies land uses associated with odor complaints as agriculture uses, wastewater treatment plants, chemical and food processing plants,

composting, refineries, landfills, dairies, and fiberglass molding. In addition, the project would have to comply with SCAQMD Rule 402, which prohibits the discharge of air contaminants that would cause injury, detriment, nuisance, or annoyance to the public. Therefore, the proposed project would not generate objectionable odors affecting a substantial number of people.

2.4 Biological Resources

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status species in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including but not limited to: marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with an established resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Rincon Consultants conducted a reconnaissance-level field survey and prepared a Biological Resource Assessment Memorandum in 2019 (**Appendix B**) to analyze the project's impacts to biological resources. This document is incorporated by reference.

Vegetation

Two vegetation communities occur within the project site: Disturbed and Developed. Disturbed habitats have been physically disturbed (by previous legal human activity) and are no longer recognizable as a native or naturalized vegetation association but continue to retain a soil substrate. Typically, vegetation of disturbed areas, if present, is nearly exclusively composed of non-native plant species such as landscape ornamentals or ruderal exotic species that take advantage of disturbance. This usually removes any capability of providing viable natural habitat for uses other than dispersal.

Approximately 2.6 acres of disturbed habitat comprises the majority of the project site and is dominated by non-native weedy vegetation. Ornamental trees line the perimeter of the project site and include jacaranda (*Jacaranda mimosifolia*), golden raintree (*Koelreuteria paniculata*), pine (*Pinus spp.*) and eucalyptus (*Eucalyptus spp.*). The central portions of the site are dominated by cheeseweed mallow (*Malva parviflora*) and other non-native species such as whitestem filaree (*Erodium moschatum*), crown daisy (*Glebionis coronaria*), Russian thistle (*Salsoga tragus*), nettle leaf goosefoot (*Chenopodium murale*) and field bindweed (*Convolvulus arvensis*).

Developed land includes areas that have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported. It is characterized by permanent or semi-permanent structures, pavement or hardscape, and landscaped areas that often require irrigation. Approximate 0.2 acres of the project site include paved asphalt parking lot with non-native, irrigated ornamental turf and trees similar to those in disturbed areas of the project site.

Special-Status Plants

As outlined in **Appendix B**, 65 special-status plant species have been recorded within 5 miles of the project site. However, special-status plant species typically have specialized habitat requirements, including vegetation communities, soils, elevational ranges. No special-status plant species were observed during a site reconnaissance survey. No suitable habitat exists within the project site for any special-status plant species, which have no potential to occur on-site.

Special-Status Wildlife

The potential for special-status wildlife to occur on the project site was assessed based on known distribution, habitat requirements, and existing site conditions. No special-status wildlife species were determined to have potential to occur on-site (**Attachment B**), and none were detected within or immediately surrounding the project site during a reconnaissance survey. The lack of potential for sensitive wildlife species occurrence is based on low habitat quality in disturbed and developed areas of the site, lack of native vegetation, isolation from other suitable habitat due to developed land uses surrounding the site, and the presence of significant highway noise from adjacent State Route 55.

Nesting Birds

Established ornamental trees and the powerline structure in the project site could provide nesting areas for common nesting birds protected under the California Fish and Game Code (CFGF) Section 3503 and the Migratory Bird Treaty Act (MBTA).

Roosting Bats

Bat species are not likely to utilize disturbed or developed habitat in areas without neighboring insect or floral foraging habitat nearby. The area surrounding the project site is developed and offers little foraging habitat within 2 miles. The lack of buildings and dense tree canopies on-site further reduce on-site roosting potential. Evidence of roosting bats was not observed during the site survey.

Impact Discussion

- a) **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status species in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

Less than significant with mitigation. The project site is undeveloped and contains Disturbed and Developed vegetation communities. The project site does not contain suitable habitat to support special-status plant or wildlife species. However, migratory or other common nesting birds protected by the CFGC and MBTA and could nest on the project site. Project construction could therefore impact nesting birds protected under the CFGC and MBTA. This represents a potentially significant impact, which would be reduced to a less-than-significant level with implementation of **Mitigation Measure BIO-1**.

Mitigation Measure BIO-1: If initial clearing activities prior to the start of construction take place during the bird nesting season (generally February 1 through August 31, but variable based on seasonal and annual climatic conditions), nesting bird surveys are recommended to be performed by a qualified biologist within seven days prior to such activities to determine the presence/absence, location, and status of any active nests on-site or within 100 feet of the site.

If no nesting birds are observed during pre-construction surveys, no further actions would be necessary. If nesting birds are found on-site, a construction buffer of appropriate size (as determined by California Department of Fish and Wildlife [CDFW] guidelines) should be implemented around the active nests and demarcated with fencing or flagging. Nests should be monitored at a minimum of once per week by the qualified biologist until it has been determined that the nest is no longer being used by either the young or adults. No ground disturbance should occur within this buffer until the qualified biologist confirms that the breeding/nesting is complete and all the young have fledged. If project activities must occur within the buffer, they should be conducted at the discretion of the qualified biologist.

- b) **Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

No impact. No riparian habitat or sensitive natural communities occur within or near the project site. Therefore, there would be no impact to riparian habitats or other sensitive natural communities.

c) **Have a substantial adverse effect on state or federally protected wetlands (including but not limited to: marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

No impact. No state or federally defined unvegetated stream(s), swale(s), riparian/riverine habitat, wetlands, vernal pools, or potential vernal pools occur within or adjacent to the project site. A minor dirt v-ditch draining the site exists on the northeastern boundary of the site and connects to the street water conveyance system on Brookhollow Drive. Additionally, a concrete v-ditch that drains the adjacent freeway off-ramp lines a portion of the southern boundary of the site. Both ditches appear to have been constructed as part of the local storm drain system to convey runoff from development, drain upland areas, and thus are not expected to be federally jurisdictional. Thus, the project would not affect protected wetlands and there would be no impact.

d) **Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with an established resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

No impact. The project site is surrounded by urban development and roadways. The project site is not connected to contiguous wildlife habitats or open space areas and does not serve as a migratory wildlife corridor. Therefore, no impact would occur.

e) **Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

Less than significant impact. Chapter 33, Article VII of the Santa Ana Municipal Code (SAMC) regulates the planting, maintenance, and removal of trees on public property or in the public right-of-way (ROW). No trees on or immediately adjacent to the project site appear to be currently located directly in or along a public ROW (specifically, along South Grand Avenue and the associated public sidewalk). Thus, the project would not conflict with any local policies or ordinances protecting biological resources, and this impact would be less than significant.

f) **Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?**

No impact. The project is not subject to a local, state, or regional habitat conservation plan. Therefore, no impact would occur.

2.5 Cultural Resources

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
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Would the project:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to in Section 15064.5?

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource, pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The Northwest Information Center at Sonoma State University conducted a non-confidential California Historical Resources Information System (CHRIS) records search for the project site (**Appendix C**). The CHRIS search concluded that the project site does not contain previously recorded archaeological resources. Furthermore, the project site is vacant devoid of built resources that could convey historical significance.

Regulatory Setting

State

California Public Resources Code

Archaeological, paleontological, and historical sites are protected by a wide variety of State policies and regulations under the California Public Resources Code. Under the Public Resources Code, the State Historical Resources Commission is responsible for oversight of the California Register of Historical Resources (California Register) and designation of State Historical Landmarks and Historical Points of Interest. Key provisions of the Public Resources Code that provide protection to cultural and paleontological resources are outlined below.

- California Public Resources Code Sections 5097.9–5097.991 provides protection to Native American historical and cultural resources and sacred sites and identifies the powers and duties of the Native American Heritage Commission (NAHC). It also requires notification of discoveries of Native American human remains and provides for treatment and disposition of human remains and associated grave goods.
- California Public Resources Code Sections 5097.98 provides that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation until the coroner has determined that the remains are not subject to provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the coroner determines that the remains are not subject to his or her authority and has reason to

believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the NAHC.

- California Public Resources Code Section 5097.5 prohibits “knowing and willful” excavation, removal, destruction, injury, and defacement of any paleontological feature on public lands (lands under State, county, City, district, or public authority jurisdiction, or the jurisdiction of a public corporation), except where the agency with jurisdiction has granted permission.

California Environmental Quality Act

Archeological Resources

CEQA also requires lead agencies to consider whether projects will affect “unique archaeological resources” (Public Resources Code, Section 21083.2(g)) which are defined as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Treatment options for unique archaeological resources include preservation in place in an undisturbed state; excavation and curation or study in place without excavation and curation (if the study finds that the artifacts would not meet one or more of the criteria for defining a “unique archaeological resource”).

Paleontological Resources

Treatment of paleontological resources under CEQA is generally similar to treatment of cultural resources, requiring evaluation of resources in a project’s area of potential affect, assessment of potential impacts on significant or unique resources, and development of mitigation measures for potentially significant impacts, which may include monitoring combined with data recovery and/or avoidance.

Native American Burials

California law protects Native American burials, skeletal remains, and associated grave goods regardless of their antiquity and provides for the sensitive treatment and disposition of those remains (Section 7050.5(b) of the California Health and Safety Code). CEQA Guidelines section 15064.5(e) requires that excavation activities be stopped whenever human remains are uncovered, and that the county coroner or medical examiner be contacted to assess the remains. If the county coroner or medical examiner determines that the remains are those of Native Americans, the NAHC must be contacted within 24 hours. The property owner is required to consult with the appropriate Native Americans identified by the NAHC as a “most likely descendant” to develop an agreement for the treatment and disposition of the remains.

Local

City of Santa Ana Municipal Code

The City has adopted Chapter 30 of the Santa Ana Municipal Code to establish the Santa Ana Register of Historical Properties. The project site is not listed on the Register of Historical Properties.

Impact Discussion

a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

No impact. The project site is vacant and devoid of built resources that could convey historical significance. Therefore, no impact would occur.

b) Cause a substantial adverse change in the significance of an archaeological resource, pursuant to Section 15064.5?

Less than significant with mitigation. The CHRIS records search report indicates that there are no currently recorded archaeological sites on the project site. However, there is potential for uncovering previously undocumented archaeological resources during construction. This represents a potentially significant impact, which would be reduced to a less-than-significant level with implementation of **Mitigation Measure CUL-1.**

Mitigation Measure CUL-1: In the event Native American or other archaeological resources are encountered during construction, work shall be halted within 100 feet of the discovered materials and workers shall avoid altering the materials and their context until a qualified professional archaeologist has evaluated the situation and provided appropriate recommendations.

If an archaeological site is encountered in any stage of development, a qualified archeologist would be consulted to determine whether the resource qualifies as an historical resource or a unique archaeological resource. In the event that it does qualify, the archaeologist would prepare a research design and archaeological data recovery plan to be implemented prior to or during site construction. The archaeologist would also prepare a written report of the finding, file it with the appropriate agency, and arrange for curation of recovered materials.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

Less than significant. While unlikely, it is always possible that human remains may be unearthed during project construction. Compliance with the Health and Safety Code and the Native American Graves Protection and Repatriation Act (NAGPRA) will be required through implementation of **Standard Condition SC CUL-2.**

Standard Condition SC CUL-2: In the event that human remains are discovered during project construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains. The county coroner shall be informed to evaluate the nature of the remains. If the remains are determined to be of Native American origin, the Lead Agency shall work with the Native American Heritage Commission and the applicant to develop an agreement for treating or disposing of the human remains.

2.6 Energy

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

This section is based on the Energy Letter Report (Rincon, 2020) which is located in **Appendix D**.

Electricity and Natural Gas

In 2018, California used 285,488 gigawatt-hours (GWh) of electricity, of which 31 percent were from renewable resources. California also consumed approximately 12,638 million U.S. therms (MMthm) of natural gas in 2018. Electricity and natural gas for the project site would be provided by Southern California Edison (SCE) and SoCalGas. **Table 5** and **Table 6** show SCE's total electricity consumption and SoCalGas natural gas consumption for its service areas as well as consumption by sector. In 2018, SCE provided approximately 29.9 percent of the total electricity. In 2018, SoCalGas provided approximately 40.8 percent of the total natural gas usage in California.

Table 5 Electricity Consumption in the SCE Service Area in 2018

Agriculture and Water Pump	Commercial Building	Commercial Other	Industry	Mining and Construction	Residential	Streetlight	Total Usage
3192.2	31,573.8	4,367.4	13,391.6	2,390.0	29,864.9	495.9	85,275.9

Notes: All usage expressed in GWh (CEC 2018a)
Source: Rincon 2020.

Table 6 Natural Gas Consumption in SoCal Gas Service Area in 2018

Agriculture and Water Pump	Commercial Building	Commercial Other	Industry	Mining and Construction	Residential	Total Usage
77.6	913.0	74.5	1,714.4	229.2	2,147.4	5,156.1

Source: Rincon 2020.
Notes: All usage expressed in MMthm (CEC 2018b)

Gasoline for Motor Vehicle Trips

In 2018, approximately 28 percent of the state's energy consumption was used for transportation. Californians presently consume over 19 billion gallons of motor vehicle fuels per year. Although California's population and economy are expected to continue to grow, gasoline demand is projected to decline from roughly 15.8 billion gallons in 2017 to between 12.3 billion and 12.7 billion gallons in 2030, a 20 to 22 percent reduction. This forecast decline is due to both increasing use of electric vehicles and improved fuel economy for new gasoline vehicles.

Regulatory Setting

State of California

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.

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, was established in 1978 in response to a legislative mandate to reduce California's energy consumption. These energy efficiency standards are updated approximately every three years; the 2013 standards have been adopted and became effective July 1, 2014. The 2016 Code will be published on or before July 1, 2016 and will go into effect on January 1, 2017. Compliance with these standards is mandatory at the time new building permits are issued by city and county governments.

Local

City of Santa Ana General Plan

The City is currently undergoing a comprehensive update to the General Plan. The following goals, objectives, and policies contained in the existing Energy Element are relevant to the proposed project:

Goal 1: To reduce consumption of non-renewable energy.

Goal 2: To support develop and utilization of new energy sources.

Objective 1.1: Reduce transportation-related energy consumption.

Objective 1.2: Reduce land use related energy consumption.

Objective 1.3: Reduce construction-related energy consumption.

Methodology

The project's construction and operational energy usage were estimated using the California Emissions Estimator Model (CalEEMod), version 2016.3.2. CalEEMod uses project-specific information, including the project's land uses, square footages for different uses (e.g., mid-rise apartments), and location, to estimate a project's construction and operational emissions and energy consumption. Consumption factors were drawn from CalEEMod for project's natural gas and electricity consumption. Energy demand for off-road construction equipment is based on anticipated equipment, usage hours, horsepower, load factors, and construction phase duration provided by the CalEEMod output, as well as Exhaust and Crankcase Emission Factors for Nonroad Compression Ignition Engines.

Operational energy demand considers transportation-based fuel consumption as well as electricity and natural gas consumption associated with the project. Transportation fuel demand for operation of the project was estimated based on the annual vehicle miles travelled (VMT) generated following project buildout and fuel efficiency was based upon the California Air Resources Board's (CARB's) EMFAC2014 data. Electricity and natural gas consumption were also based on CalEEMod outputs and compared to existing consumption in the SCE and SoCalGas service areas.

Impact Discussion

- a) **Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

Construction Energy Demand

Less than Significant impact. Construction activity would use energy in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, and vehicles used to deliver materials to the site. The project would require site preparation and grading, including hauling material off-site; pavement and asphalt installation; building construction; architectural coating; and landscaping and hardscaping.

The total consumption of gasoline and diesel fuel during project construction was estimated using the assumptions and factors from CalEEMod. **Table 7** summarizes the estimated construction energy consumption for the project. Construction equipment operation, haul trips, and vendor trips, would consume an estimated 67,091 gallons of diesel fuel over the project construction period. Worker trips would consume an estimated 11,883 gallons of petroleum during project construction.

Table 7 **Estimated Fuel Consumption during Construction**

Fuel Type	Gallons of Fuel	MMBtu ⁴
Diesel Fuel (Construction Equipment) ¹	26,301	3,352
Diesel Fuel (Hauling & Vendor Trips) ²	40,790	5,199
Other Petroleum Fuel (Worker Trips) ³	11,883	1,304
Total	78,974	9,855

Source: Rincon, 2020. Fuel demand rates for construction equipment, hauling and vendor trips, and worker trips are derived from CalEEMod outputs.

The construction energy estimates represent a conservative estimate as the construction equipment used in each phase of construction was assumed to be operating every day of construction. Construction equipment would be maintained to all applicable standards as required and construction activity and associated fuel consumption and energy use would be temporary and typical for construction sites. It is also reasonable to assume that contractors would avoid wasteful, inefficient, and unnecessary fuel consumption during construction to reduce construction costs. Therefore, the proposed project would not involve the inefficient, wasteful, and unnecessary use of energy during construction, and the construction-phase impact related to energy consumption would be less than significant.

Operational Energy Demand

Operation of the project would require energy use in the form of electricity, natural gas, and gasoline consumption. Natural gas and electricity would be used for heating and cooling systems, lighting, appliances, water use, and the overall operation of the project. Gasoline consumption would be attributed to vehicular travel associated with guests and employees traveling to and from the project site. The project’s estimated number of average daily trips from CalEEMod is used to determine the energy consumption associated with fuel use from project operation. According to the CalEEMod calculations, the project would result in 1,953,784 annual VMT. Based upon the project’s VMT and the fleet mix and fuel economy estimates in CalEEMod, total gasoline consumption associated with project operation is estimated at 67,356 gallons annually and an annual total diesel consumption of approximately 21,106 gallons.

The project’s electricity demand would be served by SCE, which provided 85,275 GWh of electricity in 2018. Operation of the project would consume approximately 0.015 GWh of electricity per year, which would be less than 0.01 percent of SCE’s current electricity demand (electricity use provided in the CalEEMod output in **Appendix D**). The project’s natural gas demand would be serviced by SoCalGas, which provided approximately 4,795 MMthm per year in 2018. Estimated natural gas consumption for the project would be approximately 0.048 MMthm per year, which would be less than 0.01 percent of SoCalGas’ current natural gas demand (natural gas use provided in the CalEEMod output). Given the above considerations, the project would have a negligible impact to overall demand for SCE and SoCalGas.

The project would be required to comply with all standards set in California Building Code (CBC) Title 24, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources during operation. California's Green Building Standards Code (CALGreen; California Code of Regulations, Title 24, Part 11) requires implementation of energy efficient light fixtures and building materials into the design of new construction projects. Furthermore, the 2019 Building Energy Efficiency Standards (CBC Title 24, Part 6) requires newly constructed buildings to meet energy performance standards set by the Energy Commission. These standards are specifically crafted for new buildings to result in energy efficient performance so that the buildings do not result in wasteful, inefficient, or unnecessary consumption of energy. The standards are updated every three years and each iteration establishes stricter energy efficiency standards than the previous. For example, according to the CEC, residences built with the 2019 standards will use about seven percent less energy due to energy efficiency measures versus those built under the 2016 standards, or 53 percent less energy with rooftop solar, and nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades. Furthermore, the project would continue to reduce its use of nonrenewable energy resources as electricity generated by renewable resources provided by SCE continues to increase to comply with state requirements through Senate Bill 100, which requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

To help achieve and surpass Title 24 reduction targets, the project applicant proposes to incorporate several energy efficient features into overall project design. Energy efficient design features include solar energy infrastructure, energy efficient appliances, low flow plumbing fixtures, and water efficient features throughout the project site. Approximately 5 percent of the project's total parking would be allocated to electric vehicle (EV) stations. The hotel would include six bicycle parking spaces along with the restaurant allocating four bicycle parking spaces. Additionally, the project would provide Vanpool service to help encourage the reduction of single use vehicles.

In conclusion, energy demand associated with project construction would be temporary and typical of similar projects, and would not result in the wasteful, inefficient, or unnecessary consumption of energy. While project operation would involve the consumption of fuel, natural gas, and electricity, the project's energy usage would be in conformance with the latest version of California's Green Building Standard Code and the Building Energy Efficiency Standards. In addition, SCE has sufficient supplies to serve the project and project impacts to regional electricity and natural gas demand would be negligible. Therefore, the project would have a less than significant impact.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less than significant impact. As mentioned above, SB 100 mandates 100 percent clean electricity for California by 2045. Because the project would be powered by the existing electricity grid, it would eventually be powered by renewable energy mandated by SB 100 and would not conflict with this statewide plan. Additionally, as discussed above, the project would be subject to energy efficiency standards pursuant to CCR Title 24 requirements and has a target to exceed Title 24 targets by 10 percent.

The Santa Ana Climate Action Plan (CAP) was adopted by the City in December of 2015 and contains emissions-reduction measures that the City may implement, several of which are energy-related. The City’s CAP contains greenhouse gas (GHG) emissions reduction strategies, addresses the community’s potential vulnerability to climate change impacts, and provides clear implementation and monitoring programs to direct climate action in Santa Ana.

The City’s existing CAP includes numerous policies broken down by Community Wide Energy Measures and Municipal Operations Energy Measures. **Table 8** and **Table 9** compare the project to applicable City CAP and General Plan policies. The project would be consistent with measures and actions from the both the CAP and General Plan. Additionally, the project would be consistent with both the City’s General Plan Energy Strategies as well as the CAP’s Energy measures. Construction and operational energy impacts would be less than significant. Therefore, no mitigation measures are required.

Table 8 Climate Action Plan Consistency

Strategy	Consistency
Energy	
<p>Property Assessed Clean Energy (PACE) Financing for Commercial Properties</p> <p>PACE is an energy efficiency financing program operated by private contractors in many communities in California. PACE financing is available for a wide range of energy and water saving measures, and for renewable energy generation. Repayment of loans through the program is made on the property tax bill for the property. Communities must opt into the program, the Santa Ana program began January 2015. PACE makes it easier for owners of commercial property to implement energy efficiency and renewable energy projects that can save them money, make their properties more valuable, and create local jobs. The program is offered by private entities. Many cities have already opted into the program.</p>	<p>Consistent</p> <p>This measure is incentive based and the project applicant may decide to implement energy efficiency and renewable energy projects financed through the PACE program. The project would include green building features that include solar energy, water efficient features, low flow plumbing fixtures, energy efficient appliances, and EV stations. The project would not preclude the applicant from participating in this incentive-based program.</p>
<p>Southern California Edison Small and Medium Business Direct Install</p> <p>The California Public Utilities Commission authorizes certain energy efficiency programs through Southern California Edison (SCE). SCE sends trained energy efficiency contractors to help small businesses, up to 199 kW, identify ways to save electricity. SCE provides free upgrades to customers that may include energy efficient lighting, signage, sensors, refrigeration, sun-block window film, and programmable thermostats. These are provided through the Small and Medium Direct Install program at no cost to the City or to the customer. The current program provides up to \$10,000 for business from 0-99 kW and \$15,147 for business from 100-199 kW.</p>	<p>Consistent</p> <p>This measure is incentive based and the project proponent may decide to work with SCE to identify ways to save electricity during construction. The project would not preclude the applicant from participating in this incentive based program.</p>
<p>Solar Photovoltaic Systems— New Private Installs</p> <p>This measure accounts for the impact of new private installations of solar Photovoltaic (PV) systems in Santa Ana. Rebates or incentive payments for installation of solar PV are available as part of the California Solar Incentive program, which is administered by the California Energy Commission. For a limited time, the City is offering permit fee waiver, free plan check services, and free building inspection for solar PV systems.</p>	<p>Consistent</p> <p>This measure is incentive based and the project proponent may decide to take advantage of the California Solar Incentive program. Solar energy features would be included in the design of this project. The project would not preclude from participating in this incentive based program.</p>

Strategy	Consistency
Energy	
<p>Title 24 Energy Efficiency Standards – Commercial</p> <p>Title 24 is the energy code that establishes the minimum energy efficiency for new construction in California. The code is set by the State and enforced locally by the City of Santa Ana through the building permit review and inspection process. Amended standards went into effect January 1, 2014. This measure reflects the expected savings from those amended standards in projected new commercial construction in the City.</p>	<p>Consistent</p> <p>Title 24 established the minimum energy efficiency for new construction in California. The code is set by the State and enforced locally by the City of Santa Ana. The project would exceed Title 24 standards by 10 percent.</p>

Source: Rincon, 2020.

Table 9 General Plan Consistency

Strategy	Consistency
<p>Reduce Land Use-Related Energy Consumption</p> <p>Reduce land use-related energy consumption by requiring energy efficient planning of new development and by encouraging higher density mixed use development.</p>	<p>Consistent</p> <p>The project would be required to comply with Title 24 and the California Building Code. Additionally, the project would include design features such solar infrastructure, EV stations, low flow plumbing, and energy efficient appliances to reduce overall land-use related energy consumption.</p>
<p>Reduce Construction-Related Energy Consumption</p> <p>Reduce energy consumption in construction and occupancy of buildings by enforcement and strengthening of existing building codes</p>	<p>Consistent</p> <p>Title 24 established the minimum energy efficiency in the California Building Code for new construction in California. The code is set by the State and enforced locally by the City of Santa Ana. The project would exceed Title 24 standards by 10 percent.</p>

Source: Rincon, 2020.

2.7 Geology and Soils

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects including the risk of loss, injury or death involving:				
i) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in table 18-1b of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A Geotechnical Report was completed by Partner Engineering and Science, Inc. in July 2018 (**Appendix I**) to analyze the project's geological impacts. This report is incorporated by reference.

Regulatory Setting

Alquist-Priolo Earthquake Fault Zoning Act

The primary purpose of the Alquist-Priolo Earthquake Fault Zoning Act is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The law requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones) around the surface traces of active faults and to issue appropriate maps. Pursuant to this act, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault.

California Building Code

The Building Standards Commission is authorized by California Building Standards Law (1953) (Health and Safety Code sections 18901 through 18949.6) to administer the process related to the adoption, approval, publication, and implementation of California's building codes. These building codes serve as the basis for the design and construction of buildings in California. The most recent version of the CBC contains provisions for earthquake safety and geologic hazards based on factors including occupancy type, soil and rock profile, the strength of the ground, and distance to seismic sources.

Impact Discussion

a) Expose people or structures to potential substantial adverse effects including the risk of loss, injury or death involving:

- i. 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?**

No impact. The project site is not located within an identified Alquist-Priolo Earthquake Hazard Zone.⁷

- ii. Strong seismic ground shaking?**

Less than significant impact. Seismic ground shaking is influenced by the proximity of the site to an earthquake fault, the intensity of the seismic event, and the underlying soil composition. According to the Geotechnical Report, the risk from ground shaking at the project site would be considered moderate. The Geotechnical Report recommends spread foundations supported on aggregate piers to reduce hazards related to seismic ground shaking. The project would also adhere to seismic design requirements established in the latest CBC. With implementation of the recommendations outlined in the Geotechnical Report and adherence to the CBC seismic design requirements of the latest CBC, this impact would be less than significant.

- iii. Seismic-related ground failure, including liquefaction?**

Less than significant. Liquefaction is a mode of ground failure that results from the generation of high-water pressures during earthquake events. According to the California Geological Survey (CGS), the project site is within a liquefaction zone due to high historic groundwater table and sandy material

⁷ California Geological Survey, Alquist-Priolo Earthquake Hazard Zone Map. Website: <https://www.conservation.ca.gov/cgs/maps-data>. Accessed: April, 2020.

underlying the property.⁸ This represents a potentially significant ground failure impact, which would be reduced to a less-than-significant level with implementation of applicable geotechnical requirements in the CBC and Title 24 Regulations.. These requirements are shown in the Standard Condition below.

Standard Condition SC GEO-1: The Geotechnical Report prepared for the project by Partner Engineering and Science, Inc. recommends deep foundations and ground improvement aggregate piers to reduce hazards related to liquefaction and seismic-related ground failure. Rammed aggregate piers, also known as stone columns, should be installed on a grid that would be designed by the specialty contractor in order to reduce the sum of the static and liquefaction induced settlement on the site to less than 1 inch, with less than 0.75 inches of total differential settlement. The spacing and column diameter should be designed by a specialty contractor who has successfully performed similar projects in the City of Santa Ana.

In addition, the report recommends that slab-on-grade areas would be supported by engineered fill overlying competent native soil, and 2 feet of non-expansive engineering fill that is free of deleterious materials should be used for support. Through the implementation of non-expansive engineering fill, the potential risks to life or property damage associated with expansive soils would be reduced.

This impact is less than significant because implementation of the structural measures is required as a standard condition and would be incorporated into the final design plans as a part of the plan review process.

Landslides?

No impact. The project site is flat and is not located near slopes that would be susceptible to landslides. Therefore, no impact would occur.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less than significant impact. As discussed in **Section 2.10, Hydrology and Water Quality**, construction-period ground disturbance and permanent new impervious surfaces could trigger erosion on or adjacent to the project site. Application of a Storm Water Pollution Prevention Plan (SWPPP) would limit erosion on the project site during construction. The project would also be subject to a Water Quality Management Plan (WQMP), which would contain Best Management Practices (BMP) to detain stormwater runoff and minimize potential erosion impacts. With the implementation of the WQMP, this impact would be less than significant.

c) 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?

and

⁸ California Department of Conservation, *California Geological Survey Mapping Tool*, 2017. Available: <https://www.conservation.ca.gov/cgs/maps-data>. Accessed: April 2020.

d) Be located on expansive soil, as defined in table 18-1b of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less than significant impact. Liquefaction is a mode of ground failure that results from the generation of water pressures during earthquake ground shaking. As discussed above, the project site is within the boundaries of a liquefaction zone. Potential for liquefaction on the project site represents a potentially significant impact. Recommendations outlined in **Standard Condition SC GEO-1** ensure that the use of deep foundations and aggregate piers to prevent foundation spread and minimize liquefaction hazards. With application of the recommendations outlined in the **Standard Condition SC GEO-1**, this impact would be less than significant.

The project site exhibits moderately expansive clays that are not suitable to support building slabs. Potential risk to life or property damage associated with construction on expansive soils represents a potentially significant impact, which would be addressed through application of foundation standards of the CBC, City and enumerated in **SC GEO-1**. Therefore, this impact would be less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No impact. The project does not propose the use of septic tanks. Therefore, no impact would occur.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

Less than significant with mitigation. According to the Santa Ana General Plan Conservation Element, no known paleontological resources have been recorded at the project site. However, construction activities and ground-disturbing activities could potentially destroy unknown paleontological resources within the project site. This represents a potentially significant impact, which would be reduced to a less-than-significant level with implementation of **Mitigation Measure GEO-2**.

Mitigation Measure GEO-2: Prior to construction activities, the applicant shall prepare a Paleontology plan that would address the discovery of a paleontological specimen during any phase of the project. The plan shall include procedures to preserve any unearthed/discovered paleontological resources in place until recovery or treatment is resolved by a qualified paleontologist in consultation with the Director of the Planning and Building Agency. Should loss or damage be detected, additional protective measures or further action (e.g., resource removal), as determined by a professional paleontologist, may be implemented to mitigate the impact as identified in the Paleontology plan. The plan shall be submitted for review and approval by the Director of the Planning and Building Agency or designee prior to issuance of grading and excavation permit.

2.8 Greenhouse Gas Emissions

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Unlike emissions of criteria and toxic air pollutants (discussed under Air Quality), which have local or regional impacts, GHG emissions 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. The most common GHGs contributing to global warming and associated climate change are carbon dioxide (CO₂), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Emissions of GHGs contributing to global climate change are attributable to a variety of natural processes and human activities. Emissions of GHGs by human activities are associated with the transportation, industrial and manufacturing, utility, residential, commercial, and agricultural sectors.

Operation of the project could generate GHGs; however, to provide a conservative estimation of GHG emissions for the project site, this analysis assumed that the project site currently produces zero GHG emissions.

Regulatory Setting

Federal

The U.S. Supreme Court in *Massachusetts et al. v. Environmental Protection Agency et al.* ([2007] 549 U.S. 05-1120) held that the U.S. EPA has the authority to regulate motor-vehicle GHG emissions under the federal Clean Air Act. The U.S. EPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines and requires annual reporting of emissions. In 2012, the U.S. EPA issued a Final Rule that establishes the GHG permitting thresholds that determine when CAA permits under the New Source Review Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs are required for new and existing industrial facilities.

In 2014, the U.S. Supreme Court in *Utility Air Regulatory Group v. EPA* (134 S. Ct. 2427 [2014]) held that U.S. EPA may not treat GHGs as an air pollutant for purposes of determining whether a source is a major source required to obtain a PSD or Title V permit. The Court also held that PSD permits that are otherwise required (based on emissions of other pollutants) may continue to require limitations on GHG emissions based on the application of Best Available Control Technology (BACT).

State

The State of California considers GHG emissions and the impacts of climate change to be a serious threat to the public health, environment, economic well-being, and natural resources of California, and has taken an aggressive stance to mitigate the State's impact on climate change through the adoption of policies and legislation. CARB is responsible for the coordination and oversight of State and local air pollution control programs in California. California has numerous regulations aimed at reducing the State's GHG emissions. Some of the major initiatives are summarized below.

Assembly Bill 32

California's major initiative for reducing GHG emissions is outlined in Assembly Bill 32 (AB 32), the "California Global Warming Solutions Act of 2006," signed into law in 2006. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 (essentially a 15 percent reduction below 2005 emission levels; the same requirement as under S-3-05), and requires the ARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 requires the ARB to adopt regulations to require reporting and verification of State's largest industrial emitters (ARB 2017d).

The ARB approved the initial AB 32 Scoping Plan on December 11, 2008 and a 2020 Statewide GHG emission limit of 427 million metric tons (MMT) of carbon dioxide equivalents (CO₂e) was established. The Scoping Plan also included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since approval of the Scoping Plan.

Senate Bill 375

SB 375, signed in August 2008, enhances the State's ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles for 2020 and 2035. In addition, SB 375 directs each of the State's 18 major Metropolitan Planning Organizations (MPO) to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP). On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. SB 375 also provides the option for the coordinated development of subregional plans by the subregional councils of governments and the county transportation commissions to meet SB 375 requirements

Senate Bill 32

On September 8, 2016, the governor signed SB 32 into law, extending AB 32 by requiring the State to further reduce GHGs to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain

unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of recently adopted policies, such as SB 1383. The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with statewide per capita goals of six metric tons (MT) of CO₂e by 2030 and two MT of CO₂e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level), but not for specific individual projects because they include all emissions sectors in the state (CARB 2017).

Senate Bill 1383

Adopted in September 2016, SB 1383 requires the CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. The bill requires the strategy to achieve the following reduction targets by 2030:

- Methane – 40 percent below 2013 levels
- Hydrofluorocarbons – 40 percent below 2013 levels
- Anthropogenic black carbon – 50 percent below 2013 levels

The bill also requires CalRecycle, in consultation with the State board, to adopt regulations that achieve specified targets for reducing organic waste in landfills.

Senate Bill 97

Senate Bill (SB) 97, signed in August 2007, acknowledges that climate change is an environmental issue that requires analysis in CEQA documents. In March 2010, the California Resources Agency (Resources Agency) adopted amendments to the CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. Specifically, Section 15183.5(b)(1)A-G of Title 14 of the California Code of Regulations was amended to state that a GHG Reduction Plan, or Climate Action Plan (CAP), may be used for tiering and streamlining the analysis of GHG emissions in subsequent CEQA project evaluation provided that the CAP does the following:

- Quantifies GHG emissions both existing and projected over a specific period of time, resulting from activities within a defined geographical area.
- Establishes a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable.
- Identifies and analyzes the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area.
- Specifies measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level.

-
- Establishes a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels.
 - Is adopted in a public process following environmental review.

Senate Bill 1000

SB 1000 was signed in 2016, further codifying the State's commitment to environmental justice and equity when dealing with populations that will be disproportionately affected by climate change. SB 1000 requires all cities to include an Environmental Justice element into their next General Plan update of two or more elements.

Senate Bill 100

SB 100 was signed in September 10, 2018. SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the state's Renewables Portfolio Standard (RPS) Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 44 percent by 2024, 60 percent by 2030, and 100 percent by 2045.

Executive Order B-55-18

Also signed in September 2018 by Governor Brown, EO B-55-18 commits the State to carbon neutrality by 2045. It directs CARB to work with State agencies to develop a framework to reach this goal. Like SB 100's 2045 commitment, the EO leaves room for a flexible mix of energy sources and emission reduction methods.

California Environmental Quality Act

Pursuant to the requirements of SB 97, the Resources Agency has adopted amendments to the CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted CEQA Guidelines provide general regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. To date, a variety of air districts have adopted quantitative significance thresholds for GHGs. The SCAQMD threshold, which was adopted in December 2008 and is designed to achieve emission reductions in the Basin consistent with Statewide GHG reductions codified under AB 32, considers emissions of over 10,000 MT CO₂e/year to be significant (SCAQMD 2008b). However, the SCAQMD's threshold applies only to stationary sources and is expressly intended to apply only when the SCAQMD is the CEQA lead agency.

Regional - SCAG RTP/SCS

As discussed above, SB 375 requires MPOs to prepare an RTP/SCS that will achieve regional emission reductions through sustainable transportation and growth strategies. On September 23, 2010, the CARB adopted final regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. SCAG was assigned targets of an 8 percent reduction in GHGs from transportation sources by 2020 and a 13 percent reduction in GHGs from transportation sources by 2035. Most recently, SCAG adopted the 2016-

2040 RTP/SCS on April 7, 2016. It includes a number of strategies and objectives to encourage transit-oriented and infill development and use of alternative transportation to minimize vehicle use.

Local – Santa Ana Climate Action Plan

The City of Santa Ana adopted a Climate Action Plan (CAP) in December 2015 (Santa Ana 2015). The CAP represents the City’s commitment to improving quality of life by reducing carbon pollution and energy use from municipal operations and from the community as a whole. To develop the CAP, an emissions inventory was conducted to determine baseline GHG emissions from the community and from municipal operations for the calendar year 2008.

In 2014, the City Council adopted emissions reduction goals for the CAP. For community-wide emissions, the reduction goal is 15 percent below the baseline year 2008 by 2020 and 30 percent below the baseline year 2008 by 2035. For municipal operational emissions the reduction goal is 30 percent by 2020 and 40 percent by 2035. Based on community input, suggestions from City staff, analysis of other communities’ climate action plans, and consultant recommendations, a list of measures to reduce emissions was developed. These measures address emissions in five sectors: transportation and land use, energy, solid waste, water, and wastewater (Santa Ana 2015). Per the requirements of CEQA 15183.5(b), the CAP is considered a qualified GHG reduction plan.

Impact Discussion

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

Less than significant. The majority of individual projects do not generate sufficient GHG emissions to create significant project-specific environment effects. However, the environmental effects of a project’s GHG emissions can contribute incrementally to cumulative environmental effects that are significant, contributing to climate change, even if an individual project’s environmental effects are limited (CEQA Guidelines Section 15064[h][1]). The issue of a project’s environmental effects and contribution towards climate change typically involves an analysis of whether or not a project’s contribution towards climate change is cumulatively considerable. Cumulatively considerable means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, §15064[h][1]).

According to the CEQA Guidelines, projects can tier off a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the project’s consistency with the GHG reduction policies included in a qualified GHG reduction plan. This approach is considered by the Association of Environmental Professionals (AEP) in their white paper, *Beyond Newhall and 2020*, to be the most defensible approach presently available under CEQA to determine the significance of a project’s GHG emissions (2016). As mentioned under “Local Regulations,” the City of Santa Ana has

adopted a qualified GHG reduction plan. For the purposes of this analysis the project’s significance is determined by consistency with the CAP, which is consistent with the 2017 Scoping Plan and emission reduction targets per SB 32. GHG emissions associated with the proposed project would be less than significant if the project is consistent with the City’s CAP.

Consistency with GHG Reduction Plans and Policies

The City of Santa Ana adopted a CAP in December 2015. **Table 10** summarizes the project’s consistency with applicable CAP measures. The project would be consistent with applicable regional and local plans and policies to reduce GHG emissions.

Table 10 Consistency with Applicable Santa Ana Climate Action Plan Measures

Measure	Consistency
Transportation and Land Use	
<p>End of Trip Facilities in New Projects The City will amend its Municipal Code to require the placement of end-of-trip facilities in new office and larger retail buildings meeting certain criteria (for example, those larger than 25,147 square feet). The City will perform additional analysis to determine the appropriate criteria.</p>	<p>Consistent The proposed project would include ten bicycle parking spaces. Four bicycle parking spaces would be allocated to the restaurant, and six would be allocated to the hotel.</p>
Energy	
<p>Property Assessed Clean Energy (PACE) Financing for Commercial Properties PACE is an energy efficiency financing program operated by private contractors in many communities in California. PACE financing is available for a wide range of energy and water saving measures, and for renewable energy generation. Repayment of loans through the program is made on the property tax bill for the property. Communities must opt into the program, the Santa Ana program began January 2015. PACE makes it easier for owners of commercial property to implement energy efficiency and renewable energy projects that can save them money, make their properties more valuable, and create local jobs. The program is offered by private entities. Many cities have already opted into the program.</p>	<p>Consistent This measure is incentive based and the project applicant may decide to implement energy efficiency and renewable energy projects financed through the PACE program. The project would include green building features that include solar energy, water efficient features, low flow plumbing fixtures, energy efficient appliances, and EV stations. The project would not preclude the applicant from participating in this incentive-based program.</p>
<p>Southern California Edison Small and Medium Business Direct Install The California Public Utilities Commission authorizes certain energy efficiency programs through Southern California Edison (SCE). SCE sends trained energy efficiency contractors to help small businesses, up to 199 kW, identify ways to save electricity. SCE provides free upgrades to customers that may include energy efficient lighting, signage, sensors, refrigeration, sun-block window film, and programmable thermostats. These are provided through the Small and Medium Direct Install program at no cost to the City or to the customer. The current program provides up to \$10,000 for business from 0-99 kW and \$15,147 for business from 100-199 kW.</p>	<p>Consistent This measure is incentive based and the project proponent may decide to work with SCE to identify ways to save electricity during construction. The project would not preclude the applicant from participating in this incentive based program.</p>
<p>Solar Photovoltaic Systems— New Private Installs This measure accounts for the impact of new private installations of solar Photovoltaic (PV) systems in Santa Ana. Rebates or incentive payments for installation of solar PV are available as part of the California Solar Incentive program, which is administered by the California Energy Commission. For a limited time, the City is offering</p>	<p>Consistent This measure is incentive based and the project proponent may decide to take advantage of the California Solar Incentive program. Solar energy features would be included in the design of this project. The project would not preclude the applicant</p>

Measure	Consistency
<p>permit fee waiver, free plan check services, and free building inspection for solar PV systems.</p>	<p>from participating in this incentive based program.</p>
<p>Title 24 Energy Efficiency Standards – Commercial Title 24 is the energy code that establishes the minimum energy efficiency for new construction in California. The code is set by the State and enforced locally by the City of Santa Ana through the building permit review and inspection process. Amended standards went into effect January 1, 2014. This measure reflects the expected savings from those amended standards in projected new commercial construction in the City.</p>	<p>Consistent Title 24 established the minimum energy efficiency for new construction in California. The code is set by the State and enforced locally by the City of Santa Ana. The project would exceed Title 24 standards by 10 percent.</p>
<p>Solid Waste, Water, and Wastewater</p>	
<p>AB 341 Commercial and Multifamily Recycling AB 341 was adopted as law by the State of California in 2011 and requires recycling by businesses that generate four cubic yards or more of commercial solid waste per week and multifamily residential dwellings of five units or more, starting July 1, 2012. The increased diversion of waste from landfills resulting from this requirement will reduce landfill methane emissions. Recycling programs can also reduce waste disposal costs for businesses and multifamily building owners.</p>	<p>Consistent AB 341 was adopted by the State of California in 2011 and requires recycling by businesses that generate four cubic yards of solid waste per week.</p>
<p>Food Waste Digestion The City will need to work with waste haulers and potential digestion facilities to arrange for dedicated treatment of Santa Ana food waste. The waste could go either to dedicated facilities for food waste, or be added to existing anaerobic digesters at wastewater treatment plants that use digester gas for energy. For example, Orange County Sanitation District currently has a pilot digester to which food waste might be added.</p>	<p>Consistent AB 341 also requires an increase in the rate of recovery of commercial waste for recycling, and some of this increase recovery will likely be food waste. Food waste is to be composted, to allow energy recovery.</p>
<p>Turf Removal Turf grass is one of the most water-intensive plants in a landscape. Its high water use and frequent maintenance make it a time-consuming and expensive yard option. The average residential customer spends about 60% of their water on outdoor irrigation. Turf removal and conversion to drought-tolerant landscaping reduces potable water use and associated electricity consumption. Rebates are available through SoCal Water Smart for residents and businesses to convert their lawns to drought tolerant plants or synthetic turf. The City will promote the program. It is estimated that through the program 100 single-family lawns could be converted annually from 2015 to 2035.</p>	<p>Consistent The proposed project does not include turf.</p>

Source: Rincon, 2020.

The project would comply with the California Building Standards Code, applicable SCAQMD rules (e.g., Rule 1113), and is consistent with regional and local strategies to reduce GHG emissions, as detailed in **Table 10**. The project would not substantially contribute to city, regional, or statewide GHG emissions or obstruct achievement of local targets and state mandates. The proposed project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs and would be consistent with Santa Ana’s Climate Action Plan. Therefore, the project’s GHG impact would be less than significant.

Project-generated Greenhouse Gas Emissions

Construction Emissions

It is anticipated that construction of the project would begin in January 2021 and be completed over approximately 18 months. Therefore, the project would be operational by summer 2022. As shown in **Table 11**, construction activity for the project would generate an estimated 684 MT of CO_{2e}. When amortized over a 30-year period, construction of the project would generate approximately 23 MT of CO_{2e} per year.

Table 11 Estimated Construction GHG Emissions

Construction	Project Emissions (MT/yr CO _{2e})
2020	40.8
2021	450.4
2022	192.9
Total	684.1
Total Amortized over 30 Years	22.8

Source: Rincon 2020

Notes: See **Appendix A** for CalEEMod results. Numbers may not add up due to rounding. Emission data is pulled from “mitigated” results that account for compliance with some regulations and design features included in the project.

Combined Construction, Stationary, and Mobile Source Emissions

Table 12 summarizes construction, operational, and mobile GHG emissions associated with development of the project for informational purposes. Annual emissions from the proposed project would total approximately 1,461 MT of CO_{2e}, or 0.000003 percent of statewide emissions in 2017 (CARB 2017a).

Table 12 Project Annual GHG Emissions (MT of CO_{2e})

Emission Source	Project Emissions
Construction	22.8
Operational	
Area	7.5
Energy	502.5
Solid Waste	50.2

Water	12.2
Mobile	
CO ₂ and CH ₄	835.0
N ₂ O	81.4
Total	1,461.4

Source: Rincon 2020.

Notes: See **Appendix A** for CalEEMod results. Some numbers may not add up due to rounding. Emission data is pulled from “mitigated” results that account for compliance with regulations and project features, such as the project’s proximity to public transit.

2.9 Hazards and Hazardous Materials

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

Environmental Setting

Information in this section was derived from a Phase 1 Environmental Site Assessment (ESA) **Appendix E** prepared for the project to assess potential for hazardous materials and wastes located within the project site.

Regulatory Setting

Department of Toxic Substances Control and Regional Water Quality Control Board

The Department of Toxic Substances Control (DTSC) regulates hazardous waste and remediation of existing contamination and evaluates procedures to reduce the hazardous waste produced in California. DTSC regulates hazardous waste in California primarily under the authority of the federal Resource Conservation and Recovery Act and the California Health and Safety Code. The Santa Ana Regional Water Quality Control Board (RWQCB) also provides regulatory oversight for sites with contaminated groundwater or soils.

Government Code §65962.5 (Cortese List)

Section 65962.5 of the Government Code requires the California Environmental Protection Agency to develop and annually update a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by State and local agencies and developers to comply with CEQA requirements. The Cortese List includes hazardous substance release sites identified by DTSC and the State Water Resources Control Board (SWRCB).

Impact Discussion

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than significant impact. During project construction, limited amounts of hazardous materials would be used, including standard construction materials (e.g., paints and solvents) and petroleum-based products (e.g., vehicle fuel and degreasers). The project would be required to comply with all federal, State, and local standards and regulations while handling, storing, and disposing of these hazardous materials. Compliance with all federal, state, and local standards and regulations would ensure that project impacts related to the routine transport, use, and disposal of hazardous materials would be less than significant.

Project operation would involve the use of potentially hazardous materials such as paints, oils, absorbents, cleaners, and pesticides for landscaping. All potentially hazardous materials used on the project site would be contained, stored, and used in accordance with manufacturer's instructions and handled in compliance with applicable standards and regulations. In accordance with federal and state law, the project would be required to disclose hazardous materials handled at reportable amounts. Given the above, impacts related to hazardous materials used during the project operation would be less than significant.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than significant impact. The Phase I ESA evaluated hazardous conditions associated with underground storage tanks (UST), groundwater contamination, and agricultural chemical contamination at the project site, as described below.

Underground Storage Tanks

In 1979, the project site was equipped with a 12,000-gallon gasoline UST. In 1987, the UST was removed and two soil samples were collected from the UST excavation. The concentrations of total petroleum hydrocarbons (TPH) and xylenes detected in these samples were far below the RWQCB's Maximum Soil Screening Levels (MSSLs). Based on the removal of the tank, the analytical results, the length of time since the sampling occurred (approximately 31 years), and likely degradation via natural attenuation, the former UST is not expected to represent a significant environmental concern.

Groundwater Contamination

The project site is located within an area of contaminated groundwater associated with part of the Orange County Groundwater Basin, known as the Southeast Santa Ana Site Discovery Project. Groundwater in this area is contaminated with volatile organic compounds (VOCs) including tetrachloroethylene (PCE) and trichloroethylene (TCE). Regulatory oversight is being provided by the DTSC and RWQCB. Based on review of the regulatory database report and EnviroStor and GeoTracker online databases, several facilities located in the vicinity of the project site are currently undergoing remediation for the release of PCE and TCE.

On October 9, 2017, a nearby groundwater monitoring well (MW-44B) was sampled at 2601 Hotel Terrace, approximately 200 feet west of the project site. Sampling results indicate that PCE and TCE were detected at concentrations of 1.1 and 3.1 micrograms per liter ($\mu\text{g/L}$), respectively. These concentrations are below the Maximum Contaminant Level (MCL) of 5 $\mu\text{g/L}$ for both PCE and TCE. Review of the analytical results of other wells sampled at the time suggests the contaminated groundwater is migrating to the south-southwest, away from the project site. Therefore, based on the results associated with MW-44B, it does not appear that groundwater beneath the project site has been impacted by PCE or TCE above regulatory action levels.

Agricultural Chemical Contamination

The project site was historically used for agricultural purposes, agricultural chemicals such as pesticides, herbicides, and fertilizers, may have been used on-site. The project site is largely either paved over or covered by building structures that minimize direct contact to any potential remaining concentrations in the soil. Additionally, during previous site development, near surface soils (where residual agricultural chemical concentrations would have most likely been present, if at all) were generally mixed with fill material or disturbed during grading. Engineered fill material is commonly placed over underlying soils as part of the development activities. Furthermore, it is likely that residual agricultural chemicals (if any) would have likely degraded since the site was last utilized for agricultural purposes. These additional variables serve to further reduce the potential for exposure to residual agricultural chemicals. The

possible former use of agricultural chemicals on the project site is not expected to represent a significant environmental concern.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school

No impact. The nearest school to the project site is Century High School of the Santa Ana Unified School District, located approximately 1.2 miles north of the project site. No schools are located within 0.25 miles of the project site; therefore, no impact would occur.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and as a result, would it create a significant hazard to the public or the environment?

Less than significant impact. The existing parcel is not included on the list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and would, therefore, not create a significant hazard to the public or the environment during construction or operation resulting from sites on this list. This impact would be less than significant.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

Less than significant impact. The project site is within the John Wayne Airport (JWA) 60 dB(A) CNEL Noise Contour boundary, according to the JWA Land Use Plan. Refer to **Section 2.13, Noise and Vibration**, for discussion about this Noise Contour boundary.

Federal Regulation Title 14 Part 77 (FAR Part 77) establishes standards and notification requirements for objects affecting navigable airspace. This notification serves as the basis for evaluating the effect of the construction or alteration on operating procedures on the navigable airspace around an airport. The project's height, at 82 feet, would not exceed the 200-foot height restriction in place for the FAR Part 77 notice requirement for JWA as promulgated by the JWA Airport Environs Land Use Plan (AELUP) per Federal Aviation Administration (FAA) requirements. The FAA notice requirement is a criteria tool for proposed structures based on a number of factors: height, proximity to an airport, location, and frequencies emitted from the structure. The project site and JWA are at approximately the same elevation and two miles apart. The proposed building height also would not exceed the 100:1 slope of an imaginary surface height limit for runway safety, as shown on the JWA FAR Part 77 Obstruction of Imaginary Surfaces Map in the Appendix D of the AELUP. The project site also lies outside of areas shown on the Safety Zone Reference Map showing compatibility of the areas surrounding JWA. Therefore, hazards and compatibility with JWA operations and regulations due to the proposed project would be less than significant.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No impact. The City does not have an official emergency response plan or emergency evacuation plan. Therefore, the project would not physically impair or otherwise interfere with the implementation of an

adopted emergency response plan or emergency evacuation plan in the project vicinity. There would be no impact.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No impact. According to the California Department of Forestry and Fire Prevention, the project site is not located in a Fire Hazard Severity Zone.⁹ Because the project is not located within a Fire Hazard Severity Zone, the project would not expose people or structures to direct or indirect risks associated with wildland fires. Therefore, there would be no impact.

2.10 Hydrology and Water Quality

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage patterns of the site or area including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(i) result in substantial erosion or siltation on or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted run-off; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

⁹ California Department of Forestry and Fire Prevention. *Fire Hazard Severity Zone Map*. 2020. Available: <https://o square-footm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/>. Accessed: April, 2020.

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The project site does not include surface water features. The nearest body of surface water to the property is a concrete-lined drainage channel paralleling SR-55 which is a tributary of the San Diego Creek which is located 1,500 feet south of the project site. All runoff flows to San Diego Creek and is received by Upper Newport Bay. Upper Newport Bay is listed as an impaired waterbody for nutrients, pathogens, pesticides, and siltation. Therefore, all surface runoff will require onsite treatment to remove pollutants prior to release to the storm drain system.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), the project site is classified as Zone X, which is an area of minimal flood hazard.¹⁰

Regulatory Setting

Federal Emergency Management Agency

The FEMA administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities that comply with FEMA regulations protecting development in floodplains. As part of the NFIP, FEMA publishes FIRMs that identify flood hazard zones within a community. FIRMs designate 100-year floodplain zones and delineate other flood hazard areas. A 100-year floodplain zone is the area that has a one in one hundred (1 percent) chance of being flooded in any one year based on historical data.

National Pollutant Discharge Elimination System Permit Program

The National Pollutant Discharge Elimination System (NPDES) permit program controls sources that discharge pollutants into waters of the United States (e.g., streams, lakes, bays, etc.). For the City, these regulations are implemented at the regional level by the RWQCB. The RWQCB is responsible for protecting the quality of surface water and groundwater by issuing and enforcing compliance with the NPDES permits, and by preparation and revision of the relevant Regional Water Quality Control Plan, also known as the Basin Plan.

¹⁰ Federal Emergency Management Agency (FEMA), 2019. FEMA Flood Map Service Center. Panel No. 06081C0153F. Available: <https://msc.fema.gov/portal/search?AddressQuery=1540%20brookhollow%20santa%20ana#searchresultsanchor>. Accessed April, 2020.

The RWQCB also has issued a Municipal Regional Stormwater NPDES Permit (Permit Number CAS612008). Under the Municipal Regional Stormwater NPDES Permit, development projects that create, add, or replace 10,000 square feet or more of impervious surface area are required to control post-development stormwater runoff through source control, site design, and treatment control BMPs. Additional requirements must be met by certain large projects that create 1 acre or more of impervious surfaces.

In addition to water quality controls, the Regional Municipal NPDES permit has hydromodification¹¹ controls as defined in the Hydromodification Management Plan. The NPDES permit requires all new and redevelopment projects that create or replace 1 acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation or other impacts to beneficial uses of local rivers, streams, and creeks.

Statewide Construction General Permit

The SWRCB has implemented a NPDES General Construction Permit for the State of California. Projects that would disturb more than 1 acre of land are required to submit a Notice of Intent (NOI) and a SWPPP to the SWRCB to apply for coverage under the NPDES Construction and Land Disturbance General Permit. Construction activities subject to this permit include grading, clearing, or any activities that cause ground disturbance such as stockpiling or excavation. The SWPPP will include the site-specific BMPs to control erosion and sedimentation and maintain water quality during the construction phase. The SWPPP also contains a summary of the structural and non-structural BMPs to be implemented during the post-construction period.

Groundwater Management Plan

The Orange County Water District, the District that services the City, updated the Groundwater Management Plan in 2015. The plan describes the district's groundwater sustainability goals, and the strategies, programs, and activities that support these goals. The Groundwater Management Plan satisfies the objectives of the Sustainable Groundwater Management Act enacted by the state legislature in 2014. The 2015 Groundwater Management Plan covers the City.

Water Quality Control Plan for the Santa Ana River Basin (Basin Plan)

The 1995 Water Quality Control Plan for the Santa Ana River Basin (Region 8) was updated in February 2008, June 2011, and February 2016. The SWRCB and the nine RWQCBs are responsible for the protection and, where possible, the enhancement of the quality of California's waters. The SWRCB sets statewide policy, and together with the RWQCBs, implements state and federal laws and regulations. Each of the nine Regional Boards adopts a Water Quality Control Plan, or Basin Plan, which recognizes and reflects regional differences in existing water quality, the beneficial uses of the region's ground and surface waters, and local water quality conditions and problems. The Basin Plan for the Santa Ana Region includes the upper and lower Santa Ana River watersheds, the San Jacinto River watershed, and

¹¹ Hydromodification is a change in stormwater runoff characteristics from a watershed caused by changes in land use conditions (i.e., urbanization) that alter the natural cycling of water. Changes in local land use can cause runoff volumes and velocity to increase which can result in a decrease in natural vegetation, changing of river/creek bank grades, soil compaction, and the creation of new drainages.

several other small drainage areas. The Santa Ana Region covers parts of southwestern San Bernardino County, western Riverside County, and northwestern Orange County.

Orange County Drainage Area Management Plan

The Orange County Drainage Management Plan (DAMP), implemented in 2003, provides the framework for the program management activities and plan development, provides the legal authority for prohibiting unpermitted discharges into the storm drain system and for requiring BMPs in new development and significant redevelopment. Santa Ana is a Permittee of the DAMP, and actively creates policy, planning and implementation for the municipal NPDES Stormwater Permit Compliance.

Santa Ana Municipal Storm Water Permitting Program

The Municipal Storm Water Permitting Program regulates stormwater discharges from municipal separate storm sewer systems (MS4s). Most of these permits are issued to a group of co-permittees encompassing an entire metropolitan area. The MS4 permits require the discharger to develop and implement a Storm Water Management Plan/Program with the goal of reducing the discharge of pollutants to the maximum extent practicable. The management programs specify what BMPs would be used to address certain program areas.

The Orange County Flood Control District, the County of Orange, and the City, along with 51 other incorporated cities, discharge pollutants from their MS4s. Stormwater and non-stormwater enter and are conveyed through the MS4s and are discharged to surface water bodies of the Orange region. These discharges are regulated under countywide waste discharge requirements contained in Order No. R8-2009-0030 (as amended by Order No. R8-2010-0062), Waste Discharge Requirements for the County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County within the Santa Ana Region Area wide Urban Storm Water Runoff Orange County, which was approved on May 19, 2011. Order No. R8-2009-0030, which serves as an NPDES permit, has expired but remains in effect until the RWQCB adopts a new permit.

This permit requires the development and implementation of a program addressing stormwater pollution issues in development planning for private projects. The primary objectives of the municipal stormwater program requirements are to (1) effectively prohibit non-stormwater discharges; and (2) reduce the discharge of pollutants from stormwater conveyance systems to the MEP statutory standard. The County Model WQMP was developed as part of the municipal stormwater program to address stormwater pollution from new development and redevelopment by the private sector. This WQMP contains a list of the minimum required BMPs that must be employed for a designated project. Permittees are required to adopt the program's requirements in their own water quality regulations. Developers must incorporate appropriate WQMP requirements into their project plans. Each permittee must approve the project plan as part of their development plan approval process and prior to issuing grading and building permits for projects covered by the WQMP. A draft WQMP has been prepared for the project and recommendations from it have been incorporated into the impact discussion.

Impact Discussion

a) **Violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality?**

Less than significant impact. Project-related impacts related to water quality can generally occur over several different periods:

- During demolition of existing uses, when risk of pollution exposure is present
- During the earthwork and construction phase, when the potential for erosion, siltation, and sedimentation would be the greatest
- Following construction, before the establishment of ground cover, when the erosion potential may remain relatively high
- After project completion, when impacts related to sedimentation would decrease markedly, but those associated with urban runoff would remain similar to existing conditions.

Construction

Project construction could generate polluted stormwater runoff that could degrade water quality if not properly controlled. Because project construction would disturb over 1 acre, the project would be subject to a NPDES General Construction Permit issued by the RWQCB, which would stipulate erosion control requirements. These requirements include the preparation and implementation of a SWPPP to identify potential sediment sources and other pollutants and prescribe BMP to ensure that potential adverse erosion, siltation, and contamination impacts would not occur during construction activities. BMPs include, but are not limited to, damp-street sweeping and providing the temporary cover of disturbed surfaces. Implementation of the SWPPP would control erosion and protect water quality from potential contaminants in stormwater runoff emanating from the construction site. Therefore, potential impacts to surface water or groundwater quality would be reduced to less-than-significant levels during construction.

Operation

According to the Draft WQMP, the project would be required to treat all surface runoff through bioretention and subdrains to ensure that pollutants are treated before water is released to downstream receiving waters. Additionally, the project would be subject to compliance Chapter 19, Article IV—Water Pollution of the SAMC, which addresses compliance with the 2003 DAMP. Compliance with NPDES, DAMP, and SAMC requirements would ensure that the operational water quality impacts would be less than significant.

b) **Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?**

Less than significant impact. The project site would be served by municipal water purveyors and would not directly access local groundwater supplies. According to soil percolation tests conducted at the site, there is a high level of clay present causing the soil to percolate very slowly. Therefore, the site did not contribute local recharge of ground water sources due to the rate of flow offsite. Furthermore, the urbanized project site was previously subject to development and does not substantially contribute to

the groundwater recharge in Orange County. Thus, the project would not substantially affect with groundwater supplies or groundwater recharge, and this impact would be less than significant.

c) Substantially alter the existing drainage patterns of the site or area including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on- or off-site;

and

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or offsite;

and

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted run-off?

and

iv. Impede or redirect flood flows?

Less than significant impact. The project site is mostly flat, and project implementation would not substantially alter the existing drainage pattern of the site. Furthermore, the proposed project would not alter the course of a stream or river. However, construction would include excavation, grading, trenching and other activities that would result in ground disturbance. As described above, project construction would be subject to a NPDES requirements on construction. Project construction would require the preparation and implementation of a SWPPP to identify potential sediment sources and other pollutants and prescription of BMPs to ensure that potential erosion, siltation, and contamination impacts would not occur during construction activities.

During operation, the project would implement the identified BMPs to accommodate surface runoff per the Orange County DAMP, NPDES, and SAMC requirements. Projects that comply with these requirements would not result in a significant impact related to changes in the quantity, rate, or quality of stormwater runoff from the site. Finally, continuous use and operation of the site would not create or contribute runoff water that would exceed the capacity of existing stormwater drains on the project site with implementation of onsite drainage and retention of stormwater onsite. Therefore, the project would not result in erosion or substantially increase stormwater, and this impact would be less than significant.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No impact. A seiche is a standing wave that can be generated in an enclosed body of water. There is no enclosed body of water in the project vicinity that could generate a seiche.

A tsunami is a sea wave generated by an earthquake, landslide, volcanic eruption, or even a large meteor hitting the ocean. Tsunamis generally affect coastal communities and low elevation river valleys in the vicinity of the coast. According to the California Geological Survey Orange County Tsunami

Inundation Maps, the project site is not located within a tsunami inundation area. The project site located approximately 8 miles inland from the Pacific Ocean.

Potential risk from mudflow (e.g., mudslide, debris flow) does not exist within the project area or the project site, as steep slopes are not located on or in proximity to the project site. Therefore, no impact would occur.

e) Conflict with or obstruct implementation of water quality control plan or sustainable groundwater management plan?

Less than significant impact. The Basin Plan (the applicable water quality control plan) lists the beneficial uses listed are recreational, commercial and habitat uses associated with the downstream uses in Upper and Lower Newport Bay and the Pacific Ocean. A beneficial use is one of the various ways that water can be used for the benefit of people and/or wildlife. As discussed earlier, the project would be implemented in compliance with other applicable water quality regulations including NPDES and the DAMP. In addition, the project site is not located in an important recharge area for groundwater in the Basin Plan. Therefore, the project would have less than significant impacts to the implementation of the Basin Plan and the groundwater management plan.

2.11 Land Use and Planning

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Regulatory Setting

City of Sana Ana General Plan

Various policies in the General Plan have been adopted for the purpose of avoiding or mitigating land use impacts resulting from planned development within the City. Development in the City would be subject to the following policies listed in the General Plan:

Policy 1.1: Foster compatibility between land uses to enhance livability and promote healthy lifestyles

Policy 1.8: Ensure that new development projects provide a new community benefit

Policy 1.0: Evaluate individual new development proposals to determine if the proposals are consistent with the General Plan, and to ensure that they do not compound existing public facility and service deficiencies

Policy 1.10: Balance development within the downtown to continue to serve as a cultural and economic hub for existing and future residents

Impact Discussion

a) Physically divide an established community?

No impact. There are no established communities within the immediate vicinity of the project site that would be physically divided. Commercial and light industrial properties are located northwest of the project across South Grand Avenue and directly north and south of the project. SR-55 bounds the eastern side of the project. Directly across South Grand Avenue to the west, seven other hotels are located within approximately one square mile on either side of Hotel Terrace. Therefore, no impact would occur.

b) 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?

Less than significant impact. The project site’s existing land use designation is Professional and Administrative Office (PAO). As discussed previously, the FAR of the proposed project (0.66) would be consistent with the designated FAR for PAO (0.5-1.0). The site is zoned as Specific Development No. 8 (SD-8), Zone III. However, the expressly permitted and conditionally permitted uses for the SD-8 Zone III do not include hotels. The project would require a Zoning Ordinance Amendment to SD-8 Zone III to add “hotel” as a conditionally permitted use, as well as a Conditional Use Permit for the hotel. However, adoption of a Zoning Ordinance Amendment and a Conditional Use Permit would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. This impact would be less than significant.

2.12 Mineral Resources

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
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Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

Environmental Setting

The City is highly urbanized and does not have any active mining operations within City limits. The City's Land Use Element of the General Plan does not identify mineral resource zones. The closest regionally significant resources are north of the City, found along the Santa Ana River within the cities of Orange and Anaheim.

The CGS is responsible under the Surface Mining Control and Reclamation Act of 1975 (SMARA) for classifying land into Mineral Resource Zones (MRZs) based on the known or inferred mineral resources potential of that land. The project site is classified as an MRZ-1 zone, which is defined as "areas where geological information indicates no significant mineral deposits are present."¹²

Impact Discussion

a) **Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

and

b) **Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?**

No impact. According to the SMARA, the project site is classified MRZ-1, which is defined as an area in which adequate information indicates that no significant mineral deposits are present, or that there is little likelihood for significant mineral deposits. The project site is urbanized, and implementation of the project would not result in the loss of availability of a known mineral resource. Therefore, no impact would occur.

2.13 Noise and Vibration

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
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Would the project result in:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local

¹² California Department of Conservation. *Guidelines for Classification and Designation of Mineral Lands*. Available: <https://maps.conservation.ca.gov/cgs/informationwarehouse/mlc/>. Accessed: December 24, 2019.

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
general plan or noise ordinance, or applicable standards of the other agencies?				
b) Generation of excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

This section is based on the Tapestry Hotel Noise and Vibration Assessment Memorandum (Rincon, 2020) and is included in **Appendix F**.

Noise

Noise is defined as sound that is loud, unpleasant, unexpected, or undesired. Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response, which is most sensitive to frequencies around 4,000 Hertz (Hz) and less sensitive to frequencies around and below 100 Hz (Kinsler, et al. 1999). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as a doubling of traffic volume, would increase the noise level by 3 dB; similarly, dividing the energy in half would result in a decrease of 3 dB (Crocker 2007).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive an increase (or decrease) of up to 3 dBA in noise levels (i.e., twice [or half] the sound energy); that a change of 5 dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (or half) as loud (10.5 times the sound energy) (Crocker 2007).

Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this “shielding” depends on the size of the object and the frequencies of the noise levels. Natural terrain features, such as hills and dense woods, and man-made features, such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2011). Structures can substantially reduce occupants’ exposure to noise as well. The FHWA’s guidelines

indicate that modern building construction generally provides an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows.

The impact of noise is not a function of sound level alone. The time of day when noise occurs, and the duration of the noise are also important. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. One of the most frequently used noise metrics is the equivalent noise level (Leq); it considers both duration and sound power level. Leq is defined as the single steady A-weighted level equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time. Typically, Leq is summed over a one-hour period. Lmax is the highest root mean squared (RMS) sound pressure level within the sampling period.

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using Day-Night Average Level (Ldn or DNL), which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime hours (10:00 p.m. to 7:00 a.m.). Community noise can also be measured using Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013a). Noise levels described by Ldn and CNEL usually differ by about 1 dBA. Quiet suburban areas typically have CNEL noise levels in the range of 40 to 50 dBA, while areas near arterial streets are in the 50 to 60+ dBA CNEL range.

Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of hertz (Hz). The frequency of a vibrating object describes how rapidly it oscillates. The normal frequency range of most groundborne vibration that can be felt by the human body is from a low of less than 1 Hz up to a high of about 200 Hz (Crocker 2007).

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise may result in adverse effects, such as building damage, when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz). The primary concern from vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration amplitudes are usually expressed in peak particle velocity (PPV) or RMS vibration velocity. Particle velocity is the velocity at which the ground moves. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the greatest magnitude of particle velocity associated with a vibration event.

Sensitive Receptors

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. According to the City of Santa Ana General Plan Noise Element (2010), noise-sensitive land uses include residential uses, institutional uses (i.e., hospitals, school classrooms/playgrounds, churches, and libraries), and open space areas.

The nearest noise-sensitive receiver to the project site is the Ricca Children’s Learning Center north of the site. While the Learning Center is located approximately 175 feet north of the site, its outdoor playground is located closer to the site at 125 feet north of the site. The nearest multi-family residences are located approximately 1,000 feet to the east at the newly constructed Heritage Mixed Use Development at 2001 E. Dyer Road and the closest single family residences are located 1,000 feet to the west along S. Evergreen Street. These noise-sensitive receivers would not be subject to substantial noise from project construction or operation due to their distance from the project site and noise from State Route-55 that would exceed the project’s noise.

Project Area Noise Setting

The primary off-site noise sources in the project site vicinity are motor vehicles (e.g., automobiles, buses, and trucks), particularly along the State Route (SR)-55 and its southbound off-ramp south of the site and South Grand Avenue west of the site. Ambient noise levels would be expected to be highest during the daytime and rush hour unless congestion slows speeds substantially. To determine ambient noise levels at the project site, two 15-minute noise measurements were recorded during the morning peak hour on January 3, 2019 between 7:15 a.m. and 8:00 a.m. using an Extech (Model 407780A) ANSI Type 2 integrating sound level meter. Noise Measurement (NM) 1 was conducted at the western boundary along South Grand Avenue while NM 2 was conducted on the southern boundary of the site along SR-55. **Figure 2** shows noise measurement locations and **Table 3** summarizes the noise measurement results. Noise levels for the 15-minute measurements are provided in L_{eq} for the measurement period; L_{min} and L_{max} are also provided. Noise measurement data is included in **Appendix F**.

Regulatory Setting

City of Santa Ana General Plan Noise Element

The goals and policies in the City of Santa Ana General Plan Noise Element (2010) focus on minimizing the negative impacts of noise, especially at sensitive receivers. In support of these goals and policies, the Noise Element includes standards for exterior and interior levels at various noise-sensitive land uses, which are shown in **Table 13**.

Table 13 City of Santa Ana Interior and Exterior Noise Standards in CNEL

Categories	Land Use Categories	Interior ¹ (CNEL)	Exterior ² (CNEL)
Residential	Single-family, duplex, multi-family	45 ³	65
Institutional	Hospital, school classroom/playgrounds,	45	65
Institutional	Church, library	45	--
Open Space	Parks	--	65

¹ Interior areas include, but are not limited to: bedrooms, bathrooms, kitchens, living rooms, dining rooms, closets, corridors/hallways, private offices, and conference rooms.

2 Exterior areas include: private yards of single-family homes, park picnic areas, school playgrounds, common areas, private open space, such as atriums or balconies, shall be excluded from exterior areas provided sufficient common area is included within the project.

3 Interior noise level requirements contemplate a closed window condition. Mechanical ventilation system or other means of natural ventilation shall be provided per Chapter 12, Section 1305 of the Uniform Building Code.

Source: Santa Ana 2010.

According to the Noise Element, all residential uses should be protected with sound insulation over and above that provided by normal building construction when constructed in areas exposed to greater than 60 CNEL.

The City's Noise Element does not explicitly characterize noise exposure levels or other standards for a hotel uses, but for the purpose of this analysis, the proposed hotel is considered a noise-sensitive residential use due to the hotel's inclusion of sleeping areas.

Santa Ana Municipal Code

Chapter 18, Article VI, *Noise Control*, of the Santa Ana Municipal Code (SAMC) establishes a series of regulations and standards to prevent unnecessary or excessive noise that may be detrimental to the health, welfare, and safety of the public or degrade their quality of life. According to Section 18-314(e) of the SAMC, noise associated with construction, repair, modeling, or grading of any property is exempt from the provisions of Article VI provided that such work only occurs between 7:00 a.m. and 8:00 p.m. on weekdays and Saturdays. In addition, Section 18-315 prohibits the generation of noise that causes the exterior noise level at any school, church, or hospital to exceed 55 dBA L_{eq} from 7:00 a.m. to 10:00 p.m. and 50 dBA L_{eq} from 10:00 p.m. to 7:00 a.m.

Impact Discussion

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of the other agencies?

The project would involve construction of a six-story hotel with 139 rooms and a separate, one-story restaurant on a 2.8-acre site. The site is surrounded by commercial, business park, and light industrial uses that may be subject to increased noise levels from both temporary construction and long-term operations. Of these uses, the nearest noise-sensitive receivers include the Ricca Children's Learning Center playground located approximately 125 feet north of the site. The following discussions address the potential noise level increases associated with the construction and operation of the project.

Construction

Less than significant impact. Construction activity would result in temporary increases in ambient noise levels in the project area on an intermittent basis and, as such, would expose surrounding noise-sensitive receivers to increased noise levels. While the City does not have specific noise level criteria for assessing construction impacts, the Federal Transit Administration (FTA) has developed criteria for determining whether construction of a project would result in a substantial temporary increase in noise levels. Based on FTA guidance, a significant impact would occur if project-generated construction noise exceeds a one-hour 90 dBA L_{eq} noise limit during the day or a one-hour 80 dBA L_{eq} noise limit at night at the nearest residences (FTA 2018). While the noise-sensitive receivers nearest to the project site is

not residential uses, Ricca Children’s Learning Center, i.e., both the Learning Center and its playground is considered as noise-sensitive as residential uses for the purpose of this analysis based on land uses the City characterizes as noise-sensitive, as discussed under Sensitive Receivers and Regulatory Setting. Therefore, the FTA thresholds are used to determine whether noise levels from construction would result in a substantial temporary increase in noise levels at nearby sensitive receivers.

Construction noise was estimated using the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) (2006). RCNM predicts construction noise levels for a variety of construction operations based on empirical data and the application of acoustical propagation formulas. Using RCNM, construction noise levels were estimated at noise-sensitive receivers near the project site. RCNM provides reference noise levels for standard construction equipment, with an attenuation of 6 dBA per doubling of distance for stationary equipment.

Each phase of construction has a specific equipment mix, depending on the work to be accomplished during that phase. Each phase also has its own noise characteristics; some will have higher continuous noise levels than others, and some may have discontinuous high-impact noise levels. The maximum hourly L_{eq} of each phase is determined by combining the L_{eq} contributions from each piece of equipment used in that phase (FTA 2018). Project construction phases would include site preparation, grading, building construction, architectural coating, and paving of the project site. It is assumed that diesel engines would power all construction equipment. For assessment purposes, the loudest phases (i.e., grading, and building construction) have been used for this assessment and have been modeled under the conservative assumption that a dozer, an excavator, and a jackhammer would be operating simultaneously.

Construction equipment would be continuously moving across the site, coming near and then moving further away from individual receivers. Therefore, due to the dynamic nature of construction, maximum hourly noise levels are calculated at various distances from the center of on-site construction activity to the nearest receivers. Based on the configuration of the project site, the center area of the site is located, on average, about 100 feet from site boundaries. Therefore, using the FHWA RCNM, construction noise was modeled at 225 feet from the Ricca Children’s Learning Center playground to the north. For a conservative analysis, construction noise modeling does not account for noise reduction from existing noise barriers (e.g., masonry walls). Construction noise levels and distances to the nearest receivers are shown in **Table 14**.

Table 14 Estimated Construction Noise

Construction Equipment	Estimated Noise (dBA L_{eq})
	At 225 feet
Bulldozer, Excavator, Jackhammer	71

Source: Rincon 2020

As shown in **Table 14**, maximum hourly noise levels during project construction, which would occur during the grading and building phases of construction, were calculated at between 71 dBA L_{eq} at the nearest noise-sensitive receiver. Therefore, construction noise levels would not exceed the FTA daytime

noise criteria of 90 dBA L_{eq} , where off-site noise would be of disturbance to daytime school operations. In addition, construction work would occur during daytime hours and, therefore, construction noise levels would not exceed the FTA nighttime noise criteria of 80 dBA L_{eq} , where off-site noise would be of disturbance to sleeping hotel guests. Therefore, construction noise levels would not exceed applicable noise criteria at nearby noise-sensitive uses. Construction noise impacts would be less than significant.

Operations

Less than significant impact. Operation of the project would generate on-site noise from new heating, ventilation, and air conditioning (HVAC) equipment, delivery- and trash-hauling trucks, on-site vehicle circulation, and light outdoor recreation from lounging areas on the roof terrace.

Based on combined data from Trane, Carrier, and Rheem HVAC manufacturing companies, noise from HVAC equipment would typically generate a noise level in the range of 70 dBA L_{eq} at a reference distance of 3 feet from the source. The nearest noise-sensitive receiver, the Ricca Children's Learning Center to the north, would be located at least 216 feet from the nearest rooftop-mounted HVAC equipment based on the approximate 82-foot roof-level height of the hotel and approximate 200-foot setback between the hotel and Learning Center. Based on attenuation rate of approximately 6 dBA per doubling of distance from the source, rooftop-mounted HVAC equipment would generate an estimated noise level of 33 dBA L_{eq} at 216 feet. Furthermore, rooftop HVAC units are traditionally shielded from surrounding land uses with parapets and roofs that block line-of-sight to sensitive receivers would typically provide at least a 5-dBA noise reduction. Based on the City's exterior noise standards for schools, noise levels from on-site HVAC equipment would not exceed the noise level standards of 55 dBA L_{eq} from 7:00 a.m. to 10:00 p.m. and 50 dBA L_{eq} from 10:00 p.m. to 7:00 a.m. as regulated by SAMC Section 18-315. Therefore, operational noise impacts associated with HVAC equipment would be considered less than significant.

The proposed project would require delivery- and trash-hauling services and would include surface parking with a total of 142 parking spaces, which would introduce new on-site noise from arriving and departing trucks and vehicles. However, the project site is surrounded by commercial, business park, and light industrial uses to the north, northeast, south, and west across South Grand Avenue, which already generate these noise sources. Furthermore, primary off-site noise sources in the project area are vehicles (e.g., automobiles, buses, and trucks) along the SR-55 and its southbound off-ramp south of the site and South Grand Avenue west of the site. Therefore, due to existing ambient mobile noise, operational of the project would not generate a substantial increase in mobile noise above existing noise levels and impacts would be considered less than significant.

Traffic Noise

The proposed project would generate new vehicle trips and incrementally increase traffic on area roadways, particularly on South Grande Avenue. As discussed under *Land Use Compatibility*, the segment of South Grand Avenue nearest to the project site carries an ADT of approximately 25,000 vehicles while the segment of SR-55 nearest to the project site carries an ADT of approximately 288,600 (JBA 2019; Caltrans 2017). According to the Traffic Analysis Update conducted by JBA in February 2020, the project would generate 761 ADT. As discussed under *Noise Background*, a doubling of traffic is required for an audible 3 dB increase in traffic noise levels. Conservatively adding all 761 daily vehicle

trips generated by the proposed project to this segment of South Grand Avenue would increase daily traffic by approximately three percent to 25,761 ADT. A 3 percent increase in traffic along South Grand Avenue would generate a less than 0.5 CNEL increase in traffic noise. Similarly, adding all 761 daily vehicle trips to the SR-55 would increase daily traffic along this freeway by less than 0.5 percent to approximately 289,360 ADT. A less than 0.5-percent increase in traffic along SR-55 would also generate a less than 0.5 CNEL increase in traffic noise. Therefore, the project would not create a perceptible 3-dBA increase in traffic noise. Noise impacts associated with off-site traffic generated by the proposed project would be less than significant.

b) Generation of excessive ground borne vibration or ground borne noise levels?

Less than significant impact. Operation of the project would not include stationary sources of significant vibration, such as heavy equipment operations. Rather, construction activities have the greatest potential to generate groundborne vibration affecting nearby receivers. Certain types of construction equipment can generate high levels of groundborne vibration. Construction of the project would potentially utilize loaded trucks, jackhammers, and/or bulldozers during most construction phases.

The City has not adopted specific standards for vibration impacts during construction. Therefore, the Caltrans Transportation and Construction Vibration Guidance Manual (2020) is used to evaluate potential construction vibration impacts related to both potential building damage and human annoyance. Based on the Caltrans criteria shown in **Table 15**, construction vibration impacts would be significant if vibration levels exceed 0.5 in./sec. PPV for residential structures and 2.0 in./sec. PPV for commercial structures, which is the limit where minor cosmetic, i.e. non-structural, damage may occur to these buildings. For the purpose of this analysis, the Ricca Children's Learning Center is analyzed as a residential use and vibration levels at the school building are compared against the Caltrans criteria of 0.5 in./sec. for residential structures. In addition, construction vibration impacts would cause human annoyance at nearby receivers if vibration levels exceed 0.24 in./sec. PPV, which is the limit above which temporary vibration activities become distinctly perceptible.

Because groundborne vibration could cause physical damage to structures, vibration impacts were modeled based on the distance from the location of vibration-intensive construction activities, conservatively assumed to be at edge of the project site, to the edge of nearby off-site structures. Therefore, the analysis of groundborne vibrations differs from the analysis of construction noise levels in that modeled distances for vibration impacts are those distances between the project site to nearest off-site structures (regardless of sensitivity) whereas modeled distances for construction noise impacts are based on the property line of the nearest off-site sensitive receivers. Based on the distance from the project site to nearby structures, equipment was modeled at 175 feet from Ricca Children's Learning Center to the north, 75 feet from the commercial office building to the east and fast-food restaurant to the south across the SR-55 off-ramp, and 125 feet from the restaurant and commercial office building to the west across South Grand Avenue. **Table 15** estimated groundborne vibration levels from project equipment.

Table 15 Vibration Levels at Structures

Equipment	PPV (in/sec)		
	75 Feet	125 Feet	175 Feet
Large Bulldozer	0.027	00.15	0.011
Loaded Truck	0.023	0.013	0.009
Jack Hammer	0.011	0.006	0.004
Small Bulldozer	0.001	0.001	0.001
Threshold for Building Damage	2.0	0.5	2.0
Threshold for Human Annoyance	0.24	0.24	0.24
Thresholds Exceeded?	No	No	No

Source: Rincon, 2020.

As shown in **Table 15**, construction activities would generate peak vibration levels of approximately 0.03 in./sec. PPV at the nearest off-site commercial office building to the east. Therefore, according to the Caltrans vibration criteria, groundborne vibration from typical construction equipment would not exceed the applicable threshold of 2.0 in./sec. PPV for building damage at the nearby commercial buildings nor would it exceed the applicable threshold of 0.5 in./sec. PPV for building damage at the Ricca Children’s Learning Center. Furthermore, groundborne vibration would not exceed the threshold of 0.24 in./sec. PPV for human annoyance at any of the modeled distances. Project construction would not result in groundborne vibration that would cause building damage or human annoyance. Vibration impacts would be less than significant.

- c) **For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

Less than significant impact. The airport closest to the project site is the John Wayne Airport (located approximately 2.15 miles southwest of the site. According to the Orange County Airport Land Use Commission (ALUC) Land Use Plan for the John Wayne Airport, the site is located within the airport’s 60 CNEL noise contour (Orange County ALUC 2008). However, an exterior noise level up to 65 CNEL is acceptable for residential land uses. Although the project would potentially be subject to occasional aircraft overflight noise, such occurrences would be intermittent and temporary. In addition, there are no private airstrips in the vicinity of the project site. Therefore, the project would not expose people living or working in the project area to excessive noise levels associated with airports or airstrips and the project would not exacerbate existing noise conditions related to airports or airstrips. Impacts would be less than significant.

2.14 Population and Housing

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly, (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

According to the United States Census Bureau, the population of Santa Ana in 2015 was 332,006. Santa Ana's General Plan predicts that the town's population will grow to 336,338 in 2020 and by 2040 the population is projected to grow to 341,285.¹³

Impact Discussion

- a) Induce substantial population growth in an area, either directly, (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

Less than significant impact. The project would construct a new hotel and freestanding restaurant, but no permanent housing or utility extensions outside of the project perimeter are proposed. Project operation would provide temporary lodging for visitors but would not result in a permanent population increase. This impact would be less than significant.

- b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

No impact. The project site is vacant and does not contain existing housing or residents.

¹³ Santa Ana General Plan. Draft General Plan. Accessed here: https://www.scag.ca.gov/DataAndTools/Documents/Resources/DraftGeneralPlanData_SantaAna.pdf. Accessed on February 10, 2020.

2.15 Public Services

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The Orange County Fire Authority (OCFA) provides fire protection and medical response services to the City. The OCFA operates 10 stations throughout the City, and each station covers a service radius of approximately 1.5 miles. The closest fire station to the project site is Orange County Fire Authority Station #79, located approximately 0.35 miles to the southwest.

The Santa Ana Police Department (SAPD) provides police protection to the City. According to the Santa Ana General Plan Public Safety Element, the City's central police station is located in the Civic Center approximately 4.3 miles northwest of the project site.

The City is included within the jurisdiction of four school districts: Santa Ana Unified, Garden Grove Unified, Tustin Unified, and Orange Unified. Santa Ana Unified School District accounts for over 90 percent of school resources in the City.

The City contains a city library system consisting of a central library in Civic Center Plaza and a Newhope Branch Library.

According to the Santa Ana General Plan Open Space, Parks, and Recreation Element, the City has approximately 400 acres of public park and recreation facilities distributed throughout the City. Approximately 2 acres of open space exist for each 1,000 residents.

Impact Discussion

- a) **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:**

i. **Fire Protection?**

Less than significant impact. The project would not result in a permanent residential population increase and would be unlikely to affect OCFA response times. The project's design would be subject to compliance with the requirements in the California Building Standards Commission 2019 California Fire Code. The project plans would be reviewed and approved by the Santa Ana Building & Safety Division and the OCFA, which would ensure adequate emergency access, fire hydrant availability, and compliance with all applicable codes and standards. Compliance with the City's permit process and Santa Ana Municipal Code requirements would ensure that project implementation would result in a less-than-significant impact to fire protection services.

ii. **Police Protection?**

Less than significant impact. The project would not result in a permanent residential population increase and would be unlikely to affect SAPD response times. In addition, the project plans would be reviewed and approved by the Santa Ana Building & Safety Division and Police Department, which would ensure that adequate safety and crime prevention measures are provided. Compliance with the City's discretionary review process would ensure that project implementation would result in a less-than-significant impact to police services.

iii. **Schools?**

No impact. As a hotel and restaurant development, the project would not increase demand for school services in the City.

iv. **Parks?**

Less than significant impact. According to the City's General Plan Open Space, Parks and Recreation Element, the City aims to maintain approximately two acres of open space for each 1,000 residents. The project would not result in a population increase that would affect the park acre-to-resident ratio established by the City. Temporary visitors staying at the hotel may use park facilities, but this would not be expected to permanently deteriorate recreational facilities such that replacement facilities would be required. This impact would be less than significant.

v. **Other public facilities?**

No impact. As a hotel and restaurant development, the project would not increase demand for other public facilities, such as libraries. Therefore, no impact would occur.

2.16 Parks and Recreation

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The City provides approximately 47 parks and 22 recreation facilities managed by the City's Parks and Recreation Community Service Agency. The park closest to the project site, Delhi Park, is located approximately 1 mile away.

Regulatory Setting

City of Santa Ana General Plan

Various policies in the General Plan have been adopted for the purpose of establishing a safe, accessible, and sustainable park system within the City. All future development allowed by the proposed land use designations would be subject to the parks and recreation policies listed in the General Plan, including the following:

Policy PR 1.2: Establish a comprehensive and integrated network of parks, open space, and recreational facilities that maintains and provides a variety of active and passive recreational opportunities that meets the needs of all the City residents, regardless of age, ability, or income.

Policy PR 1.3: Achieve a minimum park standard of two acres per 1,000 residents in the city

Policy PR 1.7: Ensure that park facilities and programs reflect the priorities of residents in the surrounding neighborhoods, with attention to place-making elements that foster social interaction and community pride.

Impact Discussion

a) **Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

and

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Less than significant impact. According to the City’s General Plan Open Space, Parks and Recreation Element, the City aims to maintain approximately two acres of open space for each 1,000 residents. The project would not result in population increase that would affect the park acre-to-resident ratio established by the City. Temporary visitors staying at the hotel may use park facilities, but this would not be expected to permanently deteriorate recreational facilities such that replacement facilities would be required. This impact would be less than significant.

2.17 Transportation

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
Would the project:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The transportation analysis in this section is based on the Traffic Impact Study provided by Jano Baghdanian & Associates (JBA) (**Appendix G**).

The project area is adjacent to SR-55, the Costa Mesa Freeway, which consists of four mixed-flow travel lanes and one high occupancy vehicle (HOV) lane in each direction. On- and off-ramps provide access to the project area on South Grand Avenue and East Dryer Road. The project area is served by the following surrounding roadways:

- South Grand Avenue: A north-south major arterial that, within the project area, consists of three travel lanes in each direction separated by a continuous two-way left-turn lane with exclusive left-turn lanes at major intersections. Parking is prohibited on both sides of the street. The speed limit is 45 miles per hour (mph). There is a southbound SR-55 off-ramp at South Grand Avenue.
- East Warner Avenue: An east-west major arterial that, within the project area, has two westbound lanes and three eastbound lanes separated by a continuous two-way left-turn lane

with exclusive left and right turns lanes at major intersections. Parking is not allowed on both sides of the street. The speed limit is 40 to 45 mph.

- East Dyer Road: An east-west major arterial that generally consists of three travel lanes in each direction with exclusive left-turn lanes at intersections. There is a raised median island on East Dyer Road separating opposing traffic East of South Grand Avenue and west of Hotel Terrace. Parking is prohibited on both sides of the street. The speed limit is 45 mph east of Main Street and 40 mph west of Main Street. There are northbound and southbound on and off-ramps for SR-55 at East Dyer Road.
- Brookhollow Drive: A local circular road that provides internal circulation for a triangular area of a mixed development complex bounded by South Grand Avenue, East Warner Avenue and SR-55. It also has access connections at East Warner Avenue and South Grand Avenue. Brookhollow Drive has one lane in each direction separated by a double yellow center line. There is no parking on both sides of the street. The project has two driveways on Brookhollow Drive.

Public transit is provided by the Orange County Transportation Authority (OCTA). There are four bus routes within the vicinity of the project site: Local OCTA Route 55, 59, and 72, and Metrolink Stationlink Route 463.

Regulatory Setting

Congestion Management Program for Orange County

The OCTA oversees the *Congestion Management Program for Orange County* (Orange County CMP), a program aimed at reducing regional traffic congestion. The OCTA has review responsibility for proposed projects that are expected to affect CMP designated intersections.

City of Santa Ana General Plan

The Santa Ana General Plan's Circulation Element contains the following policies that are applicable to the project:

Policy 1.4: Maintain at least a level of service "D" on arterial street intersections, except in major development areas.

Policy 2.1: Limit the number of driveways on arterial streets to reduce vehicular conflict, and facilitate traffic flow.

Policy 3.4: Encourage the development of multi-modal transit opportunities within major development areas.

Policy 3.7: Support system enhancements and bikeway support facilities that encourage bicycle usage.

The City of Santa Ana uses LOS D as the minimum acceptable LOS standard for intersection and roadway segment operations except for intersections and roadway segments in Major Development Areas, where LOS E is the minimum acceptable LOS standard. An impact to intersections and roadway segments is considered significant if the project related increase in Internal Capacity Utilization (ICU) is equal to or greater than 0.01, causing or worsening LOS E or LOS F (ICU >0.900) at intersections with the target LOS D. An impact to intersections and roadway segments is considered significant if the project

related increase in ICU is equal to or greater than 0.01, causing or worsening LOS F (ICU >1.0) at intersections with the target LOS E.

City of Santa Ana SB 743 CEQA Implementation

Consistent with State CEQA Guidelines section 15064.3, the City has adopted the thresholds of significance to guide when the City will normally determine that a project will have a significant transportation impact. Pursuant to the requirements of SB 743, the City included VMT as the metric to be used for determining traffic impacts. These were adopted in June 2019 as part of the City's Local CEQA Guidelines. VMT is discussed in more detail below.

Impact Discussion

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than significant impact. As described in the Orange County CMP, a traffic impact analysis is required for all proposed development generating 2,400 or more trips per day. For development with direct access a CMP Highway System link, the threshold for requiring a traffic impact analysis is reduced to 1,600 or more trips per day. As described in **Appendix G**, the project would generate approximately 1,060 daily trips, which is below the threshold for a traffic impact analysis. In addition, there is no CMP monitoring intersection within the transportation study area. Therefore, the project would not conflict with the Orange County CMP. Furthermore, as described below under Item (b), the project would not directly lead to a level of service (LOS) of D on any of the studied areas. This impact would be less than significant.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less than significant impact. According to CEQA Guidelines section 15064.3, subdivision (b), projects must use vehicle miles traveled (VMT) as the metric for determining the significance levels of transportation impacts of a project. Both LOS and VMT analyses will be used to determine significance.

LEVEL OF SERVICE (LOS) ANALYSIS

This analysis used trip rates from the Institute of Transportation Engineers (ITS) *Trip Generation Manual 10th Edition*. As shown in **Table 16**, the project is forecasted to result in 99 new AM peak-hour trips, 88 new PM peak hour trips, and 1,060 new daily trips. A 10 percent internal capture reduction was applied to the high-turnover sit-down restaurant trips to account for the internal trips made between the hotel and the restaurant. Those trips begin and end within the development complex without using the external road system.

Table 16 Project Trip Generation

ITE Land Use Code	Size	AM Peak Hour Trips				PM Peak Hour Trips				Daily Trips	
		Rate	Total	In	Out	Rate	Total	In	Out	Rate	Total
New Project Land Use Added											
Business Hotel (312)	138 rooms	0.39	54	23	31	0.32	44	24	20	4.02	555
High-Turnover Sit-Down Restaurant (932)	5,000 square feet	9.94	50	28	22	9.77	49	30	19	112.18	561
<i>Internal Capture Reduction (10%)</i>			-5	-3	-2		-5	-3	-2		-56
Total Trip Generation			99	48	51		88	51	37		1,060

ITE = Institution of Transportation Engineers.
 Source: JBA, 2019.

To determine the existing plus project traffic conditions shown in **Table 17** and **Table 18**, the project traffic was added to existing traffic conditions. As shown in **Table 18** and **Table 18**, there would be only minor changes to the volume-to-capacity (v/c) ratios at the studied intersections and roadway segments. Likewise, the LOS would not change at the studied intersections and roadway segments.

To determine the future (year 2022) without-project traffic conditions, the trips generated by related projects (projects under construction, approved, and planned) was added to existing conditions. As shown in **Table 19** and **Table 20**, project-related traffic in the future year condition (year 2022) would result in similar LOS as without-project conditions. The only study intersection with a diminished LOS under future project conditions would be at Grand Avenue and SR-55 southbound off-ramp. However, as shown in **Table 19**, the LOS would lower from LOS A to LOS B.

Based on the City’s significance criteria, the additional traffic forecasted due to the project would not significantly impact the study intersections and roadway segments. Therefore, the impact to congestion and travel in the area would be less than significant.

VEHICLE MILES TRAVELED (VMT) ANALYSIS

CEQA Guidelines section 15064.3, subdivision (b), states that projects must use vehicle miles traveled (VMT) as the metric for determining the significance levels of transportation impacts of a project. However, guidance provided by the State Office of Planning and Research regarding the implementation of VMT calculation provides little to no direction on how to calculate or determine significance for a hotel use. However, based on the City VMT analysis policies in Table 1: VMT Impact Thresholds, the project is presumed to have less than significant VMT impacts because it is located in a Transit Priority Area (TPA). Based on the mapping of the TPA for the City, it encompasses the majority of the City including the project site. The only caveat is that the project must be consistent with the Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategies (RTP/SCS). For RTP consistency, the traffic model (OCTAM v5 - base year 2016, future year 2045 SED data sets) was investigated and it was found that the model assumed adequate employment growth in the area that includes the project site. Therefore, the project is within RTP assumptions

resulting in no VMT significant impacts. The Tapestry Hotel project will have a less than significant VMT impact and there is no need to prepare a VMT analysis as prescribed by the City's VMT policies. Refer to **Appendix G**.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than significant impact. This project does not introduce incompatible uses, such as farm equipment or other similar vehicles, to the surrounding urban area. As described above, the project would utilize existing driveways on Brookhollow Drive, and no new intersections would be created. The project would not introduce hazardous design features to accommodate the parking lot's entrance and exit points. This impact would be less than significant.

d) Result in inadequate emergency access?

Less than significant impact. The project does not propose facilities that would conflict with emergency access. As described above, the added volume of traffic calculated for the project would not cause significant congestion or diminish the LOS for studies intersections and roadway segments. The project would not result in inadequate emergency access; this impact would be less than significant.

Table 17 Existing Plus Project Conditions AM/PM LOS for Intersections

Study Intersections		Existing Conditions				Existing Plus Project Conditions							
		AM Peak		PM Peak		AM Peak				PM Peak			
		V/C	LOS	V/C	LOS	V/C	LOS	Change in V/C	Significant Impact	V/C	LOS	Change in V/C	Significant Impact
1	Grand Avenue and Warner Avenue	0.546	A	0.649	B	0.550	A	0.004	No	0.653	B	0.004	No
2	Grand Avenue and Hotel Terrace/Brookhollow Drive	0.336	A	0.420	A	0.357	A	0.021	No	0.452	A	0.032	No
3	Grand Avenue and SR-55 Southbound off-ramp	0.441	A	0.542	A	0.455	A	0.014	No	0.556	A	0.014	No
4	Grand Avenue and Dyer Road	0.614	B	0.764	C	0.624	B	0.010	No	0.771	C	0.007	No

V/C = volume-to-capacity; LOS = level of service; SR = State Route

Source: JBA, 2019.

Table 18 Existing Plus Project Conditions Daily LOS for Roadway Segments

Study Intersections		Existing Conditions		Existing Plus Project Conditions			
		Daily		Daily			
		V/C	LOS	V/C	LOS	Change in V/C	Significant Impact
1	Grand Avenue – Warner Avenue to Hotel Terrace/Brookhollow Drive	0.468	A	0.474	A	0.006	No
2	Grand Avenue – Brookhollow Drive to SR-55 Southbound off-ramp	0.438	A	0.449	A	0.011	No
3	Grand Avenue – SR-55 Southbound off-ramp to Dyer Road	0.428	A	0.437	A	0.009	No

V/C = volume-to-capacity; LOS = level of service; SR = State Route

Source: JBA, 2019.

Table 19 Future (Year 2022) with Project Conditions AM/PM LOS for Intersections

Study Intersections		Existing Conditions				Existing Plus Project Conditions							
		AM Peak		PM Peak		AM Peak				PM Peak			
		V/C	LOS	V/C	LOS	V/C	LOS	Change in V/C	Significant Impact	V/C	LOS	Change in V/C	Significant Impact
1	Grand Avenue and Warner Avenue	0.623	B	0.712	B	0.626	B	0.003	No	0.713	C	0.004	No
2	Grand Avenue and Hotel Terrace/Brookhollow Drive	0.364	A	0.453	A	0.385	A	0.021	No	0.484	A	0.032	No
3	Grand Avenue and SR-55 Southbound off-ramp	0.469	A	0.589	A	0.483	A	0.014	No	0.604	B	0.014	No
4	Grand Avenue and Dyer Road	0.729	C	0.879	C	0.740	C	0.011	No	0.887	D	0.007	No

V/C = volume-to-capacity; LOS = level of service; SR = State Route

Source: JBA, 2019.

Table 20 Future Year (Year 2022) with Project Conditions Daily LOS for Roadway Segments

Study Intersections		Existing Conditions		Existing Plus Project Conditions			
		Daily		Daily			
		V/C	LOS	V/C	LOS	Change in V/C	Significant Impact
1	Grand Avenue – Warner Avenue to Hotel Terrace/Brookhollow Drive	0.514	A	0.520	A	0.006	No
2	Grand Avenue – Brookhollow Drive to SR-55 Southbound off-ramp	0.489	A	0.501	A	0.012	No
3	Grand Avenue – SR-55 Southbound off-ramp to Dyer Road	0.478	A	0.487	A	0.009	No

V/C = volume-to-capacity; LOS = level of service; SR = State Route

Source: JBA, 2019.

2.18 Tribal Cultural Resources

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
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Would the project:

a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Environmental Setting

Tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe that are listed, or determined to be eligible for listing, in the national, state, or local register of historical resources. Additionally, a tribal cultural resource may also be a resource that the lead agency determines, in its discretion, is a tribal cultural resource. Cultural resources are generally defined as traces of human occupation and activity that include prehistoric and historic archaeological sites, districts, and objects; standing historic structures buildings, districts, and objects; and locations of important historic events of sites of traditional and/or cultural importance to various groups, tribal cultural resources signify the intent to protect resources specifically of cultural value to a

tribe. Specifically, the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1 protect the following resources:

(c) A resource may be listed as an historical resource in the California Register if it meets any of the following National Register of Historic Places criteria:

- (1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- (2) Is associated with the lives of persons important in our past.
- (3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- (4) Has yielded, or may be likely to yield, information important in prehistory or history.

Impact Discussion

- a) **Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:**
 - i. **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?**

and

- ii. **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

Less than significant with mitigation. As discussed in **Section 2.5, Cultural Resources**, the project site does not contain any known site or structures eligible for listing in the CRHR. Furthermore, **Mitigation Measure CUL-1** and **Standard Condition SC CUL-2** would be implemented to protect unrecorded archaeological resources and human remains during construction.

To address the possibility of tribal cultural resources on the project site, the Native American Heritage Commission (NAHC) conducted a Sacred Lands File search to identify places of religious or social significance to Native Americans on the project site. The NAHC response, received on November 28, 2018, indicated a positive result for the Sacred Lands File Search and recommended the Juaneno Band of Mission Indians, Acjachemen Nation be contacted for further information. The response also included ten Native American representatives that could provide site-specific knowledge on local Native American cultural resources.

On January 14, 2020, Circlepoint submitted a letter to the ten Native American representatives identified by the NAHC, which included a project description and a request for information regarding

Native American resources within or adjacent to the project site. The Gabrielino Band of Mission Indians - Kizh Nation and the Juaneno Band of Mission Indians, Acjachemen Nation-Belardes, responded to the request acknowledging that the project site could contain unrecorded tribal cultural resources. This represents a potentially significant impact, reduced to a less-than-significant level through implementation of **Mitigation Measure TCR-1**.

Mitigation Measure TCR-1: Prior to the issuance of a grading permit, the Property Owner/Developer shall submit to the City a Native American tribal monitoring agreement with the Juaneno Band of Mission Indians, Acjachemen Nation-Belardes and the Gabrielino Band of Mission Indians-Kizh Nation for tribal cultural resource monitoring to take place during subsurface ground-disturbing construction activities. If tribal cultural resources are encountered during ground disturbing activities, work in the immediate area must halt. Depending on the nature of the find, if the discovery proves to be potentially significant under CEQA, as determined by the tribal representative(s), additional measures such as avoidance of the area of the find, documentation, testing, data recovery, reburial, archival review and/or transfer to the appropriate museum or educational institution, or other appropriate actions may be warranted. The tribal representative(s) shall complete a brief letter report of excavations and findings and submit the report to the City. After the find is appropriately mitigated, work in the area may resume.

2.19 Utilities and Service Systems

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a) Require or result in the relocation or construction of new or expanded water, wastewater or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The project site is currently serviced by utility purveyors.

Water

The City is the water provider and services are operated by the Santa Ana Public Works Agency. The Santa Ana Public Works Agency obtains local well water from the Lower Santa Ana River Groundwater Basin, which is managed by the Orange County Water District (OCWD), and imported water from the Metropolitan Water District of Southern California (MWD). Groundwater accounts for roughly 70 to 75 percent of the water supply, while the imported water supply accounts for the remaining 25 to 30 percent.¹⁴

The City maintains 444 miles of transmission and distribution mains, 9 reservoirs with a storage capacity of 49.3 million gallons, 7 pumping stations, 20 wells, and 7 connections to the MWD System that have a transfer capacity of 60,580 gallons per minute (gpm). The project site is currently served by the City's water utility and is connected to the existing water infrastructure. South Grand Avenue contains a 14-inch water main that conveys water supplies to the Project site and adjacent areas.¹⁵

Waste Water

In 2015, the City of Santa Ana generated approximately 23,826 acre-feet of wastewater (2015 UWMP). The City of Santa Ana operates and maintains the local sewer system consisting of over 390 miles of

¹⁴ City of Santa Ana, 2017 Water Master Plan, 2017. Website: <https://www.santa-ana.org/sites/default/files/Documents/2017WaterMasterPlan.pdf>. Accessed: April, 2020.

¹⁵ Ibid.

pipeline, 7,630 manholes, and two lift stations. The City is serviced by the Orange County Sanitation District (OCS D) Treatment Plant Number. A 24-inch sewer line lies in South Grand Avenue.

Storm Water Drainage

The City's stormwater systems consist of a series of storm drains, catch basins, manholes, inlets, storm drainpipes, pump stations, detention basins and other features located throughout the City. Runoff from the project site is discharged in a westerly and southerly sheet flow to South Grand Avenue on the west and freeway right of way on the south.

Solid Waste

Waste Management Inc. provides solid waste, recycling, and organic materials collection, transportation, and disposal services to the City. Waste Management hauls recyclables and organic solids waste to the Sunset Environmental Center in Irvine for sorting. Solid waste is sent to the Frank R. Bowerman Landfill operated by the Orange County Waste & Recycling Department. In 2018, a majority (87 percent) of the solid waste from the City of Santa Ana, which was disposed of in landfills, went to the Frank Bowerman Sanitary Landfill (CalRecycle 2019). The Frank Bowerman Sanitary Landfill is permitted to accept 11,500 tons per day of solid waste and is permitted to operate through 2053. In September 2019, the maximum tonnage received was 9,967 tons. Thus, the facility had additional capacity of 1,533 tons per day (CalRecycle 2019).

Natural Gas and Electricity

Electricity is supplied by Southern California Edison (SCE) and natural gas is provided by SoCal Gas in the City and throughout northern and central Orange County.

SCE provides electricity service to more than 14 million people in a 50,000 square-mile area of central, coastal and Southern California. California utilities are experiencing increasing demands that require modernization of the electric distribution grid to, among other things, accommodate two-way flows of electricity and increase the grid's capacity. SCE is in the process of implementing infrastructure upgrades to ensure the ability to meet future demands. In addition, as described by the Edison International 2018 Annual Report, the SCE electrical grid modernization effort supports implementation of California Senate Bill 32 that requires the state to cut greenhouse gas emissions 40 percent below 1990 levels by 2030 in order to help address global climate change. It describes that in 2018 Approximately 35% of power that SCE delivered to customers in 2018 came from renewable sources (SCE 2019).

The Southern California Gas Company (SoCalGas) is the natural gas purveyor in the City of Santa Ana and is the principal distributor of natural gas in Southern California. SoCalGas estimates that gas demand will decline at an annual rate of 0.5 percent from 2018 to 2035 due to modest economic growth, mandated energy efficiency standards and programs, renewable electricity goals, and conservation savings linked to advanced metering infrastructure (CGEU 2018). The gas supply available to SoCalGas is regionally diverse and includes supplies from California sources (onshore and offshore), Southwestern U.S. supply sources, the Rocky Mountains, and Canada (CGEU 2018). SoCalGas designs its facilities and supplies to provide continuous service during extreme peak demands and has identified the ability to meet peak demands through 2035 in its 2018 report (CGEU 2018).

Telecommunications

Cable and telecommunications are provided by a number of providers in a number of ways in the City of Santa Ana. Therefore, consumers have a choice in how these services are provided to the project site and there does not seem to be a limitation of providing services to the site.

Regulatory Setting

Water

Safe Drinking Water Act

The United States Environmental Protection Agency administers the Safe Drinking Water Act, which is the primary federal law that regulates the quality of drinking water and establishes standards to protect public health and safety. The Department of Health Services (DHS) implements the requirements of the Act and oversees public water system quality statewide. DHS establishes legal drinking water standards for contaminants that could threaten public health.

California Urban Water Management Planning Act

Section 10610 of the California Water Code established the California Urban Water Management Planning Act (CUWMPA), requires urban water suppliers to initiate planning strategies to ensure an appropriate level of reliability in its water service. CUWMPA states that every urban water supplier that provides water to 3,000 or more customers, or that annually provides more than 3,000 acre-feet of water service, should make every effort to ensure the appropriate level of reliability in its water service to meet the needs of its various categories of customers during normal, dry, and multiple-dry years. The CUWMPA describes the contents of UWMP's as well as methods for urban water suppliers to adopt and implement the plans. The City of Santa Ana has an updated 2015 UWMP that addresses water supply and demand through 2040.

CalGreen Building Code

California Code of Regulations Title 24, Part 11, establishes the California Green Building Code or CALGreen. The CALGreen Code is updated every three years. It was recently updated in 2019 and is effective January 1, 2020. CALGreen sets forth water efficiency standards (i.e., maximum flow rates) for all new plumbing and irrigation fittings and fixtures.

City of Santa Ana General Plan

The City is currently undergoing a comprehensive update to the General Plan. The existing Conservation Element of the Santa Ana General Plan includes the following goals and policies are related to water supply and the proposed Project.

Goal 1: Protect the public health, safety and welfare through effective management of natural resources.

Objective 1.2: Provide sufficient water of adequate quality for all users.

Objective 2.1: Conserve water resources in commercial, industrial, residential and recreational uses.

City of Santa Ana Municipal Code

Municipal Code Section 39-106; Permanent Water Conservation Requirements: The City promotes water use efficiency and only allows outdoor watering between the hours of 6:00 p.m. and 6:00 a.m. Municipal Code Section 39-106 establishes permanent water conservation requirements and prohibition against waste that are effective at all times and is not dependent upon a water shortage for implementation. In the event of a water supply shortage, the ordinance further establishes three levels of water supply shortage response actions to be implemented during times of declared water shortage or declared water shortage emergency, with increasing restrictions on water use in response to worsening drought or emergency conditions and decreasing supplies.

Municipal Code Section 41-1503; Landscape Water Use Standards

The City promotes water use efficiency through water efficient landscape requirements that were implemented in January 2016. This code requires that new landscape projects greater than 2,500 square feet comply with the performance requirements of the City's Water Efficient Landscape Guidelines that identifies a maximum allowable water use for landscape that is implemented by efficient irrigation systems and drought tolerant landscape species.

Wastewater

National Pollution Discharge Elimination System Permit

The NPDES permit system was established in the federal Clean Water Act to regulate both point source discharges (a municipal or industrial discharge at a specific location or pipe) and nonpoint source discharges (diffuse runoff of water from adjacent land uses) to surface waters of the U.S. For point source discharges, such as sewer outfalls, each NPDES permit contains limits on allowable concentrations and mass emissions of pollutants contained in the discharge.

SWRCB Statewide General Waste Discharge Requirements for Sewer Systems

The Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (SWRCB Order No 2006-0003-DWQ) applies to sanitary sewer systems that are greater than one mile long and collect or convey untreated or partially treated wastewater to a publicly owned treatment facility. The goal of Order No. 2006-0003 is to provide a consistent statewide approach for reducing Sanitary Sewer Overflows (SSOs), which are accidental releases of untreated or partially treated wastewater from sanitary sewer systems.

Solid Waste

California Assembly Bill 341

On October 6, 2011, Governor Brown signed AB 341 establishing a state policy goal that no less than 75 percent of solid waste generated be source reduced, recycled, or composted by 2020, and requiring CalRecycle to provide a report to the Legislature that recommends strategies to achieve the policy goal.

5.410.1 Recycling by occupants

Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive.

Impact Discussion

- a) **Require or result in the relocation or construction of new or expanded water, wastewater or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**

Less than significant. Because the project is being developed on a previously developed site in a very urbanized setting, the project has adequate capacity and service for all utilities supporting the proposed hotel and restaurant uses. All on site utilities will hook into the existing utilities in South Grand Avenue (water, wastewater, drainage, electric, telecommunications and natural gas). The project would also be adequately served for solid waste and recycling services. In addition, the project would be built in compliance with CalGreen requirements which include energy and water reduction design efficiencies to ensure that sustainable design is included in all new California buildings.

- b) **Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?**

Less than Significant. The Santa Ana Public Works Agency obtains water from OCWD and the Metropolitan Water District and would provide water supplies to the project site. Based on the City's Design Guidelines for Water and Sewer (2017), Section 200.3.1 the project would require 180 gallons per day per room (gpd/room) and 5,000¹⁶ gpd for the restaurant. Therefore, the project would require 30,020 (25,020 + 5,000) gpd of water not including landscape irrigation. According to the City's 2010 Urban Water Management Plan (UWMP), existing water supplies and planned capacity improvements are sufficient to meet anticipated water demands. The adequate supply of water is not a constraint to the production of additional development within City limits.¹⁷ The project would be consistent with the UWMP.

- c) **Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

Less than Significant. The proposed project would result in an increase of wastewater generation from the site. To evaluate the maximum potential impact of the proposed project on wastewater treatment facilities, and because wastewater treatment facility capacity is based on million gallons per day (mgd) not cfs, it has been conservatively assumed that all of the water needed for indoor uses by the proposed project would be converted to wastewater and need treatment. Based on the City's Water and Sewer Design Guidelines, the proposed project would utilize 30,020 gpd of water (without inclusion of the landscaping water need). Assuming all of this needs treatment, the Project would result in a 30,020 gpd increase in flows to the OCSD Reclamation Plant No. 1 in Fountain Valley. As noted above, the OCSD 24-inch sewer in South Grand Avenue conveys wastewater to the OCSD Reclamation Plant No. 1, which has

¹⁶ Estimated based on average uses and relative size of the proposed project. https://pacinst.org/wp-content/uploads/sites/21/2013/02/appendix_e3.pdf

¹⁷ City of Santa Ana, 2010 Urban Water Management Plan, 2010. Accessed: April, 2020.

a treatment capacity of 204 mgd and an average daily flow of 117 mgd. Due to the additional capacity of 87 mgd, the existing facilities would be available to accommodate the increase in wastewater flow from full occupancy of the proposed project that would generate 30,020 gpd. As a result, implementation of the proposed project would not result in inadequate capacity of the wastewater treatment plant to serve the project's demand in addition to existing service commitments, and impacts would be less than significant.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less than significant. According to CalRecycle, a 139-room hotel would generate approximately 3 lbs of solid waste per room¹⁸ and 17lbs per day per employee at the restaurant. Using these rates, the project is projected to generate 536 lbs (417 + 119) per day. However, both the hotel and restaurant would be subject to the City's recycling and other waste reduction requirements. Therefore, the project is not expected to generate solid waste in excess of local infrastructure or that would impair the City's solid waste reduction goals.

e) Comply with Federal, State, and local statutes and regulations related to solid waste?

No Impact. The project would not result in unique types of solid waste that would conflict with existing regulations applicable to waste disposal. The project would be required to comply with recycling programs established under AB 939. As a result, the project would comply with federal, state, and local statutes and regulations related to solid waste. Therefore, no impact would occur.

2.20 Wildfire

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Yes	No	
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

¹⁸ <https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates>

exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Environmental Setting

No impact. The California Department of Forestry and Fire Protection (CAL FIRE) Fire Hazard Severity Zones (FHSZ) Maps includes proposed Fire Hazard Severity Zone Maps for the State Responsibility Area lands. CAL FIRE allows those reviewing local responsibility area hazard zone maps to verify any adopted ordinances that may affect communities’ hazard mapping and building code requirements. The project site is not located within a Fire Hazard Severity Zone.¹⁹ Therefore, no impact would occur.

2.21 Mandatory Findings of Significance

	Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

¹⁹ California Department of Fire and Forestry Protection. 2019. California Fire Hazard Severity Zone Map Update Project. Available at: https://osfm.fire.ca.gov/media/6737/fhszs_map30.pdf. Accessed 1/29/20.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

-
- a) **Does the project have the potential to substantially degrade quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

Less than significant with mitigation. As discussed in **Section 2.4, Biological Resources**, migratory or other nesting birds could be found on the project site during nesting season. Additionally, as discussed in **Section 2.5, Cultural Resources** project implementation could encounter unrecorded archaeological resources and human remains. **Mitigation Measures BIO-1, CUL-1, and Standard Condition SC CUL-2** would be implemented to reduce impacts to wildlife species habitat and important historic and prehistoric cultural resources to a less-than-significant level.

- b) **Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?**

Less than significant impact. The project would result in potentially significant project-level impacts related to aesthetics, biological resources, cultural resources, geology and soils, hazards and hazardous materials, and noise. All other impacts of the project were determined either to have no impact or to be less than significant without the need for mitigation. Mitigation measures outlined within this Initial Study shall be implemented to reduce project-level impacts to a less-than-significant level. As such, the project would not result in any significant impacts that would substantially combine with impacts of the other current or probably future projects. Therefore, the project would not considerably contribute to significant cumulative impacts.

- c) **Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

Less than significant impact. As discussed in the environmental analysis throughout this Initial Study, the project would not result in environmental effects that would cause substantial adverse direct or indirect effects on human beings. This impact would be less than significant.

3 References

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