

**DRAFT
INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION
SITE B-2 HOTEL**



Lead Agency
City of Garden Grove
Community and Economic Development Department
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June 2022

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GARDEN GROVE

MITIGATED NEGATIVE DECLARATION

Title of Project (including any commonly used name for the project): Site B-2 Hotel Project (herein referred to as the “proposed project”)

Brief Description of Project: The proposed project involves construction of a full-service high-rise (maximum height of 350 feet) resort hotel with hotel program entertainment/pool deck (height of approximately 61 feet) on a 3.72-acre site. The proposed hotel would include 500 guest suites with balconies; themed pool experience with lazy river; storage and loading area at 8,600 square feet maximum; event space with a 600-person maximum occupancy theater; a grand ballroom at 9,490 square feet; two meeting rooms at 4,194 square feet and 4,031 square feet; a variety of food and beverage opportunities to be placed throughout the hotel totaling a maximum area of 22,296 square feet; themed amenities totaling 13,238 square feet; a 7,000-square foot arcade; and a spa and fitness center at 8,532 square feet. All hotel amenities, except for the ballroom, meeting rooms, and 11,148 square feet of restaurant, would be for the hotel guests use only. For further details, refer to Section 3.0, Project Description.

Project Location (see also attached map): The project site is located at the northwest corner of Harbor Boulevard and Twintree Avenue, south of Sheraton Hotel, and east of Tamerlane Drive in the City of Garden Grove at 12241, 11261, 12271, 12291, 12311 and 12323 Harbor Boulevard (Assessor’s Parcel Numbers 231-471-06, 07, 08, 09, 10, and 11); and 12246, 12252, 12262, 12282, 12292, 12312, 12322, 12251, 12261, 12281, 12291, 12311, and 12321 Thackery Drive (Assessor’s Parcel Numbers 231-471-18, 17, 16, 15, 14, 13, 12, 19, 20, 21, 22, 23, and 24).

Name of the Project Proponent: Kam Sang Company

Cortese List: The proposed project () does (x) does not involve a site located on the Cortese list.

Finding: Pursuant to the California Environmental Quality Act, the City of Garden Grove has determined that the proposed project will not have a significant effect on the environment. The attached Initial Study summarizes the substantial evidence supporting this finding.

Mitigation Measures: Refer to Section 4.3, Environmental Checklist Questions.

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1.0 INTRODUCTION

This Initial Study/Mitigated Negative Declaration (IS/MND) evaluates the potential environmental impacts of the Site B-2 Hotel Project (proposed project) proposed by Kam Sang Company (Project Applicant). The proposed project calls for the construction and operation of a full service high-rise resort hotel with 500 guest suites with balconies and amenities such as a themed pool with lazy river, event space, ballroom, food and beverage, arcade, and spa and fitness center.

1.1 PURPOSE OF THE INITIAL STUDY

This IS/MND has been prepared in accordance with the California Environmental Quality Act (CEQA) of 1970 (Public Resources Code Sections 21000 et seq.) and California Code of Regulations, Title 14, Division 6, Chapter 3 (State CEQA Guidelines, Sections 15000 et seq.). Pursuant to CEQA, this IS/MND has been prepared to analyze the potential impacts on the environment resulting from construction and operation of the proposed project. The City of Garden Grove (City) is the designated Lead Agency for the proposed project and will be responsible for the proposed project's environmental review.

1.2 DOCUMENT ORGANIZATION

This IS/MND includes the following sections:

Section 1.0, Introduction: Provides information about CEQA and its requirements for environmental review and explains that an IS/MND was prepared to evaluate the proposed project's potential impacts to the environment.

Section 2.0, Environmental Setting: Provides information about the proposed project's location.

Section 3.0, Project Description: Includes a description of the proposed project's physical features and construction and operational characteristics. Also includes a list of the discretionary approvals that would be required by the proposed project.

Section 4.0, Environmental Checklist: Includes the Environmental Checklist and evaluates the proposed project's potential to result in significant adverse effects to the physical environment.

Section 5.0, Document Preparers and Contributors: Includes a list of the persons that prepared this IS/MND.

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2.0 ENVIRONMENTAL SETTING

2.1 PROJECT LOCATION

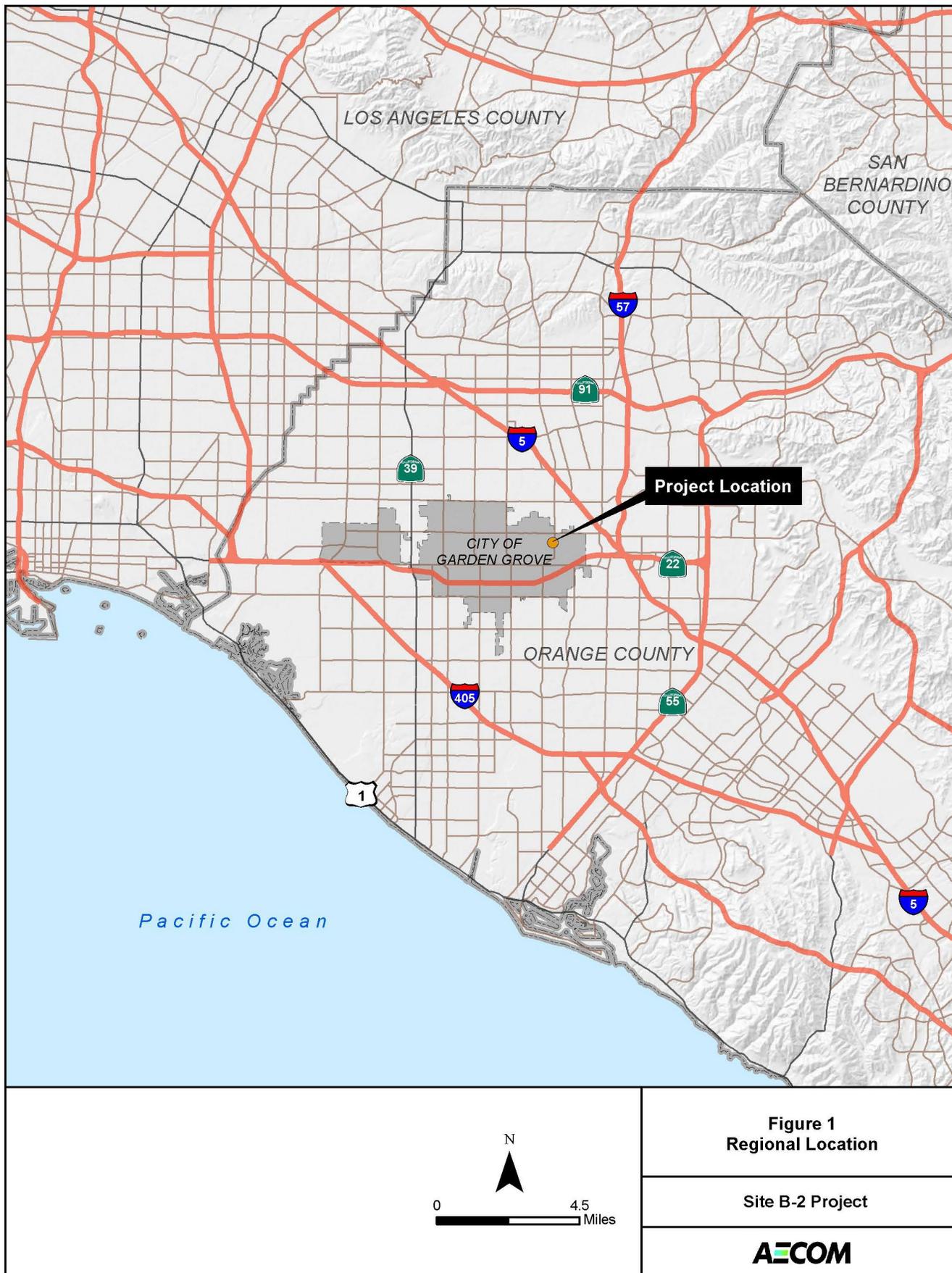
The project site is located at the northwest corner of Harbor Boulevard and Twintree Avenue, along the west and east sides of Thackery Drive, east of Tamerlane Drive in the City of Garden Grove. Regional access to the project site is provided by State Route 22 (SR-22) and Interstate 5 (I-5) (Figure 1). Local access to the project site is currently provided via Harbor Boulevard, Twintree Avenue, and Thackery Drive. Thackery Drive and a public alley will be vacated to facilitate the proposed project. The project site and surrounding area are shown in Figure 2. The project site is located at 12241, 11261, 12271, 12291, 12311 and 12323 Harbor Boulevard (Assessor's Parcel Numbers 231-471-06, 07, 08, 09, 10, and 11); and 12246, 12252, 12262, 12282, 12292, 12312, 12322, 12251, 12261, 12281, 12291, 12311, and 12321 Thackery Drive (Assessor's Parcel Numbers 231-471-18, 17, 16, 15, 14, 13, 12, 19, 20, 21, 22, 23, and 24).

2.2 EXISTING PROJECT SITE

The existing project site encompasses 3.72 acres of a previously disturbed site where the north/northeastern parcels of the project site are paved and used for parking for the adjacent Sheraton Hotel, whereas the remaining parcels are dirt pads with limited vegetation that are mostly vacant except for the southeastern parcels that are used for temporary construction storage. The easterly portion of Thackery Drive from the centerline of the street has been demolished recently; the westerly paved street portion of Thackery Drive continues to remain. The existing site is fenced and not accessible to the public. Demolition of the prior residential and commercial structures occurred between 2004 and 2013 (Figure 3).

2.3 EXISTING LAND USES AND ZONING DESIGNATION OF THE PROJECT SITE

The project site has a General Plan land use designation of International West Mixed Use (IW) and is zoned as Planned Unit Development (PUD-141-01) and Single-Family Residential Zone (R-1-7). Thirteen parcels are zoned PUD-141-01 (12241, 11261, 12271, 12291, 12311 and 12323 Harbor Boulevard and 12246, 12252, 12262, 12282, 12292, 12312, 12322 Thackery Drive), while six (6) parcels are zoned R-1-7 (12251, 12261, 12281, 12291, 12311, and 12321 Thackery Drive). The IW designation allows for a mix of uses, including resort, entertainment, hotel, and some higher density residential that are appropriate for a major entertainment and tourism destination.





■■■ Project Site Boundary

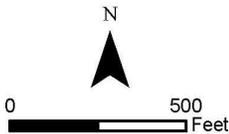


Figure 2
Vicinity Map

Site B-2 Project





2.4 SURROUNDING GENERAL PLAN AND ZONING DESIGNATIONS

The project site is located within a fully developed and urbanized area. The project site is bounded by:

	Existing Land Use	General Plan Designation	Zoning Designation
North	Sheraton Hotel and associated paved parking areas	IW	PUD-141-01
Northwest	Multiple-family apartments and associated paved parking areas	IW	R-3
East	Harbor Boulevard and vacant lots approved for hotel	IW	PUD-128-12
South	Twintree Avenue and commercial and residential structures	IW and Low Density Residential (LDR)	PUD-121-98 and R-1-7
West	Residential structures	IW and LDR	R-1-7

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3.0 PROJECT DESCRIPTION

3.1 PROJECT OVERVIEW

The proposed project involves construction of a full-service high-rise (maximum height of 350 feet) resort hotel with hotel program entertainment/pool deck (height of approximately 61 feet) on a 3.72-acre site. The proposed hotel would include 500 guest suites with balconies; themed pool experience with lazy river; storage and loading area at 8,600 square feet maximum; event space with a 600-person maximum occupancy theater; a grand ballroom at 9,490 square feet; two (2) meeting rooms at 4,194 square feet and 4,031 square feet, respectively; a variety of food and beverage opportunities to be placed throughout the hotel totaling a maximum area of 22,296 square feet; themed amenities totaling 13,238 square feet; a 7,000-square foot arcade; and a spa and fitness center at 8,532 square feet (see Table 1). All hotel amenities, except for the ballroom, meeting rooms, and 11,148 square feet of restaurant, would be for the hotel guests use only.

The proposed project would also include a five-level (approximately 61 feet) parking garage (four levels above grade and one level below grade) with a grand total of 528 spaces to serve the 500 guest suites, event space, commercial and retail uses, food and beverage needs, as well as other amenities such as spa and fitness center (see Table 2).

To accommodate the proposed development, the proposed project also includes vacation of a public street (Thackery Drive) and public alley located entirely within the site.

Table 1: Project Summary

Project Features	Summary
Project Site Area	3.72 acres (161,933 square feet [SF])
Landscape Area (Additional 12,000 SF to be provided at the podium for a grand total of 51,711 SF of landscape or 31% coverage.)	26,224 SF (at street level) 13,487 SF (at podium level) 39,711 SF (27% coverage)
Total Hotel Rooms	500 keys
Ballroom/Meeting Rooms	
Ballroom	9,490 SF
Meeting Room 'A'	4,194 SF
Meeting Room 'B'	4,031 SF
Restaurant, Lobby, Amenities	
Food and Beverage	22,296 SF
Hotel Themed Amenities	13,238 SF
Nick Studio (Theater)	7,039 SF
Studio Hall	6,448 SF
Nick Arcade	7,000 SF
Spa/Fitness	8,532 SF
Hotel Themed Pool	24,980 SF
Office, Back of House, Others	
Hotel Office (Production)	3,173 SF
Hotel Support (Offices)	11,329 SF
Back of House (Support)	16,492 SF
Retail	5,480 SF
Hotel	289,891 SF
Storage, Loading	8,600 SF
Parking (528 spaces)	249,480 SF
Below Grade Parking	52,206 SF
Hotel Tower Maximum Height	350 feet
Hotel Program Entertainment/Pool Deck	60 feet 7 inches
Total Building Area	691,693 SF

Table 2: Parking Summary

Parking Level	Total Space
Level 4 (52,206 SF)	110
Level 3 (52,206 SF)	110
Level 2 (52,206 SF)	110
Level1 (40,656 SF)	84
Level B1 (52,206 SF)	114
Total Parking Spaces Provided	528
Total EV Parking Spaces Provided	28
Total ADA Spaces Provided	20

Notes: All entertainment, 11,148 square feet of restaurants, spa/fitness, Nick studio, Nick Amenities, and retail are intended for occupied guest of the hotel

3.2 CONSTRUCTION

The proposed project construction would take approximately 30 months in a single phase. The construction and grading activities hours would comply with the noise limitation provisions set forth in the City of Garden Grove's Noise Ordinance, Garden Grove Municipal Code Sections 8.47.040 to 8.47.060, except that permitted hours and days of construction and grading will be as follows: Monday through Saturday – not before 7:00 a.m. and not after 8:00 p.m. (of the same day); and Sunday and Federal Holidays – may work the same hours, but be subject to the restrictions as stipulated in Sections 8.47.040 to 8.47.060 of the Municipal Code. Compliance with the permitted hours and days of construction and grading would be imposed as conditions of approval for the proposed project. The maximum number of employees during construction would be 210 toward the last six-month period of construction.

3.3 PROJECT DESIGN FEATURES

The following Project Design Features (PDFs) would be implemented during construction and operation of the proposed project. These PDFs would be imposed as conditions of approval for the proposed project.

Construction PDFs

PDF-1 Prior to starting construction, the project should submit a Construction Management Plan to the City of Garden Grove that specifies how all construction design features will be implemented.

PDF-2 The project must follow the standard South Coast Air Quality Management District (SCAQMD) rules (Rule 403) and requirements applicable to fugitive dust control, which include, but are not limited to the following:

1. All active construction areas shall be watered two (2) times daily.
2. Speed on unpaved roads shall be reduced to less than 15 miles per hour (mph).
3. Any visible dirt deposition on any public roadway shall be swept or washed at the site access points within 30 minutes.
4. Any onsite stockpiles of debris, dirt or other dusty material shall be covered or watered twice daily.

5. All operations on any unpaved surface shall be suspended if winds exceed 15 mph.
6. Access points shall be washed or swept daily.
7. Construction sites shall be sandbagged for erosion control.
8. Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
9. Cover all trucks hauling dirt, sand, soil, or other loose materials, and maintain at least 2 feet of freeboard space in accordance with the requirements of California Vehicle Code (CVC) section 23114.
10. Pave or provide construction access roads at least 100 feet onto the site from the main road and use gravel aprons at truck exits.
11. Replace the ground cover of disturbed areas as quickly possible.

PDF-3 All diesel construction equipment should have Tier 4 low emission "clean diesel" engines (OEM or retrofit) that include diesel oxidation catalysts and diesel particulate filters that meet the latest California Air Resources Board (CARB) best available control technology.

PDF-4 Construction equipment should be maintained in proper tune.

PDF-5 All construction vehicles should be prohibited from excessive idling. Excessive idling is defined as five (5) minutes or longer.

PDF-6 Minimize the simultaneous operation of multiple construction equipment units, to the maximum extent feasible.

PDF-7 The use of heavy construction equipment and earthmoving activity should be suspended during Air Alerts when the Air Quality Index reaches the "Unhealthy" level.

PDF-8 Establish an electricity supply to the construction site and use electric powered equipment instead of diesel-powered equipment or generators, where feasible.

PDF-9 Establish staging areas for the construction equipment that as far from adjacent residential homes, as feasible.

PDF-10 Use haul trucks with on-road engines instead of off-road engines for onsite hauling.

Operational PDFs

PDF-11 The project should comply with the mandatory requirements of the latest California Building Standards Code, Title 24, Part 6 (Energy Code) and Part 11 (California Green Building Standards Code [CALGreen]), including the provisions for bicycle parking, electric vehicle charging stations, energy efficiency, material conservation, and water/waste reduction.

PDF-12 Install signage at loading docks requiring trucks to limit engine idling times to 5 minutes or less.

PDF-13 The project must install an eight (8) foot high masonry block noise barrier wall along the western and northwestern property line. The property line wall will be constructed using masonry block and the barrier's weight must be at least 3.5 pounds per square foot of face area without decorative cutouts or

line-of-site openings between the shielded areas and the project site. All gaps (except for weep holes) must be filled with grout or caulking to avoid flanking.

PDF-14 All central plant heating, ventilation, and air conditioning (HVAC) equipment, mechanical pumps and pool equipment must be fully enclosed inside the building structure.

PDF-15 The hotel themed pool attraction and outdoor pool deck operation will be open only during daytime hours (7 a.m. – 10 p.m.).

PDF-16 A minimum eight (8) foot high noise barrier shielding wall should be installed and maintained along all sides of the perimeter of the outdoor patio and pool deck area on level six (6) to shield noise associated with pool activities. The barrier's weight should be at least 3.5 pounds per square foot of face area without decorative cutouts or line-of-site openings between the shielded areas and the project site. All gaps (except for weep holes) should be filled with grout or caulking to avoid flanking. Noise control barrier may be constructed using one, or any combination of the following materials:

- Masonry block
- Stucco veneer over wood framing (or foam core), or 1-inch thick tongue and groove wood of sufficient weight per square foot; and/or,
- Transparent glass (5/8 inch thick), acrylic, polycarbonate, or other transparent material with sufficient weight per square foot.

PDF-17 The project should provide one row of vegetation along the north, west, and south sides of the interior pool deck wall on level six (6) by planting evergreen trees/shrubs. A dense vegetation barrier can help provide some sound absorption and visual screening to further help reduce noise levels impacting the adjacent residential homes surrounding the project site. Vegetation should be at least as high as the wall (8 feet).

PDF-18 Outdoor speakers on the pool deck must be predominantly located and concealed within the landscape. All outdoor speakers must be located not greater than eight (8) feet high above the pool deck and directed inwards towards the pool or lazy river area.

PDF-19 The project access on Twintree Avenue must be restricted to emergency access, maintenance vehicles, trash, and delivery trucks only. All employee and guest access to the project site, including tourist buses and shuttles, must be via Harbor Boulevard.

PDF-20 Delivery, loading/unloading activity, and trash pick-up hours shall be limited to daytime hours (7:00 a.m. – 10:00 p.m.) only, per the requirements of Garden Grove Municipal Code Section 8.47.060(I). Signage should be posted in the designated loading areas reflecting these hour restrictions.

PDF-21 Engine idling time for all delivery vehicles and trucks must be limited to 5 minutes or less. Signage should be posted in the designated loading areas reflecting the idling restrictions.

PDF-22 A 4-foot high noise shielding wall must be installed on the perimeter of each floor of the parking structure facing the residential neighborhood to the west, north and south.

PDF-23 The drive aisle surfaces within the parking structure must have a textured finish or treatment that helps minimize tire squeal.

PDF-24 The exterior façade of the parking structure must include louvered or perforated wall paneling to help conceal parking structure activities and reduce noise levels. Paneling should cover the entire upper portions of the parking structure openings of each floor facing the west, north and south.

PDF-25 The project must comply with the California Title 24 Sound Transmissions requirements for exterior walls, roofs, and common separating assemblies (e.g., floor/ceiling assemblies and demising walls).

- a. Walls, partitions, and floor-ceiling assemblies separating sleeping units from each other or from public or service areas shall have a sound transmission class (STC) of not less than 50, or not less than 45 if field tested.
- b. Floor-ceiling assemblies between sleeping units shall have an impact insulation class (IIC) rating of not less than 50, or not less than 45 if field tested.
- c. Interior noise levels due to exterior sources shall not exceed a community noise equivalent level (CNEL) or a day-night level (LDN) of 45 A-weighted decibel (dBA), in any habitable room.

PDF-26 For proper acoustical performance, the project must utilize standard building practices to ensure all exterior windows, doors, and sliding glass doors have a positive seal and leaks/cracks are kept to a minimum.

3.4 DISCRETIONARY ACTIONS AND APPROVALS

The following discretionary actions and other non-discretionary approvals are required to implement the proposed project.

- Approval of the MND Adoption of Mitigation Monitoring and Reporting Program
- Approval of Zone Change to subzone Planned Unit Development No. PUD-141-01(A)
- Approval of Site Plan No. SP-107-2022
- Approval of a Street Vacation
- Approval of a Tentative Tract Map
- Approval of a Development Agreement
- Approval of Grading
- Approval of Building and Occupancy Permits
- Approval of a Conditional Use Permit
- Approval of Final Water Quality Management Plan and Stormwater Pollution Prevention Plan (SWPPP)

4.0 ENVIRONMENTAL CHECKLIST

This section includes the initial study checklist form found in Appendix G of the CEQA Guidelines. The checklist form is used to assist in evaluating the potential environmental impacts of the proposed project. The checklist form identifies potential project impacts as follows: 1) Potentially Significant Impact; 2) Less Than Significant with Mitigation Incorporated; 3) Less Than Significant Impact; and 4) No Impact. Substantiation and clarification for each checklist response is provided in Section 4.3 below. Included in the discussion for each topic, as necessary, are mitigation measures that are recommended for implementation as part of the proposed project to reduce potentially significant impacts to less than significant.

4.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, meaning at least one impact is “Less Than Significant Impact with Mitigation Incorporated” as explained below.

Environmental Factors Potentially Affected

X	Aesthetics		Agriculture and Forest Resources		Air Quality
X	Biological Resources	X	Cultural Resources	X	Energy
X	Geology/Soils	X	Greenhouse Gas Emissions		Hazards and Hazardous Materials
	Hydrology/Water Quality		Land Use/Planning		Mineral Resources
X	Noise		Population/Housing		Public Services
	Recreation		Transportation	X	Tribal Cultural Resources
	Utilities/Service Systems		Wildfire		Mandatory Findings of Significance

4.2 DETERMINATION

To be completed by the Lead Agency at 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.
X	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 revisions in the project have been made by or agreed to by the project proponent. 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 “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earliest analysis as described on attached sheets. 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, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or Negative Declaration pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



6/6/2022

Signature

Date

EVALUATION OF ENVIRONMENTAL IMPACTS

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analysis,” as described in (5) below, may be cross-referenced.)
- 5) Earlier Analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such efforts were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigating measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is elected.
- 9) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance.

4.3 ENVIRONMENTAL CHECKLIST QUESTIONS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
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?			X	
d) Create a new source of substantial shadows, light, or glare which would adversely affect day or nighttime views in the area?		X		

Discussion:

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

No Impact. The City is a mature and fully built out urbanized city, where most of the land within the City has been developed and redevelopment is occurring throughout the City (City of Garden Grove, 2021b). The project site is generally flat and is located within an urbanized area surrounded by mixed uses such as hotels, retail/commercial uses, and residential uses. The City of Garden Grove General Plan does not identify any scenic vistas within the City (City of Garden Grove, 2021a); thus, the project site is not located near or within a scenic vista. Therefore, implementation of the proposed project would not have a substantial adverse effect on a scenic vista. No impact would occur.

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 the California Department of Transportation (Caltrans)'s Scenic Highway Mapper, there are no designated or eligible state scenic highways near the project site (Caltrans, 2021). The nearest designated or eligible state scenic highway is State Route 91 (from State Route 55 to north of E. Santa Ana

Road and S. Eucalyptus Drive), located approximately over 6.5 miles to the northeast (Google Earth Pro, 2021). The project site was previously disturbed and occupied by former residential and commercial uses, which were demolished between 2004 and 2013. The north/northeastern parcels of the project site are paved and used for parking the adjacent Sheraton Hotel, and the remaining parcels are comprised of dirt pads with limited vegetation that are mostly vacant except for the southeastern parcels that are used for temporary construction storage. The easterly portion of Thackery Drive from the centerline of the street has been demolished recently; the western paved street portion of Thackery Drive continues to remain. As such, there are no scenic resources on the project site, including rock outcroppings or historic buildings. A limited number of ornamental trees are present on site, but they are not considered scenic resources. Therefore, implementation of the proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. No impact 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 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?**

Less than Significant Impact. As mentioned above, the project site is within an urbanized area that does not contain scenic resources or vistas nor is it within a scenic area. The project site consists of a previously disturbed site that was occupied by former residential and commercial uses, which were demolished between 2004 and 2013.

According to the City's General Plan - Land Use Element, the project site has an IW land use designation, which is intended to function as the City's resort area (City of Garden Grove, 2021). The proposed project includes development of a hotel, which would be consistent with the intended function of the site. The project site is also zoned as PUD-141-01 and R-1-7; the PUD-141-01 is intended for hotel development per City Ordinance No. 2564 (City of Garden Grove, 2002) while the R-1-7 is intended for single-family residential use (City of Garden Grove, 2020). As part of the proposed project, the entire project site would be rezoned to create a subzone, PUD-141-01(A), which would be consistent with the existing General Plan Designation of IW and would facilitate the development of the proposed project. With this modification the proposed project would be consistent with all applicable zoning.

The proposed project involves construction of a full-service high-rise (23 stories tall with a maximum height of 350 feet) resort hotel along with a five-level parking garage (four levels above grade and one level below grade with an approximate height of 61 feet). A hotel project ranging from 14 to 19 stories tall to the east of the project site (across Harbor Boulevard) was approved by the City in 2012 with land use redesignation to IW and rezoning to PUD-128-12 to be consistent with the surrounding uses.

The proposed PUD zoning designation and subsequent intended development of the site would be compatible with the surrounding area in intensity and density. The proposed project would also be required to comply with the City's development standards which would ensure the design, scale, and visual elements of the proposed hotel blend with the surrounding built environment. Given this, implementation of the proposed

project would not substantially degrade the existing visual character or quality of the site. Therefore, impacts 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 Incorporated. The proposed project involves construction of a full-service high-rise (23 stories tall with a maximum height of 350 feet) resort hotel along with a five-level parking garage (four levels above grade and one level below grade approximately 61 feet in height) on a site that is mostly vacant except for a small portion that is being used as a laydown yard. While there is no lighting on the existing project site, the project site is within an urbanized area with street lighting and lights from surrounding hotels, residences, and retail/commercial uses. Vehicle headlights traveling on Harbor Boulevard and Twintree Avenue, and within existing parking areas are also a source of existing lighting at the project site and adjacent uses.

The project-related construction activities would occur during permitted hours of 7:00 a.m. to 8:00 p.m. from Monday through Saturday. On Sunday and Federal Holidays, the construction activities may occur during the same hours, but would be subject to the restrictions as stipulated in Sections 8.47.040 to 8.47.060 of the Municipal Code. Operationally, the proposed project would include nighttime lighting for security and safety purposes throughout the project site, including the parking areas. In addition, new lighting would occur from the lighted monument signs, lighted building signs, and interior lighting from the hotel.

The proposed project would comply with the Garden Grove Municipal Code Section 9.18.100.020 (Development Standards Applicable to All Mixed Use Zones), which states that all onsite lighting shall be stationary and directed away from adjoining properties and public right-of-way; and Section 9.18.140.070 (Parking Design Standards) related to parking area standards, which states that lighting of parking areas shall be designed with automatic timers (photovoltaic cells) and be directed, positioned, or shielded in such a manner so as not to unreasonably illuminate the window area of nearby residences. Compliance with the City's lighting requirement would be confirmed during the building permit process.

Glare can be caused by light reflections from the pavement vehicles and building materials such as reflective glass and polished surfaces. The proposed project would not use reflective glass on the proposed tower. In addition, prior to final site plan approval, a site specific light and glare study would be prepared to ensure that the proposed project will be in compliance with the applicable zoning codes. Additionally, the light and glare study would incorporate measures necessary to ensure the proposed project's compatibility with the goals and policies (i.e., Policy SAF-2.1 and SAF-IMP-2A) in the 2021 General Plan for providing adequate lighting to maintain a safe public environment. Implementation of the following mitigation measure would reduce the potential light and glare impacts to less than significant.

Light and Glare Mitigation Measure

AES-1 Prior to final site plan approval, a site specific light and glare study shall be prepared and approved by the Community and Economic Development Director, or his or her designee, to ensure that the proposed project will be in compliance with the City's Zoning Code related to lighting designs. The

light and glare study shall include technologically advanced hotel/resort lighting measures in its detailed design plans. These measures may include, without limitation, installation of exterior screening such as shielding attached to the luminaire, building, or site structures; using anti-reflective glass or glass treated with an anti-reflective coating; and shielding lights with visors to reduce light trespass, glare impact and visual distraction. Additionally, the light and glare study shall incorporate measures necessary for the proposed project's compatibility with the goals and policies (i.e., Policy SAF-2.1 and SAF-IMP-2A) in the General Plan for providing adequate lighting to maintain a safe public environment. These measures may include, without limitation, placement of pedestrian-level lighting throughout the project site; and provision of signage and markings within the project site for pedestrian safety.

A shade and shadow study (Appendix A) (AECOM, 2022) was conducted to analyze the potential shade and shadow impacts on adjacent properties from the proposed project. Specifically, a project would have a significant impact if:

- Shadow-sensitive use areas (where sunlight is important to its function) would be shaded by project-related structures for more than three hours between the hours of 9:00 a.m. and 3:00 p.m. Pacific Standard Time (PST) (between late October and early April), or for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. PST (between early April and late October), compared to existing conditions.

As stated in the shade and shadow study (Appendix A), the proposed project would cast new shadows onto surrounding shadow-sensitive use areas (e.g., residential and hotels/hostel uses). The threshold above states that a significant shadow impact would result if shadow-sensitive uses would be shaded for "more than" three hours between the hours of 9:00 a.m. and 3:00 p.m. PST (between late October and early April). This condition is applicable to the Winter Solstice and Spring Equinox diagrams. The shade and shadow study shows that a covered parking area associated with one residence would be shaded for more than three hours (between 9:00 a.m. and 1:00 p.m. PST); however, the residence itself would only be shaded for two of those hours (specifically, between 9:00 a.m. and 11:00 a.m. PST). The covered parking area would not be considered a shadow-sensitive use; thus, would not be a significant impact. Thus, no shadow-sensitive uses would be shaded for more than three hours between the hours of 9:00 a.m. and 3:00 p.m. by the proposed project under the Winter Solstice and Spring Equinox conditions.

The threshold further states that a significant shadow impact would result if shadow-sensitive uses would be shaded for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. PST (between early April and late October). The shade and shadow study shows that no residence would be shaded for more than four hours (between 9:00 a.m. and 5:00 p.m.) during the Fall Equinox and Summer Solstice conditions. Therefore, impacts would be less than significant.

Sources:

AECOM. 2022. *Shade/Shadow Study for Site B-2 Hotel*. April. PDF.

California Department of Transportation (Caltrans). 2021. California State Scenic Highway Map. Available at: <https://www.arcgis.com/apps/webappviewer/index.html?id=2e921695c43643b1aaf7000dfcc19983> (accessed June 2021).

City of Garden Grove. 2021a. Focused General Plan Update and Zoning Amendments Draft Environmental Impact Report. August 18, 2021. Adopted November 9, 2021. Available at: <https://ggcity.org/sites/default/files/2021-08/FGPUZA%20DEIR.pdf> (accessed March 2022).

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----. 2020. Garden Grove Municipal Code. Available at: https://www.qcode.us/codes/gardengrove/?view=desktop&topic=9-9_12-9_12_040-9_12_040_030 (accessed July 2021).

----. 2002. Ordinance No. 2564. Available at: https://ggcity.org/records_request/requests/4191/correspondences/16899/download/GG_Ord._2564_PUD_141-01.pdf (accessed July 2021).

Google Earth Pro. 2021.

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 non-agricultural use?**

No Impact. The project site is located in an urbanized area in the City. It was previously disturbed and occupied by former residential and commercial uses. These uses were demolished between 2004 and 2013. The north/northeastern parcels of the project site are paved and used for parking the adjacent Sheraton Hotel, and the remaining parcels are comprised of dirt pads with limited vegetation that are mostly vacant except for the southeastern parcels that are used for temporary construction storage. The easterly portion of Thackery Drive from the centerline of the street has been demolished recently; the westerly paved street portion of Thackery Drive continues to remain.

According to the California Department of Conservation (CDC)'s California Important Farmland Finder, the project site is not located on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance; rather, it is located on Urban and Built-Up Land (CDC, 2021). Therefore, implementation of the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. No impact would occur.

b) Conflict with existing zoning for agricultural use, with a designated Agricultural Resource Area, or with a Williamson Act contract?

No Impact. According to the City's Zoning and Land Use GIS mapper, the project site is zoned as Planned Unit Development (PUD-141-01) and Single-Family Residential Zone (R-1-7), neither of which is an agricultural zoning designation (City of Garden Grove, 2021). Furthermore, the project site does not contain agricultural land nor is it located within a Williamson Act contract. Therefore, implementation of the proposed project would not conflict with existing zoning for agricultural use or with a Williamson Act contract. No impact would occur.

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

No Impact. As noted above, the project is zoned as PUD-141-01 and R-1-7, neither of which is a forest land or timberland zoning designation. Furthermore, the project site does not contain forest land or timberland. Therefore, implementation of the proposed project would not conflict with existing zoning for, or cause rezoning of, forest land or timberland. No impact would occur.

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

No Impact. As noted above, the project site does not contain forest land. Therefore, implementation of the proposed project would not result in the loss of forest land or conversion of forest land to non-forest use. 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 noted above, the project site does not contain farmland or forest land. Therefore, implementation of the proposed project would not result 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 or forest land to non-forest use. No impact would occur.

Sources:

California Department of Conservation (CDC). 2021. California Important Farmland Finder. Available at: <https://maps.conservation.ca.gov/DLRP/CIFF/> (accessed May 2021).

City of Garden Grove. 2021. Zoning and Land Use Mapper. Available at: <https://ggcity.org/maps/zoning-land-use/> (accessed June 2021).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

- | | | | | |
|---|--|--|---|--|
| a) Conflict with or obstruct implementation of the applicable air quality plan? | | | X | |
| 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? | | | X | |
| c) Expose sensitive receptors to substantial pollutant concentrations? | | | X | |
| d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | | | X | |

Discussion: The discussion below is based on the *Garden Grove Hotel Site B-2 Air Quality and Greenhouse Gas Impact Study* prepared by RK ENGINEERING GROUP, INC. (RK) (2022a) included as Appendix B.

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

Less than Significant Impact (a-b). The primary purpose of an air quality plan is to bring an area that does not attain National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) into compliance with those standards pursuant to the requirements of the Clean Air Act and California Clean Air Act. NAAQS and CAAQS have been established for the following criteria pollutants: ozone, carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), particulate matter less than 10 microns in diameter (PM₁₀), particulate matter less than 2.5 microns in diameter (PM_{2.5}), and lead. The CAAQS are more stringent than the NAAQS and include additional air pollutants, such as visibility reducing particles, sulfates, vinyl chloride, and hydrogen sulfide.

The proposed project is located within the South Coast Air Basin (SCAB)¹ under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The applicable Air Quality Management Plan (AQMP) for the project site was prepared by SCAQMD in partnership with the California Air Resources Board (ARB), United States (U.S.) Environmental Protection Agency (EPA), and the Southern California Association of Governments

¹ SCAQMD has divided the SCAB into 14 general forecasting areas and 38 Source Receptor Areas (SRAs) for monitoring and reporting local air quality. The project site is located in SRA 17 (Central Orange County) (RK, 2021).

(SCAG). The most recent AQMP (2016 AQMP) was adopted by the SCAQMD in March of 2017 (SCAQMD, 2017). The 2016 AQMP is the legally enforceable blueprint for how the region will meet and maintain the CAAQS and NAAQS. The 2016 AQMP identifies strategies and control measures needed to achieve attainment of the 8-hour ozone standard and federal annual and 24-hour standard for PM_{2.5} in the SCAB. The future emission forecasts are primarily based on demographic and economic growth projections provided by SCAG.

As discussed in the *Garden Grove Hotel Site B-2 Air Quality and Greenhouse Gas Impact Study* (RK, 2022a) (Appendix B), the SCAQMD has established regional and localized air quality emissions thresholds of significance for criteria air pollutants for the purposes of determining whether a project may have a significant effect on the environment per Section 15002(g) of the CEQA Guidelines. By complying with the SCAQMD’s regional and localized air quality thresholds of significance, a project would be in compliance with the 2016 AQMP as well as the NAAQS and CAAQS. A summary of the proposed project’s maximum daily construction and operational emissions² compared to the applicable regional and localized SCAQMD’s air quality thresholds are presented in Tables 3 and 4 below, respectively. The proposed project’s emissions assume implementation of PDF-1 through PDF-12, discussed previously in Section 3.3 of this IS/MND.

Table 3: Maximum Daily Project Construction-Related Emissions

Source/Description	VOC ¹ (lbs/day)	SO ₂ (lbs/day)	NO _x (lbs/day)	CO (lbs/day)	PM ₁₀ (lbs/day)	PM _{2.5} (lbs/day)
Maximum On- and Off-Site Daily Project Emissions	52.68	0.21	50.73	31.68	8.68	3.98
SCAQMD Regional Thresholds	75.00	150.00	100.00	550.00	150.00	55.00
Exceed SCAQMD Regional Thresholds?	No	No	No	No	No	No
Maximum Onsite Daily Project Emissions ²	N/A	N/A	2.23	20.87	7.58	3.93
SCAQMD Localized Thresholds ³	N/A	N/A	147.00	975.20	9.60	5.50
Exceed SCAQMD Localized Thresholds?	N/A	N/A	No	No	No	No

Source: RK, 2022a.

Notes: 1. Although not a criteria air pollutant, volatile organic compounds (VOCs) are regulated by the SCAQMD because they cause chemical reactions which contribute to the formation of ozone. Both VOCs and NO_x are precursors in the formation of ozone; following SCAQMD methodology, the evaluation of ozone was conducted by evaluating emissions of VOCs and NO_x.

2. Onsite emissions were evaluated for the localized air quality impacts to determine whether the proposed project may generate significant adverse localized air quality impacts per SCAQMD Localized Thresholds of Significance (LST) methodology. Thus, off-site emissions were not evaluated for the localized analysis, in contrast to the regional analysis which encompassed both on- and off-site emissions.

3. The nearest existing sensitive receptors are located along the northern, southern, and western property line of the project site, less than 25 meters from potential areas of onsite construction activity. Although sensitive receptors are located closer than 25 meters to the project site, the SCAQMD LST methodology states that projects with boundaries located closer than 25 meters to the nearest receptor should use the LST for receptors located at 25 meters. In addition, the daily disturbance area for the proposed project was estimated to be 3.5 acres; however, SCAQMD LST is only based on 1, 2 and 5-acre sites. RK therefore used a linear trend line analysis

² Note that lead was not included as part of this analysis as the proposed project was not expected to emit lead in any significant measurable quantity. In addition, visibility-reducing particles were not explicitly addressed in this analysis because particulate matter was addressed. Also, vinyl chloride was not included in the analysis as the proposed project is not expected to generate or be exposed to vinyl chloride because proposed project uses do not utilize the chemical processes that create this pollutant and there are no such uses in the project vicinity. Lastly, hydrogen sulfide was not included in the analysis as the proposed project is not expected to cause exposure to hydrogen sulfide because it would not generate hydrogen sulfide in any substantial quantity.

to calculate the construction LST. Lastly, per SCAQMD LST methodology, the LST used for this analysis was developed based on the ambient concentrations of four applicable air pollutants (e.g., NO_x, CO, PM₁₀, and PM_{2.5}) for SRA-17.

Table 4: Maximum Daily Project Operation-Related Emissions

Source/Description	VOC ¹ (lbs/day)	SO ₂ (lbs/day)	NO _x (lbs/day)	CO (lbs/day)	PM ₁₀ (lbs/day)	PM _{2.5} (lbs/day)
Maximum On- and Off-Site Daily Project Emissions	20.54	0.23	13.88	97.85	23.88	6.74
SCAQMD Regional Thresholds	55.00	150.00	55.00	550.00	150.00	55.00
Exceed SCAQMD Regional Thresholds?	No	No	No	No	No	No
Maximum Onsite Daily Project Emissions ²	N/A	N/A	5.75	9.25	1.60	0.70
SCAQMD Localized Thresholds ^{1,2}	N/A	N/A	147.00	975.20	2.40	1.60
Exceed SCAQMD Localized Threshold ³	N/A	N/A	No	No	No	No

Source: RK, 2022a.

Notes: 1. Although not a criteria air pollutant, VOCs are regulated by the SCAQMD because they cause chemical reactions which contribute to the formation of ozone. Both VOCs and NO_x are precursors in the formation of ozone; following SCAQMD methodology, the evaluation of ozone was conducted by evaluating emissions of VOCs and NO_x.

2. Onsite emissions were evaluated for the localized air quality impacts to determine whether the proposed project may generate significant adverse localized air quality impacts per SCAQMD LST methodology. Thus, off-site emissions were not evaluated for the localized analysis, in contrast to the regional analysis which encompassed both on- and off-site emissions.

3. The nearest existing sensitive receptors are located along the northern, southern, and western property line of the project site, less than 25 meters from potential areas of onsite construction activity. Although sensitive receptors are located closer than 25 meters to the project site, the SCAQMD LST methodology states that projects with boundaries located closer than 25 meters to the nearest receptor should use the LST for receptors located at 25 meters. In addition, the daily disturbance area for the proposed project was estimated to be 3.5 acres; however, SCAQMD LST is only based on 1, 2 and 5-acre sites. RK therefore used a linear trend line analysis to calculate the operational LST. Lastly, per SCAQMD LST methodology, the LST used for this analysis was developed based on the ambient concentrations of four applicable air pollutants (e.g., NO_x, CO, PM₁₀, and PM_{2.5}) for SRA-17.

As shown in Tables 3 and 4, the proposed project’s daily construction and operational emissions would be below the applicable SCAQMD’s air quality regional thresholds of significance and LST; thus, construction and operation of the proposed project would not contribute substantially to existing or projected violations of the NAAQS or CAAQS. Given this, implementation of the proposed project would not obstruct or conflict with the 2016 AQMP. Furthermore, by complying with the SCAQMD’s air quality regional thresholds of significance and LST, implementation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable NAAQS or CAAQS. Therefore, impacts would be less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. As discussed in the *Garden Grove Hotel Site B-2 Air Quality and Greenhouse Gas Impact Study* (RK, 2022a) (Appendix B), sensitive receptors are considered land uses or other types of population groups that are more sensitive to air pollution exposure. Sensitive population groups include children, the elderly, the acutely and chronically ill, and those with cardio-respiratory diseases. For CEQA purposes, the SCAQMD considers a sensitive receptor to be a location where a sensitive individual could remain for 24-hours or longer, such as residences, hospitals, and schools, etc., as described in the SCAQMD LST methodology. Several sensitive receptors currently surround the project site, including the following:

adjacent residential uses to the west and northwest (within 25 meters [82 feet]); residential uses approximately 55 feet to the south, along south side of Twintree Avenue (within 25 meters [82 feet]); and the Sheraton Hotel to the north, approximately 100 feet from the project site to the nearest building facade (within 50 meters [164 feet]). The nearest existing sensitive receptors are located along the northern, southern, and western sides of the project site.

To determine potential exposure of sensitive receptors to substantial pollutant concentrations, the air quality analysis conducted for the proposed project utilized the applicable SCAQMD's LST (discussed above) as well as evaluated potential exposure to toxic air contaminants (TACs) using the California Office of Environmental Health Hazard Assessment (OEHHA)'s Guidance Manual for Preparation of Health Risk Assessments (HRA Guidelines), which provide risk factors based on exposure to toxic substances over a 30-year lifetime span. TACs are defined as air pollutants which may cause or contribute to an increase in mortality or serious illness, or which may pose a hazard to human health, and for which there is no concentration that does not present some risk. This contrasts with the criteria pollutants, in that there is no threshold level for TAC exposure below which adverse health impacts are not expected to occur. Most of the estimated health risk from TACs can be attributed to a relatively few compounds, the most common being diesel particulate matter (DPM) from diesel engine exhaust. In addition to DPM, benzene and 1,3-butadiene are also significant contributors to overall ambient public health risk in California.

As shown above in Tables 3 and 4, construction and operation of the proposed project would not exceed the applicable SCAQMD's LST. Regarding TACs, the proposed project would generate DPM during construction from off-road diesel equipment and trucks. The proposed project's construction activity would not be a long-term (i.e., 30 years) source of TAC emissions and short-term risk factors have not been developed. Due to the significantly reduced risk from short-term exposure, SCAQMD does not typically require the evaluation of long-term cancer risk or chronic health impacts for construction operations from a project such as the one being proposed. Hence, the impacts from short-term exposure to DPM during project construction are considered less than significant without the need for a detailed HRA study. Furthermore, PDF-3 through PDF-10, which include the requirement for Tier 4 engines on all off-road diesel equipment, would ensure potential DPM exposure to adjacent sensitive receptors would be reduced to the maximum extent feasible. Also, the proposed project would be required to comply with SCAQMD Rule 403, which requires that fugitive dust (suspended particulate matter) is controlled with best-available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, the proposed project consists of resort hotel land uses, which do not include major sources of TAC emissions; thus, operation of the proposed hotel would not result in exposure of sensitive receptors to substantial pollutant concentrations. Given this, implementation of the proposed project would not expose sensitive receptors to substantial pollutant concentrations. Therefore, impacts would be less than significant.

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

Less than Significant Impact. As discussed in the *Garden Grove Hotel Site B-2 Air Quality and Greenhouse Gas Impact Study* (RK, 2022a) (Appendix B), land uses that commonly receive odor complaints include agricultural uses (farming and livestock), chemical plants, composting operations, dairies, fiberglass molding facilities, food processing plants, landfills, refineries, rail yards, and wastewater treatment plants. Operational activities of the proposed project would not involve any of these land uses and would not be located in an area with existing odors. While the proposed project's use of heavy-duty equipment during construction would emit odors in the project area, it would not adversely affect a substantial number of people and would be temporary; thus, the temporary odor emissions would cease to occur after construction is completed. Additionally, construction and operation of the proposed project would be required to comply with SCAQMD Rule 402, which requires a person to not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. Given this, implementation of the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Therefore, impacts would be less than significant.

Sources

RK ENGINEERING GROUP, INC. (RK). 2022a. *Garden Grove Hotel Site B-2 Air Quality and Greenhouse Gas Impact Study*. April. PDF.

South Coast Air Quality Management District (SCAQMD). 2017. *South Coast Air Quality Management District – Final 2016 Air Quality Management Plan*. Available at: <https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=15> (accessed August 2021).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES: Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS)?		X		
b) Have a substantial adverse effect on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, regulations or by CDFW or USFWS?				X
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		X		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved state, regional, or local habitat conservation plan?				X

Discussion:

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

Less Than Significant with Mitigation Incorporated. Due to the built-out nature of the City and surrounding area, biological resources in the City are almost non-existent (City of Garden Grove, 2021). The project site is

located in a highly urbanized area with commercial uses along Harbor Boulevard and residential uses along Twintree Avenue.

In February 2022, a search was conducted of the California Department of Fish and Wildlife (CDFW)'s California Natural Diversity Database (CNDDDB) for sensitive plant, natural community, and wildlife species occurrence data within the U.S. Geological Survey (USGS) 7.5-minute Anaheim topographic quadrangle map (which the project site is located within) (Appendix C). Based on this search, the California black rail (*Laterallus jamaicensis coturniculus*) is the only sensitive species (State Threatened) with the potential to be found on the project site (CDFW, 2022).

However, the project site was previously disturbed and occupied by former residential and commercial uses. As noted, these uses were demolished between 2004 and 2013. The north/northeastern parcels of the project site are paved and used for parking the adjacent Sheraton Hotel, and the remaining parcels are comprised of dirt pads with limited vegetation (i.e., non-native grass and two (2) ornamental trees on Twintree Avenue along the sidewalk near Harbor Boulevard) that are mostly vacant except for the southeastern parcels that are used for temporary construction storage. The easterly portion of Thackery Drive from the centerline of the street has been demolished recently; the westerly paved street portion of Thackery Drive continues to remain. As a result, the project site does not provide suitable habitat for the California black rail. Additionally, the California black rail was last sighted in December 1986 in the City of Orange. On this basis, it is not reasonably foreseeable that there would be an occurrence of this species at the project site.

During construction, the proposed project would require removal of the non-native grass and the two (2) ornamental trees. While no sensitive plants or wildlife would be impacted by vegetation removal activities, there is a potential for impacts to occur to raptors and other nesting birds protected under the federal Migratory Bird Treaty Act (MBTA) that could nest within these trees. With Mitigation Measure BIO-1, implementation of the proposed project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS. Therefore, impacts would be less than significant with mitigation incorporated.

MBTA Nesting Birds Mitigation Measure

BIO-1 With the potential for nesting birds protected under the Migratory Bird Act Treaty (MBTA) and California Fish and Game Code (CFGC) to occur in ornamental trees within the project site and surrounding area, tree removal during construction shall occur outside of the nesting bird season (generally, February 15 through September 1). If avoiding the nesting season is not practicable, the following additional measures shall be employed:

- a. A pre-construction nesting bird survey shall be conducted by a qualified biologist within 3 days prior to the start of construction activities to determine whether active nests are present within or directly adjacent to the construction zone. All active nests found shall be recorded.
- b. If active nests are detected during the survey, the qualified biologist shall establish an appropriate buffer and monitor the active nests within the buffers at a minimum of once per week to determine whether the birds are being disturbed. If signs of disturbance or stress are observed, the qualified biologist shall immediately implement adaptive measures to reduce disturbance.

These measures shall be determined by the qualified biologist and could include, without limitation, increasing buffer distance, temporarily halting construction activities until fledging is confirmed, or placing visual screens or sound dampening structures between the nest and construction activity.

- b) Have a substantial adverse effect on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, regulations or by CDFW or USFWS?**
- c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?**

No Impact (b-c). As discussed above, due to the built-out nature of the City and surrounding area, biological resources in the City are almost non-existent (City of Garden Grove, 2021). The project site is located in a highly urbanized area with commercial uses along Harbor Boulevard and residential uses along Twintree Avenue. The project site was previously disturbed and occupied by former residential and commercial uses, which were demolished between 2004 and 2013. The north/northeastern parcels of the project site are paved and used for parking for the adjacent Sheraton Hotel, whereas the remaining parcels are dirt pads with limited vegetation (i.e., non-native grass and two ornamental trees on Twintree Avenue along the sidewalk near Harbor Boulevard) that are mostly vacant except for the southeastern parcels that are used for temporary construction storage. The easterly portion of Thackery Drive from the centerline of the street has been demolished recently; the westerly paved street portion of Thackery Drive continues to remain.

In addition, there are no sensitive natural communities on the project site per the search conducted of the CDFW's CNDDDB for the USGS 7.5-minute Anaheim topographic quadrangle map (which the project site is located within) (Appendix C). Furthermore, based on a review of the U.S. Fish & Wildlife (USFWS)'s National Wetlands Inventory, there are no wetlands or riparian mapped areas within or in the vicinity of the project site (USFWS, 2021).

For these reasons, implementation of the proposed project would not have a substantial adverse effect on any sensitive natural communities identified in local or regional plans, policies, regulations, or by the CDFW or USFWS, nor would it have a substantial adverse effect on state or federally protected wetlands. No impact would occur.

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

Less Than Significant with Mitigation Incorporated. As discussed above, due to the built-out nature of the City and surrounding area, biological resources in the City are almost non-existent (City of Garden Grove, 2021). The project site is located in a highly urbanized area with commercial uses along Harbor Boulevard and residential uses along Twintree Avenue. The project site previously disturbed and occupied by former residential and commercial uses, which were demolished between 2004 and 2013. The north/northeastern parcels of the project site are paved and used for parking for the adjacent Sheraton Hotel, whereas the

remaining parcels are dirt pads with limited vegetation (i.e., non-native grass and two ornamental trees on Twintree Avenue along the sidewalk near Harbor Boulevard) that are mostly vacant except for the southeastern parcels that are used for temporary construction storage. The easterly portion of Thackery Drive from the centerline of the street has been demolished recently; the westerly paved street portion of Thackery Drive continues to remain.

There are no designated habitat linkages, wildlife corridors, native wildlife nursery sites on the project site or vicinity per the CNDDDB search results, nor are there rivers, creeks, or open drainages near the project site or vicinity that could serve as a wildlife corridor. Furthermore, the project site is surrounded by impermeable fencing, and thus would preclude ground-level wildlife movement. Therefore, implementation of the proposed project would not interfere substantially with the movement of any native resident or migratory fish or with established native resident or migratory wildlife corridors, nor would it impede the use of native wildlife nursery sites.

However, as discussed above, during construction, the proposed project would require removal of the non-native grass and the two ornamental trees. While no sensitive plants or wildlife would be impacted by vegetation removal activities, there is a potential for impacts to occur to raptors and other nesting birds protected under the federal MBTA. With Mitigation Measure BIO-1, implementation of the proposed project would not interfere substantially with the movement of any native resident or migratory wildlife species. Therefore, impacts would be less than significant with mitigation incorporated.

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

Less than Significant Impact. As discussed above, the proposed project would require the removal of two (2) ornamental trees located along a sidewalk on Twintree Avenue within the public right-of-way. Chapter 11.32, Trees, of the City's Municipal Code serves as the City's Tree Ordinance, which provides strict guidelines regarding the removal or tampering of trees located within any public right-of-way. The Project Applicant would be required to comply with the standards identified in Chapter 11.32, which includes obtaining approval from the City Manager prior to removal of trees in the public right-of-way. Given this, implementation of the proposed project would not conflict with any local policies or ordinances protecting biological resources. Therefore, impacts would be less than significant.

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

No Impact. The proposed project is not located within any Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP) (CDFW, 2021). Therefore, implementation of the proposed project would not conflict with any applicable HCP or NCCP. No impact would occur.

Sources

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines § 15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5?		X		
c) Disturb any human remains, including those interred outside of dedicated cemeteries?		X		

Discussion:

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

No Impact. According to the *Site B-2 Hotel Project: Cultural, Paleontological and Tribal Cultural Resources Technical Memorandum* prepared by AECOM (2022) (Appendix D), no historical resources were identified on the project site. Specifically, the South Central Coastal Information Center (SCCIC) records search identified 17 previously recorded cultural resources mapped within 0.25 miles of the project site. All of these resources are historic homes and converted offices that have been determined not eligible for listing in federal registers or recommended not eligible for listing in the National Register of Historic Places (NRHP) and none are located on the project site. 13 properties within 0.25 miles of the project site are listed on California’s State Built Environment Resources Directory, however, none of these are located on the project site. Therefore, implementation of the proposed project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines § 15064.5. No impact would occur.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5?

Less than Significant with Mitigation Incorporated. According to the *Site B-2 Hotel Project: Cultural, Paleontological and Tribal Cultural Resources Technical Memorandum* (2022) (Appendix D), based on the results of the SCCIC records search and archival research of local resource directories and historical maps and aerial images, it is possible, but unlikely, that significant archaeological resources will be encountered during ground-disturbing activities for the proposed project.

The project site is located within a heavily disturbed urban area. Prior to World War II, the project site was utilized for agricultural purposes, with a grove of trees present on most of the property and one building that was present in the southeast corner for a short period of time. During the housing boom of the 1950s, the project site was developed with a residential tract and commercial buildings which were established by 1963. A review of construction manuals from the period suggests that it is adequate to assume that up to five feet of the soil was disturbed by construction, grading, and the placement of utilities for a 1960s-era tract development. All buildings in the project site were removed between 2004 and 2013, leaving only the cul-de-sac and alley between the dirt lots. The process appears to have consisted of removing building foundations and prior utilities and grading the surface which likely heavily disturbed or destroyed any archaeological resources that may have existed at the site at that time. Work may extend below previous disturbance, however, based on the results of the archival research, no previously recorded resources are within the project site and there is low potential that archaeological resources will be encountered during ground-disturbing activities for the proposed project. Thus, no archaeological monitoring is recommended at this time.

However, in the event that archaeological resources are encountered during ground-disturbing activities and cannot be preserved in place, Mitigation Measure CR-1 is provided to reduce potential impacts. With implementation of Mitigation Measure CR-1, the proposed project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5. Therefore, impacts would be less than significant with mitigation incorporated.

Archaeological Resources Mitigation Measure

CR-1 In the event archeological resources are found during construction, all attempts will be made to preserve in place or leave resources in an undisturbed state in compliance with all applicable laws. In the event that archeological resources are identified and cannot be preserved in place, a qualified archaeologist will be contacted to evaluate and determine appropriate treatment for the resource in accordance with Public Resources Code (PRC) Section 21083.2(i). Work in the vicinity of the discovery (15-meter radius) will halt until the appropriate assessment and treatment of the resource is determined by the archaeologist (work can continue elsewhere on the project site).

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

Less than Significant with Mitigation Incorporated. According to the *Site B-2 Hotel Project: Cultural, Paleontological and Tribal Cultural Resources Technical Memorandum (2022)* (Appendix D), the project site was previously utilized for agricultural purposes and then later developed with a residential tract and commercial buildings, which have since been removed. No formal cemeteries or other places of human internment are known to exist on the project site. However, a lack of surface evidence does not preclude the possibility that unknown and unanticipated human remains may be encountered during ground-disturbing activities. In the event that human remains are discovered at the project site, Mitigation Measure CR-2 is provided to reduce potential impacts. With implementation of Mitigation Measure CR-2, the proposed project would not disturb any human remains, including those interred outside of dedicated cemeteries. Therefore, impacts would be less than significant with mitigation incorporated.

Human Remains Discovery Mitigation Measure

CR-2 If human remains are discovered, work in the immediate vicinity of the discovery shall be suspended and the Orange County Coroner shall be contacted. If the remains are deemed Native American in origin, the Coroner will contact the NAHC and identify a Most Likely Descendant pursuant to PRC Section 5097.98 and California Code of Regulations Section 15064.5. Work will only commence after consultation and treatment have been concluded. Work may continue on other parts of the project site while consultation and treatment are conducted.

Source

AECOM. 2022. *Site B-2 Hotel Project: Cultural, Paleontological and Tribal Cultural Resources Technical Memorandum*. March 2022. PDF.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. ENERGY. 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?		X		
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?		X		

Discussion:

- a) **Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**
- b) **Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

Less than Significant with Mitigation Measures Incorporated (a-b). The California Building Energy Efficiency Standards (i.e., Title 24, Part 6 [Energy Code] and Part 11 [CALGreen], of the California Code of Regulations) establish state building energy efficiency requirements for residential and nonresidential buildings, including newly constructed projects. These standards are designed to reduce wasteful and unnecessary energy consumption in newly constructed and existing buildings, as well as meet the goals of California’s Assembly Bill (AB) 32 for reducing greenhouse gases (GHG) to 1990 levels by 2020 (California Energy Commission, 2021; California Building Standards Commission, 2021) (see Section VIII, Greenhouse Gas Emissions, of this IS/MND for a discussion of GHG impacts). The City has adopted these standards in the Garden Grove Municipal Code (i.e., Section 18.04.0101). In addition, the City’s General Plan – Conservation Element provides the following energy goals:

- Goal CON-4: Reduce per-capita non-renewable energy waste and city-wide peak electricity demand through energy efficiency and conservation.
- Goal CON-5: Reduce dependency on non-renewable energy resources through the use of local and imported alternative energy sources.

Construction and operation of the proposed project would result in the consumption of energy resources. Energy consumption during construction would consist of electricity providing temporary power to lighting and equipment as well as fuel for construction vehicles. Per PDF-8, construction-related activities would minimize the use of non-renewable diesel by minimizing the use of diesel-powered equipment or generators, where feasible. Construction-related energy consumption would be minimal in comparison to the operational consumption once the proposed hotel is occupied.

Energy usage for operation of the proposed project would include both electricity and natural gas, where total electricity usage would be approximately 4,956,901 kilowatt hours per year, and total natural gas usage would be approximately 15,780,088 thousand British thermal units per year (RK, 2022a). Per PDF-11, the proposed project would be designed in compliance with the California Building Energy Efficiency Standards and Garden Grove Municipal Code Section 18.04.0101, including the provisions for bicycle parking, electric vehicle charging stations, energy efficiency, material conservation, and water/waste reduction. To further ensure the operation of the proposed project would not result in inefficient or wasteful energy consumption or conflict with the City's energy goals CON-4 and CON-5, Mitigation Measures GHG-2 through GHG-6 (provided below in Section VIII, Greenhouse Gas Emissions, of this IS/MND), which would require the use of renewable energy sources and increase energy efficiency, such as installing onsite renewable energy sources capable of generating up to 25 percent of the proposed project's total electricity demand, implementing water conservation strategies, and implementing waste management, recycling, and composting programs to divert 50 percent of waste away from a landfill. Thus, with Mitigation Measures GHG-2 through GHG-6, implementation of the proposed project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation, nor would it conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, impacts would be less than significant with mitigation incorporated.

Sources

California Building Standards Commission. 2021. CALGreen Webpage. Available at: <https://www.dgs.ca.gov/BSC/CALGreen> (accessed September 2021).

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RK ENGINEERING GROUP, INC. (RK). 2022a. *Garden Grove Hotel Site B-2 Air Quality and Greenhouse Gas Impact Study*. April. PDF.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS. 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 active fault trace? Refer to Division of Mines and Geology Special Publication 42.				X
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction and lateral spreading?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
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?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				X
e) Have soils incapable of adequately supporting the use of onsite wastewater treatment systems where sewers are not available for the disposal of wastewater?				X
f) Directly and indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

Discussion:**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 active fault trace? Refer to Division of Mines and Geology Special Publication 42.**

No Impact. Per the Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act), Alquist-Priolo earthquake fault zones are regulatory zones surrounding the surface traces of active faults in California (California Department of Conservation, 2019). Pursuant to the Alquist-Priolo Act and Title 14 Section 3603(a) of the California Code of Regulations, wherever an active fault exists, if it has the potential for surface rupture, a structure for human occupancy cannot be placed over the fault and must be a minimum distance from the fault (generally fifty feet), unless proven otherwise by an appropriate geotechnical investigation and report that the site is not underlain by active branches of the active fault. According to the geotechnical investigation prepared for the proposed project (Geocon, 2018) (Appendix E), the project site is not within a state-designated Alquist-Priolo Earthquake Fault Zone for surface fault rupture hazards. No active or potentially active faults with the potential for surface fault rupture are known to occur in the vicinity (i.e., within 50 feet) of the project site (Geocon, 2018). The nearest active fault to the project site is the Newport-Inglewood Fault Zone, located approximately 7.4 miles south-southwest of the project site (Geocon, 2018). Given this, implementation of the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known active fault trace. No impact would occur.

ii) Strong seismic ground shaking?

Less than Significant Impact. As discussed above, the project site is not within a state-designated Alquist-Priolo Earthquake Fault Zone and there are no active or potentially active faults with the potential for surface fault rupture known to occur in the vicinity of the project site. However, the project site is located in the seismically active Southern California region and could be subjected to moderate to strong ground shaking in the event of an earthquake on one of the many active southern California faults. Nearby active faults include the Newport-Inglewood Fault Zone, the Whittier Fault, the Chino Fault, the Elsinore Fault, and the Palos Verdes Fault (offshore segment) located approximately 7.4 miles south-southwest, 10.5 miles northeast, 17 miles northeast, 18 miles east-northeast, and 19 miles southwest of the project site, respectively (Geocon, 2018). The active San Andreas Fault Zone is located approximately 42 miles northeast of the project site (Geocon, 2018). Also, several buried thrust faults, commonly referred to as blind thrusts, underlie the Los Angeles Basin, including Orange County, at depth greater than 3.0 kilometers (1.86 miles). These faults are not exposed at the ground surface and do not present a potential surface fault rupture hazard at the project site; however, these deep thrust faults are considered active features capable of generating future earthquakes that could result in moderate to strong ground shaking at the project site.

However, the design and construction of the proposed project would be required to comply with the California Building Code as well as comply with the geotechnical investigation recommendations as a condition of approval, which would ensure the proposed development is resistant to the effects of earthquake motions. For example, the California Building Code's Chapter 16, Structural Design, Section 1613, Earthquake Loads, includes design requirements for structures to resist the effects of earthquake motions (UpCodes, 2019). In addition, Section 8 of the geotechnical investigation prepared for the proposed project includes foundation design recommendations to address seismic forces (Geocon, 2018). Given this, implementation of the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. Therefore, impacts would be less than significant impact.

iii) Seismic-related ground failure, including liquefaction?

Less than Significant Impact. The State of California Seismic Hazard Zone Map for the Anaheim Quadrangle indicates that the project site is located in an area designated as having a potential for liquefaction (Geocon, 2018). In addition, the City of Garden Grove Safety Element (2021) indicates that the project site is located within an area identified as having a potential for liquefaction.

A liquefaction analysis was conducted by Geocon (2018), which concluded that the alluvial soils below the historic high groundwater level at the project site could be susceptible to settlement (ranging from 0.3 inches to 2.6 inches) during ground motion from a Design Earthquake and Maximum Considered Earthquake. However, the proposed project would be designed in compliance with the California Building Code seismic requirements (e.g., Chapter 16, Structural Design, Section 1613, Earthquake Loads, described previously) and would be required to implement the geotechnical investigation's foundation design recommendations provided in Section 8 related to addressing settlement as a condition of approval, which would ensure seismic-related ground failure, including liquefaction, would not occur.

Furthermore, as a condition of approval, per Section 8.1.2 of the geotechnical investigation, prior to obtaining building permits from the City, additional site exploration and laboratory testing will be required to confirm the existing conditions throughout the project site and provide final design recommendations, which would be incorporated into an updated geotechnical investigation and implemented as a condition of approval (Geocon, 2018). Given this, implementation of the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. Therefore, impacts would be less than significant.

iv) Landslides?

Less than Significant Impact. The project site ranges from relatively level to gently sloping to the southeast and is not within an area identified by the City of Garden Grove or the County of Orange as having a potential for slope stability hazards (Geocon, 2018). Additionally, the State of California Seismic Hazard Zone Map for the Anaheim Quadrangle indicates that the project site is not located within a zone of required investigation for earthquake-induced landslides. There are no known landslides near the project site, nor is the project site in the path of any known or potential landslides (Geocon, 2018). Thus, the potential for landslides to adversely impact the project site is considered low. Given this, implementation of the proposed project would not directly or indirectly cause potential substantial adverse effects,

including the risk of loss, injury, or death involving landslides. Therefore, impacts would be less than significant.

b) Result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact. The proposed project includes site clearing and ground disturbance, which has the potential to result in soil erosion and loss of topsoil. However, the preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) and Best Management Practices (BMPs), as discussed in Section X (Hydrology and Water Quality) of this IS/MND, during project construction and operation would minimize soil erosion and loss of topsoil. For example, typical soil erosion control and loss of topsoil BMPs would include soil stabilization via application of covers or binders or diverting storm water flows from contacting disturbed soil areas via infiltration basins. Fugitive dust would be controlled in compliance with SCAQMD Rule 403. Compliance with this rule would be achieved through application of standard BMPs, such as application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour, sweeping loose dirt from paved site access roadways, cessation of construction activity when wind exceeds 25 miles per hour, and establishing a permanent ground cover on finished sites. Compliance with the standard dust control measures would be considered part of conditions of approval for the proposed project and built into the design features (refer to Construction Design Features). Given this, implementation of the proposed project in conjunction with implementation of a SWPPP and BMPs would not result in substantial soil erosion or the loss of topsoil. Therefore, impacts 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?

Less than Significant Impact. As stated above, the project site is not within a state-designated Alquist-Priolo Earthquake Fault Zone for surface fault rupture hazards (Geocon, 2018). No active or potentially active faults with the potential for surface fault rupture are known to occur in the vicinity of the project site. Additionally, as stated above, the State of California Seismic Hazard Zone Map for the Anaheim Quadrangle indicates that the project site is not located within a zone of required investigation for earthquake-induced landslides. Also, the project site is not located within an area of known ground subsidence (Geocon, 2018). No large-scale extraction of groundwater, gas, oil, or geothermal energy is occurring or planned at the project site or in the general project vicinity; thus, there is little to no potential of ground subsidence occurring at the project site or as a result of implementation of the proposed project.

In addition, as stated above, while the proposed project is located within an area designated as having a potential for liquefaction and could be susceptible to settlement (ranging from 0.3 inches to 2.6 inches) during ground motion from a Design Earthquake and Maximum Considered Earthquake (Geocon, 2018), the proposed project would be designed in compliance with the California Building Code seismic requirements (e.g., Chapter 16, Structural Design, Section 1613, Earthquake Loads, described previously) and would be required to implement the geotechnical investigation's foundation design recommendations provided in Section 8 related to addressing settlement as a condition of approval, which would ensure seismic-related ground failure, including liquefaction, would not occur. Furthermore, as discussed previously, as a condition of approval, per Section 8.1.2 of the geotechnical investigation, prior to obtaining building permits from the

City, additional site exploration and laboratory testing will be required to confirm the existing conditions throughout the project site and provide final design recommendations, which would be incorporated into an updated geotechnical investigation and implemented as a condition of approval (Geocon, 2018). Given this, the proposed project would not be located on a geologic unit or soil that is unstable, nor that would become unstable as a result implementation of the proposed project, potentially resulting in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. Therefore, impacts would be less than significant.

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

No Impact. Based on the geotechnical investigation performed for the proposed project, it is recommended, at a minimum, that the upper 6 feet of existing site soils within the proposed on-grade building footprint areas be excavated and properly compacted for foundation and slab support. The upper 5 feet of existing soils encountered at the project site during this investigation are considered to have a “very low” expansive potential and are classified as “non-expansive” per the California Building Code (Geocon, 2018). Given this, the proposed project would not be located on expansive soil. No impact would occur.

e) Have soils incapable of adequately supporting the use of onsite wastewater treatment systems where sewers are not available for the disposal of wastewater?

No Impact. The proposed project would connect with the existing municipal sewer system, and thus would not require the use of onsite wastewater treatment systems. No impact would occur.

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

Less than Significant with Mitigation Incorporated. According to the *Site B-2 Hotel Project: Cultural, Paleontological and Tribal Cultural Resources Technical Memorandum* prepared by AECOM (2022) (Appendix D), the sensitivity of the proposed project to encounter significant fossil remains appears low to moderate. The paleontological records search indicated that surficial deposits of Late Pleistocene to Holocene silty sand alluvial fan sediments exist in the project site. No fossil specimens are known to have been documented within the project site, but these deposits have yielded fossils in the region, typically at depths of greater than 6 feet below surface. Paleontological sensitivity increases with depth as older alluvial deposits in the region have yielded vertebrate fossil specimens.

Past building and demolition activities within the project site likely removed some overlying soil, and artificial or disturbed fill may be present in the upper levels. However, intact deposits of fossil-bearing Pleistocene sediments have the potential to be encountered at depths below 6 feet within the project site. Specifically, shallow grading and other ground-disturbing activities less than 6 feet below surface are not likely to encounter fossil specimens but deeper excavation activities for building foundations or the parking garage have low to moderate potential to encounter paleontological remains.

To address this low to moderate potential, Mitigation Measure G-1 would apply in the event that fossil specimens are encountered at the project site. With implementation of Mitigation Measure G-1, the proposed project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Therefore, impacts would be less than significant.

Paleontological Resources Mitigation Measure

- G-1 In the event paleontological resources are found during construction, all attempts will be made to preserve in place or leave resources in an undisturbed state in compliance with applicable laws. In the event that fossil specimens are encountered on the site and cannot be preserved in place, a qualified paleontologist will be contacted and work in the vicinity of the discovery (15-meter radius) will halt until the appropriate assessment and treatment of the resource is determined by the paleontologist (work can continue elsewhere on the project site). If recommended by the project paleontologist, monitoring may be implemented, collection of specimens or appropriate sediment samples may be conducted, and remains may be curated at a repository, in accordance with Society of Vertebrate Paleontology guidelines.

Sources

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas (GHGs) emissions, either directly or indirectly, that may have a significant impact on the environment?		X		
b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?		X		

Discussion: The discussion below is based on the *Garden Grove Hotel Site B-2 Air Quality and Greenhouse Gas Impact Study* prepared by RK ENGINEERING GROUP, INC. (RK, 2022a) included as Appendix B.

a) Generate greenhouse gas (GHGs) emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant Impacts with Mitigation Incorporated. Certain gases in the earth’s atmosphere, classified as greenhouse gases (GHG), play a critical role in determining the earth’s surface temperature. A portion of the solar radiation that enters earth’s atmosphere is absorbed by the earth’s surface, and a smaller portion of this radiation is reflected back toward space. Infrared radiation is absorbed by GHGs; as a result, infrared radiation released from the earth that otherwise would have escaped back into space is instead “trapped,” resulting in a warming of the atmosphere. This phenomenon, known as the “greenhouse effect,” is responsible for maintaining a habitable climate on Earth.

GHGs are present in the atmosphere naturally, are released by natural sources and anthropogenic sources, and are formed from secondary reactions taking place in the atmosphere. The following are GHGs that are widely accepted as the principal contributors to human-induced global climate change that are relevant to the project:

- Carbon dioxide (CO₂)
- Methane (CH₄)
- Nitrous oxide (N₂O)

Emissions of CO₂ are byproducts of fossil fuel combustion. CH₄ is the main component of natural gas and is associated with agricultural practices and landfills. N₂O is a colorless GHG that results from industrial processes, vehicle emissions, and agricultural practices.

Global warming potential (GWP) is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to CO₂. The GWP of a GHG is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time (i.e., lifetime) that the gas remains in the atmosphere (“atmospheric lifetime”). The reference gas for GWP is CO₂; therefore, CO₂ has a GWP of 1. The other main GHGs that have been attributed to human activity include CH₄, which has a GWP of 28, and N₂O,

which has a GWP of 265. For example, 1 ton of CH₄ has the same contribution to the greenhouse effect as approximately 28 tons of CO₂. GHGs with lower emissions rates than CO₂ may still contribute to climate change because they are more effective at absorbing outgoing infrared radiation than CO₂ (i.e., high GWP). The concept of CO₂-equivalents (CO₂e) is used to account for the different GWP potentials of GHGs to absorb infrared radiation.

According to the *Garden Grove Hotel Site B-2 Air Quality and Greenhouse Gas Impact Study* (RK, 2022a) (Appendix B), GHG emissions would be generated during construction (e.g., emissions from construction equipment and vehicles) and operation (e.g., emissions from vehicles, electricity, natural gas, waste, and water sources) of the proposed project. RK used the California Emissions Estimator Model Version 2020.4.0 (CalEEMod) to calculate GHG emissions from the construction and operation of the proposed project. Because impacts from construction activities would occur over a relatively short-term period of time, they would contribute a relatively small portion of the overall lifetime project GHG emissions. Construction emissions were thus amortized over 30 years and added to the long-term operational emissions, pursuant to SCAQMD recommendations. In doing so, construction GHG emissions were included in the overall contribution of the proposed project.

The total estimated GHG emissions of the proposed project were 5,756.97 MTCO₂e per year (which assumed incorporation of PDF-1 through PDF-12, provided previously in Section 3.3 of this IS/MND). To assess potentially significant impacts, RK used SCAQMD's Tier 3 threshold of significance of 3,000 MTCO₂e/year for all non-industrial projects per the latest recommended GHG thresholds provided by SCAQMD (aka, SCAQMD's five-tiered approach³). The proposed project's GHG emissions would exceed the SCAQMD's Tier 3 threshold of 3,000 MTCO₂e and would thus result in a potentially significant impact. The project was thus analyzed under SCAQMD's Tier 4 threshold which requires implementation of GHG mitigation measures that demonstrate a 30 percent reduction compared to business as usual (BAU) conditions. Per SCAQMD guidelines, BAU is based on current regulatory requirements, and is considered the level from which GHG reductions must occur. With implementation of Mitigation Measures GHG-1 through GHG-7 shown below, the total estimated GHG emissions generated by the proposed project would be 3,583.53 MTCO₂e/year, reflecting a 51 percent reduction. Thus, with Mitigation Measures GHG-1 through GHG-7, implementation of the proposed project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Therefore, impacts would be less than significant with mitigation incorporated.

GHG Mitigation Measures

- GHG-1 The number of large diesel trucks coming to the site (i.e., for deliveries, trash collection or other services) shall be limited to 20 trucks per day or less. This restriction is specifically applicable to trucks classified as medium-heavy duty and heavy-heavy duty with gross vehicle weight (GVW) greater than 19,500 pounds.
- GHG-2 Onsite renewable energy sources (i.e., solar panels) shall be installed capable of generating up to 25% of the project's total electricity demand.

³ SCAQMD's objective in providing their five-tiered GHG guidelines is to establish a performance standard that will ultimately contribute to reducing GHG emissions below 1990 levels, and thus achieve the requirements of the California Global Warming Solutions Act (Assembly Bill 32). By complying with the SCAQMD's five-tiered GHG thresholds of significance, a project would be considered to be in compliance with Assembly Bill 32 (RK, 2022a).

- GHG-3 Prior to receiving a Certificate of Occupancy, the proposed project shall demonstrate to the satisfaction of the Garden Grove Building and Safety Division that water conservation strategies have been implemented, including low flow fixtures and toilets, water efficient irrigation systems, drought tolerant/native landscaping, and pool water recycling systems.
- GHG-4 Waste management, recycling and composting programs shall be implemented to divert up to 50% of waste away from a landfill.
- GHG-5 Electric landscaping equipment, such as leaf blowers and pressure washers shall be used.
- GHG-6 No onsite natural gas fireplaces or fire pits shall be installed.
- GHG-7 Trip reduction measures and project design features shall be implemented to reduce the number of auto-based trips generated by the project and to encourage the use of transit, bicycling, and walking through the following measures.
1. Improve the walkability and design of the project by providing pedestrian and bicycling connections within the project site and to adjacent off-site facilities (i.e., sidewalks, crosswalks, wayfinding signage, etc.).
 2. Provide traffic calming measures (i.e., marked crosswalks, raised crosswalks, raised intersections, count-down signal timers, curb extensions, speed tables, median islands, tight corner radii, roundabouts or mini-circles, on-street parking, planter strips with street trees, chicanes/chokers, etc.)
 3. Provide secure onsite bicycle racks and provide bicycle rentals for hotel guests.
 4. Provide transit/shuttle service for guests to local area attractions. The shuttle service shall operate on a regular daily basis and be offered to all guests staying at the hotel.
 5. Hotel management/concierge should provide information that promotes walking, bicycling and public transit options to nearby attractions. This should include information on local bus routes and schedules and wayfinding to the existing transit stops along Harbor Boulevard.

b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant Impacts with Mitigation Incorporated. In 2006, California passed the California Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32; California Health and Safety Code Division 25.5, Sections 38500, et seq.). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and requires statewide GHG emissions be reduced to 1990 levels by 2020 (CARB, 2017). In 2016, this goal was reinforced with the passage of Senate Bill (SB) 32, the California Global Warming Solutions Act, which established a statewide GHG reduction goal of 40 percent below 1990 levels by 2030. The 2030 target represents reductions needed to ensure California can achieve its longer-term 2050 target of a reduction of GHG gases 80 percent below 1990 levels per Executive Order B-30-15 (CARB, 2017).

In 2008 and 2014, CARB approved the Scoping Plan and the first update to the Scoping Plan, respectively (CARB, 2008; CARB, 2014). In response to SB 32 and the companion legislation of AB 197, CARB approved the 2017 Scoping Plan Update in November 2017 (CARB, 2017). The 2017 Scoping Plan Update draws from the previous plans to present strategies to reaching California's goal of 40 percent below 1990 levels by 2030.

As discussed in the *Garden Grove Hotel Site B-2 Air Quality and Greenhouse Gas Impact Study* (RK, 2022a) (Appendix B), SCAQMD's objective in providing the five-tiered GHG thresholds of significance was to establish a performance standard that will ultimately contribute to reducing GHG emissions below 1990 levels, and thus achieve the requirements of AB 32. Thus, by complying with the SCAQMD's five-tiered GHG thresholds of significance, a project would be in compliance with AB 32. In addition, a project must demonstrate it can achieve a 40 percent reduction in long-term operational GHG emissions compared to BAU conditions to be in compliance with CARB's 2017 Scoping Plan Update. As discussed above, with implementation of Mitigation Measures GHG-1 through GHG-7, the total estimated GHG emissions generated by the proposed project would be 3,316.08 MTCO₂e/year, reflecting a 42 percent reduction compared to BAU conditions. Thus, with Mitigation Measures GHG-1 through GHG-7, implementation of the proposed project would not conflict with AB 32 or CARB's 2017 Scoping Plan Update. Therefore, impacts would be less than significant with mitigation incorporated.

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
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?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of sensitive land uses?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
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?				X
f) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				X

Discussion:

- a) **Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**
- 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 (a-b). Construction of the proposed project would involve transport, use, and disposal of limited quantities of hazardous materials such as paints, solvents, cleaning agents, oils, grease, and

fuel for construction equipment. However, the proposed project would comply with all federal, state, and local requirements related to the transport, storage, use, and disposal of such materials.

In addition, operation and maintenance activities of the hotel and restaurant uses would also use limited quantities of non-acutely hazardous materials, such as paints, cleaning agents, and batteries, as well as generate small quantities of common household hazardous wastes (HHW); however, the use, storage, and disposal of such hazardous materials and HHW would be conducted in compliance with all applicable hazardous materials and waste federal, state, and local requirements. Thus, the proposed project would not create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials. Additionally, the proposed project would not require the use or storage of significant quantities of hazardous materials that could become a significant hazard to the public or the environment through an accidental release or upset condition. Though it is not reasonably foreseeable that significant quantities of hazardous materials would be used or stored on site, to the extent any such use or storage would occur, such use and storage would be conducted in compliance with all applicable federal, state, and local requirements. Therefore, impacts would be less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of sensitive land uses?

Less than Significant Impact. The Walton Intermediate School is located approximately 0.2 mile northwest of the project site; Warren Elementary School is located approximately 0.25 mile northeast of the project site; and Violette Elementary School is located approximately 0.25 mile southwest of the project site (Google Earth Pro, 2022). However, as discussed previously in Section III. Air Quality, in the environmental checklist of this IS/MND, the proposed project would not emit hazardous emissions. Also, as discussed above, while the proposed project would use, store, and dispose limited quantities of hazardous materials during construction and operation, such as paints, solvents, cleaning agents, etc., such materials would be used, stored, and disposed in compliance with all federal, state, and local requirements. Therefore, impacts would be less than significant.

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

No Impact. The proposed project is not located on a site that has been included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and thus would not create a significant hazard to the public or environment (California Environmental Protection Agency[CalEPA], 2021; California Department of Toxic Substances Control [DTSC], 2021; State Water Resources Control Board [SWRCB], 2021). No impact would occur.

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?

No Impact. The nearest public airport to the project site is the John Wayne Airport in the City of Santa Ana, approximately 8 miles southeast to the project site. The Joint Forces Training Base in the City of Los Alamitos is located approximately 7.6 miles west of the project site. As such, the proposed project is not located within

an airport land use plan nor within two miles of a public airport or public use airport (Airport Land Use Commission for Orange County, 2008; Google Earth Pro, 2021) and thus, would not result in a safety hazard or excessive noise for people residing or working in the project area. No impact would occur.

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

Less Than Significant Impact. The proposed project would share access with adjacent Sheraton Hotel via the existing access on Harbor Boulevard. A restricted access to the project site along Twintree Avenue would be provided to emergency vehicles, maintenance, and trash/delivery trucks only. During construction, there may be minor disruptions in traffic patterns with a temporary lane closure on Harbor Boulevard during the utilities upgrade. As needed, a Traffic Control Plan would be prepared to demonstrate how the traffic around the project will be controlled to maintain public safety and emergency access. The design of the proposed project would not permanently close any streets or lanes; any improvements needed for the adequate access to the project site would be reviewed by the City to ensure that access and circulation are maintained during construction.

The City of Garden Grove adopted Emergency Operations Plan in 2004, which is a multi-hazard plan that addresses the City's planned response to extraordinary emergency situations, which are typically considered large-scale disasters (City of Garden Grove, 2021). In addition, in 2020, the City adopted a Local Hazard Mitigation Plan (LHMP) to guide hazard mitigation planning to better protect the people and property of the City from the effects of natural disasters and hazard events (City of Garden Grove, 2020). The LHMP documents the hazard mitigation planning process and identifies relevant hazards and vulnerabilities and strategies the City will use to decrease vulnerability and increase resiliency and sustainability in the community. As discussed previously in Section VII. Geology and Soils in the environmental checklist of this IS/MND, the proposed project would be designed in compliance with the California Building Code seismic requirements and would implement the geotechnical investigation's design recommendations which would ensure seismic-related ground failure, including liquefaction, would not occur. Furthermore, as discussed previously, as a condition of approval, per Section 8.1.2 of the geotechnical investigation, prior to obtaining building permits from the City, additional site exploration and laboratory testing will be required to confirm the existing conditions throughout the project site and provide final design recommendations, which would be incorporated into an updated geotechnical investigation and implemented as a condition of approval (Geocon, 2018). In addition, the proposed project would be designed to ensure adequate emergency access is provided. Given this, implementation of the proposed project would not impair implementation of, or physically interfere with, the City's adopted Emergency Operation Plan or LHMP. Therefore, impacts would be less than significant.

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

No Impact. The project site is located in urbanized area of the City and is not located adjacent to any wildlands or an area where residences are intermixed with wildlands. According to the California Department of Forestry and Fire Protection (CAL FIRE)'s Fire Hazard Severity Zone (FHSZ) Viewer Map, the project site is also not within or near a state responsibility area or a very high fire severity zone (CAL FIRE, 2021). Therefore, implementation

of the proposed project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. No impact would occur.

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:			X	
i) Result in substantial erosion or siltation on- or off-site;			X	
ii) Substantially increase the rate, amount, or depth of surface runoff in a manner which would result in flooding on- or offsite;			X	
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 runoff; or			X	
iv) Impede or redirect flood flows			X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				X

Discussion: The discussion below is based on the Preliminary Hydrology Report, Preliminary Water Quality Management Plan (pWQMP), and Water Supply Assessment (WSA), prepared by Psomas (2022a, 2022b, & 2022c) included as Appendix F1, Appendix F2, and Appendix G, respectively. The pWQMP is a site-specific post-construction water quality management program intended to comply with the requirements of the local NPDES Stormwater Program. It would address pollutants of concern of the proposed project through implementation of applicable BMPs. The WSA evaluates whether the City can supply the water demands from the development of the proposed project as well as the remainder of the demands within its water service area after the proposed project is completed and 20 years into the future.

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

Less than Significant Impact. Numerous federal and state regulations and programs are designed to protect and enhance water quality, such as the Clean Water Act, the Porter-Cologne Water Quality Control Act, the NPDES Program, the Municipal Stormwater Permitting Program, and the Water Quality Control Plan for the Santa Ana River Basin. The proposed project would be required to comply with these requirements, in addition to the water quality requirements of the City of Garden Grove Municipal Code, Garden Grove Sanitary District, and the Garden Grove Public Works Water Service Division.

Pursuant to the Clean Water Act, the discharge of pollutants to waters of the U.S. from any point source is unlawful, unless the discharge is in compliance with a NPDES permit. Municipal and industrial stormwater discharges are also regulated under the NPDES program. The California State Water Resources Board maintains the California NPDES program through the Regional Water Quality Control Boards.

Construction activities that disturb one acre of land or more must apply for coverage under the State Water Resources Control Board General Construction Activity Stormwater Permit. To obtain coverage, a SWPPP must be prepared describing BMPs for erosion and sediment controls (i.e., short repeat cycles of irrigation water timing, use of mulch in planter areas), runoff water quality monitoring, waste disposal requirements, post-construction control measures and non-stormwater management controls must be prepared. The proposed project, which consists of constructing a resort hotel on a 3.72-acre site, would be required to obtain coverage under the General Construction Activity Stormwater Permit and a SWPPP would be required. Construction activities for the proposed project would include activities such as clearing and grading that would expose surface soils and could result in sediment and runoff in downstream receiving waters along with other miscellaneous waste. The control of construction-related pollutants, however, would be achieved through the implementation of BMPs identified in the SWPPP as required by the General Construction Activity Stormwater Permit.

According to the Preliminary Hydrology Report (Psomas, 2022a) (Appendix F1) and the pWQMP (Psomas, 2022b) (Appendix F2), the project site consists of 28 percent of impervious area; it is predominantly flat and drainage surface flows to Thackery Drive, then west onto Twintree Avenue, and south onto Buaro Street where it flows into a curb opening catch basin and enters the public storm drain system. The drainage ultimately flows through city and county owned facilities to Anaheim Bay.

With implementation of the proposed project, the project site would consist of 68 percent of impervious area. The post development drainage would be similar to the pre-development drainage. There is one drainage management area and runoff flows in the southern direction in both the pre- and post-development. All flows beyond the full design capture volume would follow the pre-development drainage pattern to leave the project site.

Existing drainage from the adjacent Sheraton Hotel currently surface flows through a culvert onto Thackery Drive and ultimately leaves the project site flowing west onto Twintree Avenue. With the proposed project, this offsite drainage would be routed to the new drive aisle along the west property line and continue to flow west onto Twintree Avenue to match the existing condition. These flows would not be mixed with the runoff of the proposed project.

Although impervious surfaces would be increased with implementation of the proposed project, no alteration of a course or stream would occur. Furthermore, the Preliminary Hydrology Report (Psomas, 2022a) (Appendix F1) and the pWQMP (Psomas, 2022b) (Appendix F2) prepared for the proposed project would ensure compliance with the NPDES Stormwater Program and include BMPs that would ensure no substantial alteration of the existing drainage pattern at the project site would occur. The pWQMP includes the use of bioretention as the site design BMP. Post-development, bioretention BMPs with no underdrains would be used to treat runoff and site drainage from the proposed project given the soils on the project site have been determined to have adequate infiltration capacity. Specifically, runoff from the proposed hotel would be collected using roof downspouts that would either flow directly into the top of the bioretention BMPs or outlet at grade and surface flow to the bioretention BMPs, where it would be filtered, then infiltrated onsite. The landscaping would include drought tolerant shrubs and trees in the interior and perimeter landscaping. Retained flows would be treated and metered prior to direction to off-site storm drains and the public storm drain system. The proposed project would meet the requirements of the Statewide Trash Amendment through implementation of the bioretention BMPs. Per the trash amendment requirements, the proposed treatment must trap all particles that are 5 millimeter or greater and the proposed project's bioretention BMPs would accomplish this task. Additionally, all onsite trash enclosures would be covered to reduce the amount of trash that could end up at the bioretention BMPs.

Also, the pWQMP incorporates non-structural and structural source control BMPs, as defined in the Orange County Drainage Area Management Plan (DAMP). For example, the non-structural BMPs proposed for source control and reduction/elimination of pollutants include providing educational environmental awareness materials to all employees and contractors during the initial hiring and orientation process, and annually thereafter; providing restrictions to all employees, contractors, etc. on certain activities conducted on the project site, such as vehicle washing, maintenance or repair outside of designated areas, hosing down of paved areas, and keeping dumpster lids open; maintaining common area landscape with efficient landscape and irrigation practices; and implementing trash management and litter control procedures to reduce pollution of drainage water. The structural BMPs include providing storm drain system labeling and signage on grate and drain inlets to alert the public to the destination of pollutants discharged into storm water; and using efficient irrigation systems and landscape design to minimize the runoff of excess irrigation water into the storm drain system.

The incorporation of BMPs prescribed in the WQMP would minimize impervious areas in addition to reducing potential pollutants that enter the surface flows as a result of project implementation, to the maximum extent practicable, as required by the Regional Water Quality Control Board. Prior to the commencement of grading and construction activities, a final WQMP would be prepared. With implementation of the SWPPP, WQMP, and BMPs, the construction and operation of the proposed project would not violate any water quality standards or waste discharge requirements, provide substantial additional sources of polluted runoff or otherwise substantially degrade water quality, nor would it substantially alter the existing drainage pattern of the project site or area. Therefore, impacts would be less than significant.

b) Substantially decrease 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 City's sources of water supply consist of groundwater and imported surface water. In the recent past the City has received, on average, about 70 percent of its water supply from its groundwater wells that access the Orange County Groundwater Basin and 30 percent from imported water from the Metropolitan Water District of Southern California (Metropolitan). The City's groundwater and imported water supplies are anticipated to remain stable based on studies and reports from the Orange County Water District and Metropolitan (Psomas, 2022c).

Groundwater was not encountered in any of the borings drilled to a maximum depth of 25 feet in the project site and no onsite groundwater resources would be used for the construction and operation of the proposed project. According to the WSA (Psomas, 2022c) (Appendix G), the total normal year water demand for the proposed project is 93.5 acre-feet per year (AFY) and this demand was included in the projections utilized in the City's 2020 Urban Water Management Plan (UWMP). Given this, the City would meet water demand through FY 2045, including the water demand generated by the proposed project. Furthermore, reliability of future water supplies to the region would be ensured through continued implementation of the Orange County Water District (OCWD) Groundwater Management Plan, OCWD's Long Term Facilities Plan, local agency programs, and the combined efforts and programs among member and cooperative agencies of Metropolitan. Thus, the WSA concluded a sufficient and reliable water supply for the City, now and into the future, including a sufficient water supply for the proposed project, during normal, dry and multiple dry years.

As mentioned above, the project site currently consists of 28 percent of impervious area; and with the construction of the proposed project, the impervious area would increase to 68 percent. However, the post development drainage would be similar to the pre-development drainage. With the proposed project, the offsite drainage would be routed to the new drive aisle along the west property line and continue to flow west onto Twintree Avenue to match the existing condition. These flows would not be mixed with the runoff of the proposed project. In addition, the Preliminary Hydrology Report (Psomas, 2022a) (Appendix F1) and the pWQMP (Psomas, 2022b) (Appendix F2) would ensure compliance with the NPDES Stormwater Program and include BMPs that would ensure no substantial alteration of the existing drainage pattern at the project site would occur. Given this, implementation of the proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. Therefore, impacts would be less than significant.

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

(i) Result in substantial erosion or siltation on- or off-site?

Less than Significant Impact. Implementation of the proposed project has the potential to result in erosion and siltation impacts during construction activities. However, as stated previously, the proposed project would maintain a similar drainage pattern compared to existing conditions, and there are no streams or rivers on the project site. As discussed in Response X. a) above, the proposed project would implement the erosion and sediment control BMPs from the SWPPP which would minimize erosion.

Compliance with applicable regulations for stormwater runoff would ensure that impacts related to erosion and siltation would be less than significant.

(ii) Substantially increase the rate, amount, or depth of surface runoff in a manner which would result in flooding on- or offsite?

Less than Significant Impact. Refer to Responses X. a) and X. c) (i), above. The proposed project would maintain a similar drainage pattern compared to existing conditions. According to the Preliminary Hydrology Report (Psomas, 2022a) (Appendix F1), the bioretention BMPs with no underdrain are required for the proposed project to reduce pollutants in stormwater discharges. The proposed drainage would be collected using roof downspouts, and flow directly into the bioretention BMPs. These bioretention BMPs would consist of a layer of mulch, sandy loam, and gravel. Once the stormwater passes through the planting material, the water would infiltrate into the site soils. As such, runoff from the project site would be minimized by proposed large planting areas and detaining the runoff during storm events in filtration planters (Psomas, 2022b) (Appendix F2). Therefore, the proposed project would not substantially increase the rate, amount, or depth of surface runoff in a manner which would result in flooding on- or offsite. Therefore, impacts would be less than significant.

(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 runoff?

Less than Significant Impact. Refer to Responses X. a), X. c) (i), and X. c) (ii), above. The post development drainage would be similar to the pre-development drainage. There is one drainage management area and runoff flows in the southern direction in both the pre- and post-development. All flows beyond the full design capture volume would follow the pre-development drainage pattern to leave the project site. Existing drainage from the adjacent Sheraton Hotel currently surface flows through a culvert onto Thackery Drive and ultimately leaves the project site flowing west onto Twintree Avenue. With the proposed project, this offsite drainage would be routed to the new drive aisle along the west property line and continue to flow west onto Twintree Avenue to match the existing condition. These flows would not be mixed with the runoff of the proposed project. In addition, the proposed project's BMPs would ensure that pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the project site. Therefore, impacts would be less than significant.

(iv) Impede or redirect flood flows?

Less than Significant Impact. Refer to Responses X. a), X. c) (i), X. c) (ii), and X. c) (iii) above. As stated previously, all flows beyond the full design capture volume would follow the pre-development drainage pattern to leave the project site. Existing drainage from the adjacent Sheraton Hotel currently surface flows through a culvert onto Thackery Drive and ultimately leaves the project site flowing west onto Twintree Avenue. With the proposed project, this offsite drainage would be routed to the new drive aisle along the west property line and continue to flow west onto Twintree Avenue to match the existing condition. These flows would not be mixed with the runoff of the proposed project. The proposed project would not substantially increase the rate or amount of surface runoff in a manner that would impede or redirect flood flows. Therefore, impacts would be less than significant.

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

Less than Significant Impact. According to the City’s LHMP (City of Garden Grove, 2020), tsunami and seiches hazards were excluded from the plan as the City is not on the coast or next to a large body of water. Thus, the proposed project is not located in a tsunami or seiche zone.

Regarding flood hazard, the proposed project is within Zone “X” according to the Flood Insurance Rate Map (06059C0141J) (FIRM) from the Federal Emergency Management Agency (FEMA) (FEMA, 2019). Zone “X” is comprised by areas with minimal flood hazard that are outside the Special Flood Hazard Area (SFHA) (SFHA is an area that will be inundated by the flood event having a 1 percent chance of being equaled or exceeded in any given year) (FEMA, 2020). Thus, the proposed project would be within a minimal flood hazard zone.

However, the entire City falls within the Prado Dam inundation area (City of Garden Grove, 2021) and the proposed project would be subject to flows due to failure or overflow at Prado Dam. However, the LHMP concluded that it is unlikely a dam failure will occur in the future that would impact the City as there have been no recorded events of dam failure in or around the City and Prado Dam has not been at risk of failure in the past. Therefore, impacts would be less than significant.

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

No Impact. As discussed above, with implementation of the SWPPP, WQMP, and BMPs, the construction and operation of the proposed project would comply with the NPDES Stormwater Program and Orange County DAMP. In addition, as discussed above, implementation of the proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. Given this, implementation of the proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. No impact would occur.

Sources

City of Garden Grove. 2020. *City of Garden Grove Local Hazard Mitigation Plan*. Available at: <https://ggcity.org/sites/default/files/City%20of%20Garden%20Grove%20LHMP%20Complete.pdf> (accessed August 2021).

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Psomas. 2022a. *Preliminary Hydrology Report – GG-Site B-2*. February. PDF.

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----. 2022c. *Site B-2 Hotel Water Supply Assessment*. March. PDF.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?				X
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?			X	

Discussion:

a) Physically divide an established community?

No Impact. The project site was previously disturbed and occupied by former residential and commercial uses which were demolished between 2004 and 2013. The north/northeastern parcels of the project site are paved and used for parking by the adjacent Sheraton Hotel, and the remaining parcels are comprised of dirt pads with limited vegetation that are mostly vacant except for the southeastern parcels that are used for temporary construction storage. The easterly portion of Thackery Drive from the centerline of the street has been demolished recently; the westerly paved street portion of Thackery Drive continues to remain. As such, the proposed project would not physically divide an established community.

The project site is located directly south of Sheraton Hotel, to the south (across Twintree Avenue) are commercial and residential uses, to the west are residential uses, and to the east (across Harbor Boulevard) of vacant lots which has been approved for a hotel use. The proposed PUD zoning designation and subsequent intended development of the site would be compatible with the surrounding area in intensity and density. The proposed project construction and operation would occur within the project site and would not include significant new infrastructure improvements, such as major roadways, that would disrupt the physical arrangement of any existing residential or commercial development in the area. During construction, there may be minor disruptions in traffic patterns with a lane closure on Harbor Boulevard during the utilities upgrade, but any such disruption would be for a short duration and would be subject to a Traffic Control Plan. Thus, the proposed project would not result in impacts related to physical division of an established community. No impact would occur.

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?

Less than Significant Impact. The primary land use plans, policies, and regulations applicable to the proposed project include the City’s General Plan and Garden Grove Municipal Code.

The project site has a General Plan land use designation of IW and is zoned PUD-141-01 and R-1-7. The parcels at 12241, 11261, 12271, 12291, 12311 and 12323 Harbor Boulevard; and 12246, 12252, 12262, 12282, 12292,

12312, and 12322 Thackery Drive are zoned PUD-141-01, while the parcels at 12251, 12261, 12281, 12291, 12311, and 12321 Thackery Drive are zoned R-1-7.

The IW is a land use designation for the area along Harbor Corridor, north of Westminster Avenue to just north of Chapman Avenue, which includes the project site. The IW designation is intended to provide for a mix of uses, including resort, entertainment, retail, hotel, and some higher density residential that are appropriate for a major entertainment and tourism destination (City of Garden Grove, 2021a). The proposed project involves construction of a full-service high-rise resort hotel which would meet the intent of the IW designation. The IW designation allows a maximum floor area ratio (FAR) of up to 5.0 for hotel resorts and entertainment venues. FAR results from dividing the total gross floor area of all buildings on a lot by the total area of that lot. The proposed project would develop approximately 691,693 square feet of hotel uses on the 3.72-acre (162,043.20 square feet) site, which would result in a FAR of 4.27, and be within the allowable FAR. Thus, the proposed project would be consistent with the IW designation.

The IW designation of the proposed project is implemented by the PUD zoning. Section 9.18.160.010 (Planned Unit Developments) of the Garden Grove Municipal Code states that planned unit developments may be permitted in any Mixed Use zone subject to the provisions of Section 9.16.030.020 (Planned Unit Development) of the Garden Grove Municipal Code. A PUD is a precise plan, adopted by ordinance that provides the means for the regulation of buildings, structures, and uses of land to facilitate the implementation of the General Plan. It is a way to create site-specific zoning requirements. The adopted PUD becomes the zoning classification of the property. As previously mentioned, the project site is currently zoned PUD-141-01 and R-1-7. As part of the proposed project, the entire project site would be rezoned to create a subzone, PUD-141-01(A), which would be consistent with the existing General Plan land use designation of IW and would facilitate the development of the proposed project. With this modification, no conflict with the property's zoning would occur. Therefore, impacts would be less than significant.

Additionally, the proposed project is not located within an airport land use plan nor within two miles of a public airport or public use airport (Airport Land Use Commission for Orange County, 2008; Google Earth Pro, 2021); the proposed project is also not located within the vicinity of a private airstrip (Google Earth Pro, 2021). The nearest public airport, John Wayne Airport, is located approximately 8 miles southeast to the project site in the City Santa Ana. The Joint Forces Training Base is located approximately 7.6 miles west of the project site in the City of Los Alamitos. Thus, there would be no conflict with the airport land use plan.

There are no adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plans in the City (City of Garden Grove, 2021b). Thus, the proposed project would not result in conflict with such plan.

As discussed previously, the proposed project would require the removal of two ornamental trees located along a sidewalk on Twintree Avenue within the public right-of-way. Chapter 11.32, Trees, of the City's Municipal Code serves as the City's Tree Ordinance, which provides strict guidelines regarding the removal or tampering of trees located within any public right-of-way. The Project Applicant would be required to comply with the standards identified in this chapter, which includes obtaining approval from the City Manager prior to removal of trees in the public right-of-way. Given this, implementation of the proposed project would not conflict with any local policies or ordinances protecting biological resources.

Therefore, the proposed project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigation an environmental effect. Therefore, impacts would be less than significant.

Source

Airport Land Use Commission for Orange County. 2008. Airport Land Use Commission for Orange County – Airport Planning Areas (Figure 1). Available at: https://files.ocair.com/media/2021-02/airportlu_20200604.pdf?VersionId=cMd6uGpbgOWGd3jMOS6TPJF3y5nMyA7F (accessed June 2021).

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Google Earth Pro. 2021.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES. 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?				X
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?				X

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?**
- 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 (a-b). According to the California Department of Conservation, the project site is located within an area designated as Mineral Resource Zone (MRZ)-3, which is an area where the significance of mineral deposits has not been evaluated (California Department of Conservation, 1995). Also, as discussed previously, the project site is zoned as Planned Unit Development (PUD-141-01) and Single-Family Residential Zone (R-1-7), neither of which allows for mining operations (City of Garden Grove, 2020 and 2021). In addition, there are no mining operations on the project site (California Department of Conservation, 2021) nor was project site previously used for mining operations (Nationwide Environmental Title Research, LLC [NETR], 2021). Therefore, implementation of the proposed project would not 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, nor 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 would occur.

Sources

City of Garden Grove. 2021. Zoning-Land Use Map. Available at: <https://ggcity.org/maps/zoning-land-use/> (accessed June 2021).

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Nationwide Environmental Title Research, LLC (NETR). 2021. Historic Aerials (v. 0.5.40). Available at:
<https://historicaerials.com/viewer> (accessed June 2021).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE. 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 general plan or noise ordinance, or applicable standards of other agencies?		X		
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
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?				X

Discussion: The discussion below is based on the *Garden Grove Hotel Site B-2 Noise Impact Study* prepared by RK ENGINEERING GROUP, INC. (RK) (2022b) included as Appendix H.

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 other agencies?

Less than Significant Impact with Mitigation Incorporated. As discussed in the *Garden Grove Hotel Site B-2 Noise Impact Study* prepared by RK (2022b) (Appendix H), noise is defined as sound that is loud, unpleasant, unexpected, or unwanted. Noise levels are measured as decibels (dB) on a logarithmic scale and weighted to frequencies audible by humans (“A-weighted”), expressed as dBA. The community noise equivalent level (CNEL) is the cumulative noise exposure in a community during a 24-hour period. CNEL adds 5 dBA for noise levels during the evening (between 7 p.m. and 10 p.m.), and 10 dBA for noise levels during the nighttime (between 10 p.m. and 7 a.m.). Similar to CNEL, the day/night average sound level (L_{dn}) considers the evening period as part of the daytime period (i.e., 7 AM to 10 PM). The time equivalent sound level (L_{eq}) is a measure of sound energy that accounts for noise fluctuations from moment to moment by averaging the louder and quieter moments, and giving more weight to the louder moments; it represents the equivalent continuous sound pressure level over a given period of time (FHWA, n.d.). Noise levels decrease with distance at a rate of 6 dBA per doubling of distance, assuming over an acoustically hard surface with no intervening topography or structures between source and receptor.

The proposed project is located within the City of Garden Grove and would thus be required to comply with the applicable noise standards and thresholds established in the City of Garden Grove’s General Plan (Noise Element) and Municipal Code. In addition, RK utilized the Federal Transit Administration (FTA)’s *Transit Noise and Vibration Impact Assessment* (2006) criteria for assessing construction noise impacts, and the Federal

Highway Administration (FHWA)'s *Traffic Noise Analysis and Abatement Policy and Guidance* for assessing operational noise impacts. A summary of the applicable noise standards and thresholds used in the noise analysis for the proposed project is provided below, followed by a summary of the construction and operational noise impacts.

Construction Noise Standards and Thresholds

Construction of the proposed project would comply with the noise limitation provisions set forth in the City of Garden Grove's Noise Ordinance, Garden Grove Municipal Code Sections 8.47.040 to 8.47.060, except that permitted hours and days of construction and grading would be as follows:

- Monday through Saturday - not before 7:00 a.m. and not after 8:00 p.m. (of the same day).
- Sunday and Federal Holidays – may work the same hours but be subject to the restrictions as stipulated in Sections 8.47.040 to 8.47.060 of the Municipal Code.

As discussed in Section 3.2 of this IS/MND, construction of the proposed project would occur during the daytime between 7:00 a.m. to 8:00 p.m. and thus would be exempt from the City's construction noise standard noted above. However, potential noise impacts are disclosed for informational purposes. For purposes of this analysis, RK used the construction noise criteria from the FTA's *Transit Noise and Vibration Impact Assessment* (2006) which assesses construction noise impacts based on the potential for adverse community reaction. For residential uses, the daytime noise threshold is 80 dBA L_{eq} for an 8-hour period.

Operational Noise Standards and Thresholds

The City's Noise Element establishes planning criteria for determining a development's noise/land use compatibility based on CNEL. The applicable noise/land use compatibility guidelines to the proposed project are the following:

- City's Noise Element - Transient Lodging – Motel, Hotels Noise/Land Use Compatibility Guidelines: 50-65 CNEL (Normally Acceptable⁴) and 60-70 CNEL (Conditionally Acceptable⁵)

The proposed project will be required to demonstrate compliance with the interior noise standards in order to be considered compatible with the proposed land use. Interior noise levels due to exterior sources must not exceed a CNEL or a day-night level (L_{dn}) of 45 dBA, in any habitable room.

In addition, the following operational noise standards from Chapter 8.47, Noise Control, of the City's Municipal Code are applicable to the project site and surrounding noise sensitive uses:

⁴ "Normally Acceptable" means that the specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

⁵ "Conditionally Acceptable" means that new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

- City's Municipal Code Exterior Noise Standards: 55 dBA from 7:00 a.m. to 10:00 p.m. for residential use (daytime noise standard); 50 dBA from 10:00 p.m. to 7:00 a.m. for residential use (nighttime noise standard); and 65 dBA for any time for hotel and motels use

The City's Municipal Code further states the following regarding operational noises:

"It shall be unlawful for any person at any location to create any noise, or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, when the foregoing causes the noise level:

1. The noise standard for a cumulative period of more than 30 minutes in any hour;
2. The noise standard plus 5 dB for a cumulative period of more than 15 minutes in any hour;
3. The noise standard plus 10 dB for a cumulative period of more than 5 minutes in any hour;
4. The noise standard plus 15 dB for a cumulative period of more than 1 minute in any hour;
5. The noise standard plus 20 dB for any period of time."

Also, RK utilized the following from the FHWA's *Highway Traffic Noise Analysis and Abatement Policy and Guidance* related to operational ambient noise impacts:

- **FHWA's Highway Traffic Noise Analysis and Abatement Policy and Guidance – Ambient Noise Impact:** A change in noise level of 3 dBA is considered barely perceptible and a change in noise level of 5 dBA is considered readily perceptible to the human ear. Typically, it takes a doubling of traffic volume along a roadway to cause a significant increase in ambient noise levels of more than 3 dBA. Therefore, for purposes of this analysis, and consistent with common practice in the City of Garden Grove, an increase of 3 dBA or more above ambient conditions would be considered a substantial permanent increase in ambient noise.

Construction Noise Impacts

As noted above, even though construction activity is exempt from the noise standards in the City's Municipal Code, potential noise impacts are disclosed for informational purposes. Thus, RK analyzed potential construction noise impacts using the FTA's *Transit Noise and Vibration Impact Assessment* (2006) criteria, which specifies 80 dBA L_{eq} over an 8-hour period as the daytime threshold for residential uses. A daytime threshold was determined appropriate as the proposed project's construction would not occur during the noise-sensitive nighttime hours in compliance with the City's Municipal Code. RK analyzed potential noise impacts during all phases of construction, including: site preparation, grading, building construction, paving, and architectural coating.

Noise levels were calculated based on an average distance of equipment over an 8-hour period to the nearest adjacent property. As discussed in the *Garden Grove Hotel Site B-2 Noise Impact Study* (RK, 2022b), the construction of the proposed project would result in a worst case construction phase noise level of 81.6 dBA L_{eq} , which would exceed the FTA construction noise criteria of 80 dBA L_{eq} . Given this, construction of the proposed project would generate temporary noise levels in exceedance of ambient conditions at the

residential uses surrounding the project site, which would be considered a potentially significant impact. However, implementation of the Mitigation Measures N-1 through N-3 shown below, in conjunction with PDF-13 through PDF-26, would reduce the construction noise level to 75.9 dBA L_{eq} , which would be below the FTA construction noise criteria of 80 dBA L_{eq} . Therefore, impacts would be less than significant.

Construction Noise Reduction Mitigation Measures

N-1 Prepare and submit a construction management plan to the City of Garden Grove prior to starting construction. The construction management plan shall ensure all contractors implement construction best management practices to reduce construction noise levels. Best management practices shall include, but not be limited to, the following:

- All construction equipment shall be equipped with muffles and other suitable noise attenuation devices (e.g., engine shields).
- Where feasible, electric hook-ups shall be provided to avoid the use of generators. If electric service is determined to be infeasible for the site, only whisper-quiet generators shall be used (i.e., inverter generators capable of providing variable load.)
- Use electric air compressors and similar power tools rather than diesel equipment, where feasible.
- Locate staging area, generator areas, and stationary construction equipment as far from the adjacent residential homes, as feasible.
- Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 5 minutes.
- Provide notifications and signage in readily visible locations along the perimeter of construction sites that indicate the dates and duration of construction activities, as well as provide a telephone number where neighbors can inquire about the construction process and register complaints to a designated construction noise disturbance coordinator.
- All construction activities shall take place during daytime hours, between 7:00 a.m. to 8:00 p.m., per the requirements of the City of Garden Grove conditions of approval.
- No impact pile driving or blasting activities shall be permitted on the project site during construction.

N-2 Construct the eight (8) foot high masonry block noise barrier wall along the western and northwestern property lines during the first phase of construction, prior to performing any excavation or grading activities.

N-3 Install a temporary noise barrier wall along the northern and southern property lines of the project site to shield adjacent sensitive receptors from construction noise. The temporary barrier should be installed at the first phase of construction, prior to performing any excavation or grading activities

and shall remain till the construction is completed. The temporary noise barrier shall be a minimum of six (6) feet high and present a solid face area such as by installing sound absorptive material or blankets which can be installed in multiple layers for improved noise insulation.

Operational Noise Impacts

The daytime noise analysis considered all proposed project noise sources operating simultaneously during daytime (7:00 a.m. to 10:00 p.m.) hours at the nearest adjacent property lines, whereas the nighttime noise analysis considered all proposed project noise sources operating simultaneously during nighttime hours (10:00 p.m. to 7:00 a.m.) at the nearest adjacent property lines. Both the daytime and nighttime analyses took into account implementation of PDF-13 through PDF-26, which include, among other things, the prohibition of pool deck operations and loading/delivery activity during nighttime hours, installation of a dense vegetation barrier along the interior pool deck wall to provide some sound absorption and visual screening to further reduce noise levels impacting the adjacent residential homes, and the installation of a 8-foot high masonry block noise barrier wall along the western and northwestern property line.

Daytime noise levels generated by the operation of the proposed project would range from 42.6 to 48.7 dBA L_{eq} at surrounding residential land uses and 40.1 dBA L_{eq} at the adjacent hotel land use; nighttime noise levels generated by the operation of the proposed project would range from 41.8 to 47.6 dBA L_{eq} at surrounding residential land uses and 39.4 dBA L_{eq} at the adjacent hotel land use. Given this, the operation of the proposed project would not exceed the City's daytime noise standards (i.e., 55 dBA L_{eq} for surrounding residential land uses and 65 dBA L_{eq} for adjacent hotel land use) or the City's nighttime noise standards (i.e., 50 dBA L_{eq} for surrounding residential land uses and 65 dBA L_{eq} for adjacent hotel land use) at the adjacent property lines. Furthermore, the change in existing ambient daytime and nighttime noise levels resulting from operation of the proposed project would not result in an increase of 3 dBA or more above ambient levels, thus not resulting in a significant permanent increase in ambient noise levels.

In addition, typically, it takes a doubling of traffic volumes along a roadway to cause a significant increase in ambient noise levels of more than 3 dBA. The proposed project is projected to generate approximately 5,122 average daily trips (ADT). The current ADT along Harbor Boulevard is approximately 27,585. Hence, the proposed project would not double the amount of traffic volume along Harbor Boulevard. Also, the proposed project would restrict access to the project site along Twintree Avenue to emergency vehicles, maintenance, and trash/delivery trucks. Daily truck deliveries are expected to be less than 20 trucks per day whereas existing ADT along Twintree Avenue, west of Harbor Boulevard, is approximately 2,000 vehicles per day. The proposed project would not cause a doubling of traffic along Twintree Avenue. Thus, operation of the proposed project's would not cause a significant increase (i.e., an increase of 3 dBA or more) in roadway noise at Harbor Boulevard and Twintree Avenue.

Lastly, based on the City's noise/land use compatibility per the City's Noise Element, the project site is expected to experience future noise levels ranging from 60 dBA to 70 dBA CNEL, which would fall within normally acceptable to conditionally accepted noise and land use zone. Additionally, the proposed project would be designed to ensure compliance with the City's interior noise standards (i.e., not exceed CNEL or L_{dn} of 45 dBA in any habitable room), which would further demonstrate noise/land use compatibility with the proposed hotel land use.

In summary, the operation of the proposed project would not generate a substantial permanent increase in ambient noise levels in the vicinity of the project site in excess of standards established in the City's General Plan and Municipal Code. Therefore, impacts would be less than significant.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact. As discussed in the *Garden Grove Hotel Site B-2 Noise Impact Study* (RK, 2022b) (Appendix H), groundborne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero, where they can be transient or continuous in nature. The effects of groundborne vibrations typically only cause a nuisance to people, but at extreme vibration levels, damage to buildings may occur. Although groundborne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Groundborne noise is an effect of groundborne vibration and only exists indoors since it is produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves.

Operation of the proposed hotel would not result in any groundborne vibration as activity associated with hotel operation would not involve the use of any equipment or processes that would result in potentially significant levels of ground vibration. However, construction activities would result in varying degrees of temporary ground vibration, depending on the specific construction equipment used and operations involved. Groundborne vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. The effects of ground vibration may be imperceptible at the lowest levels, with low rumbling sounds; detectable at moderate levels; and damaging to nearby structures at the highest levels. Groundborne vibrations from typical construction activities do not often reach levels that can damage structures in proximity to construction, but their effects may manifest and be noticeable in buildings that are within 25 feet of construction activities. One major concern with regard to construction vibration is potential building damage, which is assessed in terms of peak particle velocity (ppv), typically in units of inches per second (in/sec). In addition to structural damage, the vibration of room surfaces affects people as human annoyance. Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events.

To determine the vibratory impacts during project construction, RK used thresholds from the California Department of Transportation (Caltrans)'s *Transportation and Construction Vibration Guidance Manual* (2020) related to potential vibration annoyance and potential vibration damage to structures, which are shown in Tables 5 and 6 below. Specifically, Table 5 provides thresholds for maximum vibration limits for when vibration becomes potentially annoying, whereas Table 6 provides thresholds for potential structural vibration damage resulting from vibratory impacts.

Table 5: Vibration Annoyance Potential Criteria

Human Response	Transient Sources PPV (in/sec)	Continuous/Frequent Intermittent Sources PPV (in/sec)
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.01
Strongly perceptible	0.90	0.10
Severe	2.00	0.40

Source: RK, 2022b.

Notes: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment. A “severe” human response would be considered a potentially significant impact.

Table 6: Vibration Damage Potential Threshold Criteria

Structure and Condition	Transient Sources PPV (in/sec)	Continuous/Frequent Intermittent Sources PPV (in/sec)
Extremely fragile historic buildings ruin ancient monuments	0.12	0.08
Fragile buildings	0.20	0.10
Historic and some old buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures ¹	1.00	0.50
Modern industrial/commercial buildings	2.00	0.50

Source: RK, 2022b.

Notes: All structures surrounding the project site are “new residential structures.” No historical or fragile buildings are known to be located within the vicinity of the site. Thus, the “new residential structure” threshold is applicable to the proposed project. A potentially significant impact would occur if transient sources are greater than or equal to 2.00 ppv or if continuous/frequent intermittent sources are greater than or equal to 0.50 ppv.

Also, for the vibration impact analysis, RK used typical construction vibration levels from the Federal Transit Administration (FTA)’s *Transit Noise and Vibration Impact Assessment* (2006) and then extrapolated to the façade of the nearest adjacent structures within 25 feet. The nearest sensitive receptors to the project site were the residential structures located adjacent to the western property line. The use of substantial vibration inducing equipment or activities, such as pile drivers or blasting, is prohibited.

The main source of vibration impacts during construction of the proposed project would be the operation of equipment such as bulldozer activity during site preparation, loading trucks during grading and excavation, vibratory rollers during paving, and caisson drilling. Table 7 below shows the proposed project’s construction-related vibration analysis at the nearest structures to the project construction area. Construction impacts are assessed from the closest area on the project site to the nearest adjacent structure. All structures surrounding the project site are “new residential structures”; no historical or fragile buildings are known to be located within the vicinity of the project site. As shown in Table 7, project-related construction activity would not cause any potential damage to the nearest structures.

Table 7: Construction Vibration Impact Analysis

Construction Activity	Distance to Nearest Structure (ft)	Duration	Calculated Project Vibration Level – PPV (in/sec)	Damage Potential Level	Vibration Annoyance Threshold (Severe) – PPV (in/sec)	Vibration Structural Damage Threshold – PPV (in/sec)	Significant Impact?
Large Bulldozer	25	Continuous /Frequent	0.089	Extremely Fragile Buildings, Ruins Ancient Monuments	0.40	0.50	No
Vibratory Roller	25	Continuous /Frequent	0.210	Fragile Buildings	0.40	0.50	No
Loaded Trucks	25	Continuous /Frequent	0.076	No Impacts	0.40	0.50	No
Caisson Drilling	25	Continuous /Frequent	0.089	Extremely Fragile Buildings, Ruins Ancient Monuments	0.40	0.50	No

Source: RK, 2022b.

Project construction would thus result in calculated vibration levels that are under the vibration structural damage and vibration human annoyance thresholds and therefore would not result in any potential damage to the nearest structures nor result in severe human annoyance. Further, construction vibration impacts will be temporary and intermittent. Operation of the proposed project, a resort hotel, would not generate vibration impacts. Given this, implementation of the proposed project would not result in the generation of excessive groundborne vibration or groundborne noise levels. Therefore, 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?

No Impact. The nearest public airport, John Wayne Airport, is located approximately 8 miles southeast to the project site in the City of Santa Ana. The Joint Forces Training Base is located approximately 7.6 miles west of the project site in the City of Los Alamitos. As such, the proposed project is not located within an airport land use plan nor within two miles of a public airport or public use airport (Airport Land Use Commission for Orange County, 2008; Google Earth Pro, 2021); the proposed project is also not located within the vicinity of a private airstrip (Google Earth Pro, 2021). Given this, implementation of the proposed project would not expose people residing or working in the project area to excessive noise levels. No impact would occur.

Sources

Airport Land Use Commission for Orange County. 2008. Airport Land Use Commission for Orange County – Airport Planning Areas (Figure 1). Available at: https://files.ocair.com/media/2021-02/airportlu_20200604.pdf?VersionId=cMd6uGpbgOWGd3jMOS6TPJF3y5nMyA7F (accessed June 2021).

Federal Highway Administration (FHWA). No date (n.d.). Sound Level Descriptors (FHWA-HEP-17-053). Available at: <https://www.fhwa.dot.gov/Environment/noise/resources/fhwahep17053.pdf> (accessed August 2021).

Google Earth Pro. 2021.

RK ENGINEERING GROUP, INC. (RK) 2022b. *Garden Grove Hotel Site B-2 Noise Impact Study*. April. PDF.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING. 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)?			X	
b) Displace substantial numbers of existing people or housing, especially affordable housing, necessitating the construction of replacement housing elsewhere?				X

Discussion:

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)?

Less Than Significant Impact. The proposed project involves construction of a full-service high-rise resort hotel, which is a transient use that would not directly introduce new residents. As stated in Section 3.2 of this IS/MND, construction of the proposed project would provide up to 210 temporary jobs over approximately 30-month period. It is anticipated that construction workers would come from local labor pools and would not relocate to the City from other communities. It is also anticipated that the jobs generated from the project operation would be filled by the local labor pool. It is unlikely that the employees would relocate from other regions for the proposed project. Given this, implementation of the proposed project would not directly or indirectly induce substantial unplanned population growth in the area. Therefore, impacts would be less than significant.

b) Displace substantial numbers of existing people or housing, especially affordable housing, necessitating the construction of replacement housing elsewhere?

No Impact. The project site was previously disturbed and occupied by former residential and commercial uses which were demolished between 2004 and 2013. The north/northeastern parcels of the project site are paved and used for parking by the adjacent Sheraton Hotel, and the remaining parcels are comprised of dirt pads that are mostly vacant except of the southeastern parcels that are used for temporary construction storage. The easterly portion of Thackery Drive from the centerline of the street has been demolished recently; the westerly paved street portion of Thackery Drive continues to remain. As such, the project site does not contain any housing and no people would be displaced as a result of the proposed project. Therefore, implementation of the proposed project would not displace housing nor displace substantial numbers of people, necessitating the construction of replacement housing. No impact would occur.

Source

N/A

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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XV. PUBLIC SERVICES.

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:

Fire protection?

X

Police protection?

X

Schools?

X

Parks?

X

Other public facilities?

X

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:**

Fire protection?

Police protection?

Less Than Significant Impact. The Orange County Fire Authority (OCFA) has been responsible for fire protection services in the City of Garden Grove since 2019. There are seven fire stations in the City, which are part of OCFA Division 1 and make up OCFA’s Battalion 11 (OCFA, 2022a). The following fire stations would serve the project site:

OCFA Fire Station	Distance from Project	Apparatus	Daily Staffing
ORC86 12232 West Street, Garden Grove, CA 92840	0.5 miles	Paramedic Engine – E86	Fire Captain, Fire Engineers, 2 x Firefighters
ORC83 12132 Trask Avenue, Garden Grove, CA 92843	1.2 miles	Paramedic Engine – E83	Fire Captain, Fire Engineers, 2 x Firefighters
ORC78 501 North Newhope Street, Santa Ana, CA 92703	2.5 miles	Paramedic Engine – E78	Fire Captain, Fire Engineers, 2 x Firefighters

Source: OCFA, 2022b

There are currently no plans for additional facilities or manpower needed for the project site. The OCFA’s stated standard of service for urban areas is 7 minutes and 20 seconds total response time, 80 percent of the time. The estimated travel time from the first fire station to the project site is 5 minutes, which meets or exceeds OCFA standards (OCFA, 2022b).

The Garden Grove Police Department, located at 11301 Acacia Parkway in Garden Grove, provides police protection services. The Garden Grove Police Department is divided into an East and a West Division with 43 sworn officers assigned to each Division (86 total sworn officers). The average response time from February 6 through March 15, 2021, was 5 minutes and 57 seconds in the West Division and 4 minutes and 43 seconds in the East Division for a City-wide average of 5 minutes and 20 seconds (City of Garden Grove, 2021). The project site is located within the East Division.

The proposed project is a transient use that would not directly introduce any new residents that could impact fire or police protection services. Furthermore, the proposed project would not include the construction of new or physically altered fire or police facilities. In addition, as discussed in the Population and Housing Section of this IS/MND, the proposed project would generate jobs that would likely be filled by the local labor pool and would not indirectly generate new residents. Lastly, the proposed project would be in compliance with all standard conditions with regard to development, including water supply, built in fire protection systems, road grades and width, access, building materials, applicable local fire codes, ordinances, California Fire Code regulations, and California Building Code requirements. Additionally, an internal (onsite) fire water system would be constructed to provide adequate firefighting capability along with potable and irrigation water service laterals meters, and backflow devices (PSOMAS, 2022). Therefore, impacts would be less than significant.

Schools?

No Impact. As discussed, above, the proposed project is a transient use that would not increase the number of children within the Garden Grove Unified School District. Also, the proposed project would not include or require the construction of new or physically altered school facilities. In addition, as discussed in the Population and Housing Section of this IS/MND, the proposed project would generate jobs that would likely be filled by the local labor pool and would not indirectly generate new residents or school-aged children. Nonetheless, the proposed project would be subject to the applied mitigation school fees currently applied

to new development in the City by the Garden Grove Unified School District (City of Garden Grove, 2021). The Project Applicant would provide the Community and Economic Development Department a proof of payment of appropriate school fees, adopted by the Garden Grove Unified School District, prior to the issuance of building permits in accordance with Section 65995(b) of the California Government Code. No impact would occur.

Parks?

No Impact. The proposed project includes themed pool experience providing recreation for guests staying at the hotel. The proposed project is a transient use and would not generate new residents that would increase demand for existing parks. Please refer to Response XVI. Recreation of this IS/MND. The proposed project would not require creation of additional parkland or increase the burden on existing parks and/or other recreational facilities. No impact would occur.

Other public facilities?

No Impact. Because the proposed project is a transient use, it is not reasonably foreseeable that it would increase demands on other public facilities (such as libraries). No impact would occur.

Source

City of Garden Grove. 2021. Section 4.12 Public Services, City of Garden Grove Focused General Plan Update and Zoning Amendments Draft EIR. August 18, 2021. Adopted November 9, 2021. Available at: <https://ggcity.org/sites/default/files/2021-08/FGPUZA%20DEIR.pdf> (accessed March 2022).

Orange County Fire Authority (OCFA). 2022a. E-mail correspondence with Tamera Rivers, Management Analyst. April 7, 2022.

----. 2022b. OCFA Facilities and Services Questionnaire. April 7, 2022.

Psomas. 2022. *Site B-2 Hotel Water Supply Assessment*. March. PDF.

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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XVI. RECREATION.

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?

X

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

X

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?

No Impact. The proposed project is a transient use that would not directly introduce any new residents. While the proposed project would generate jobs during construction and operation, these jobs would likely be filled by the local labor pool and would not indirectly generate new residents. In addition, the proposed project includes themed pool experience and other recreational activities for guests staying at the hotel. Based on the proposed commercial/resort use of the proposed project, no increase in use of the existing parks within the immediate area is anticipated that would substantially cause the deterioration of an existing park. No impact would occur.

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

No Impact. The proposed project involves construction of a full-service high-rise resort hotel with 500 guest suites with balconies; themed pool experience with lazy river; storage and loading areas; event space with a 600-person maximum occupancy theater; a grand ballroom; two meeting rooms; a variety of food and beverage opportunities throughout the hotel; themes amenities; an arcade; and a spa and fitness center for the proposed hotel guests. Construction and operation of these hotel amenities are analyzed in this IS/MND. The proposed project does not call for new housing that would require the creation of open space or require the payment of park-in-lieu fees to assist in mitigating the impacts to the existing park system within the City. No impact would occur.

Source

N/A

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION. Would the project:				
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X	
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?		X		
d) Result in inadequate emergency access?			X	

Discussion: The discussion below is based on the *Site B-2 Hotel Traffic Impact Study* (RK, 2022c) and *Garden Grove Hotel Site B-2 ULI Shared Parking Study* (RK, 2022d) prepared by RK ENGINEERING GROUP, INC. (RK) included as Appendix I and Appendix J, respectively.

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

Less than Significant Impact. The proposed project would not significantly change or modify any of the existing public transit, bicycle, or pedestrian facilities or make any modification that could conflict with adopted policies, plans or programs (i.e., Master Plan of Streets and Highways, Existing Transit Routes, Master Plan of Bikeway Facilities), or modify the safety of such facilities. Additionally, the proposed project would encourage and support multi-modal transit by implementing trip reduction measures (refer to Mitigation Measure GHG-7) that would reduce the number of auto-based trips generated by the proposed project and encourage the use of transit, bicycling, and walking. Thus, implementation of the proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Therefore, impacts would be less than significant.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less Than Significant Impact. Based on the City’s Traffic Impact Analysis (TIA) Guidelines, there are three types of screening that may be applied to effectively screen out land use projects from a project-level Vehicle Miles Traveled (VMT) assessment. The screening criteria are: Transit Priority Area (TPA) Screening, Low VMT Area Screening, and Project Type Screening.

Per the City’s TIA Guidelines, land use projects located within a TPA may be presumed to have a less than significant VMT impact absent substantial evidence to the contrary, if the project meets the following four conditions:

1. Has a Floor Area Ratio of 0.75 or greater;
2. Does **not** include more parking for use by residents, customers, or employees of the project than required by the City;
3. Is consistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Southern California Association of Governments); and
4. Does **not** replace affordable residential units with a smaller number of moderate- or high-income residential units.

A TPA is defined as a half-mile area around and existing major transit stop or an existing stop along a high-quality transit corridor (Public Resources Code Section 21099(a)(7)). A major transit stop is defined as a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods (Public Resources Code Section 21064.3).

The proposed project is located within a half-mile of the Harbor Boulevard/Chapman Avenue intersection, which is a major transit stop. The following Orange County Transportation Authority (OCTA) bus routes serve the Harbor Boulevard/Chapman Avenue intersection with a morning and afternoon peak commute period frequency of service interval of 15 minutes or less: OCTA Route 54 – Garden Grove to Orange (via Chapman Avenue) and OCTA Route 543 – Fullerton to Santa Ana (via Harbor Boulevard).

Additionally, the proposed project meets the four conditions listed above.

1. As stated in Section XI. Land Use and Planning, the proposed project has a FAR of 4.27 which is greater than the threshold of 0.75;
2. The proposed project would provide a total of 528 parking spaces, which is the same amount of parking spaces required by the City (528 parking spaces) as discussed in the *Site B-2 ULI Shared Parking Study* (RK, 2022d) (Appendix J);
3. The proposed project is consistent with the applicable Sustainable Community Strategy, as determined by the City; and
4. Since the project site is currently vacant and the proposed land use is not residential, the proposed project does not replace affordable residential units with a smaller number of moderate- or high-income residential units.

The proposed project satisfies the TPA screening criteria. Therefore, impacts related to VMT would be less than significant.

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 with Mitigation Incorporated. The proposed project would share access with the adjacent Sheraton Hotel via the existing access on Harbor Boulevard. To ensure that the proposed project has a less than significant impact on potential safety and hazard issues, the following recommendations are provided, which are considered standard site plan review requirements:

- Ensure adequate radius is provided for appropriate vehicles (i.e., fire trucks, buses, limousines, trash trucks, etc.) to navigate the project access and roundabout;
- Provide adequate drive aisle and lane widths;
- Parking spaces should not be located near or within the roundabout. If absolutely necessary, the spaces near the roundabout should be valet-operated and used for long-term parking. In any case, adequate clearance and space should be provided for vehicles navigating the roundabout.
- The entrance roundabout should be designed appropriately and per engineering standards for roundabouts, including geometric elements such as Center Island, travel lanes, deflections, and inscribed circles. Appropriate design needs to be considered and implemented for all appropriate modes of transportation including pedestrians and bicycles.
- Provide appropriate and adequate wayfinding and signage for drivers to easily navigate the entrance and exit.
- During times of high activity for the proposed project and/or the adjacent Sheraton Hotel, provide adequate valet staff and means to ensure traffic does not spill back onto the roundabout or Harbor Boulevard and impede the flow of vehicles.
- Prior to final circulation design, provide a detailed plan including drive aisle dimensions and roundabout details for review by a registered traffic engineer.

Additionally, a queuing analysis was performed to determine if adequate capacity is currently available to accommodate the left-turn vehicular queues at the study intersections and found some of the left-turn movements at the following intersections would require additional left-turn capacity (Appendix I):

- Harbor Boulevard and Orangewood Avenue
- West Street and Chapman Avenue
- Harbor Boulevard and Lampson Avenue
- Haster Street and Lampson Avenue
- Harbor Boulevard and Trask Avenue

The queuing analysis found that, with implementation of Mitigation Measures TR-1 through TR-5, the study intersections listed above would not have substantial increase hazards due to a geometric design feature.

Left-Turn Queue Mitigation Measure

- TR-1 Coordinate with the City of Anaheim to determine if the project is required to make a fair-share contribution to extend the left-turn capacity up to 266 feet at the intersection of Harbor Boulevard and Orangewood Avenue.
- TR-2 Pay full cost to extend the left-turn capacity up to 169 feet at the intersection of West Street and Chapman Avenue.
- TR-3 Pay full cost to extend the left-turn capacity up to 105 feet at the intersection of Harbor Boulevard and Lampson Avenue.

TR-4 Pay full cost to extend the left-turn capacity up to 133 feet at the intersection of Haster Street and Lampson Avenue.

TR-5 Pay full cost to extend the left-turn capacity up to 381 feet at the intersection of Harbor Boulevard and Trask Avenue.

Lastly, the proposed project would not result in development of any new land uses that would be incompatible with existing and planned land uses in the surrounding areas.

Thus, with Mitigation Measures TR-1 through TR-5, implementation of the proposed project would not substantially increase hazards due to a geometric design or incompatible uses. Therefore, impacts would be less than significant with mitigation incorporated.

d) Result in inadequate emergency access?

Less Than Significant Impact. The proposed project would share access with the adjacent Sheraton Hotel via the existing access (signalized) on Harbor Boulevard. Another access to the project site would be provided via one full access driveway (unsignalized) on Twintree Avenue. However, the proposed project is restricting access to the project site along Twintree Avenue to emergency vehicles, maintenance, and trash/delivery trucks only. All employee and guest access to the project site, including tourist buses and shuttles, will be via Harbor Boulevard. Thus, the project access on Twintree Avenue would not experience any vehicle trips associated with employees or outside guests/visitors to the proposed hotel. Additionally, as stated above, the existing access on Harbor Boulevard would follow the standard site plan review requirements to ensure that the proposed project would not have a significant impact on safety and hazard issues. As such, the proposed project would not result in inadequate emergency access. Therefore, impacts would be less than significant.

Source

RK ENGINEERING GROUP, INC. (RK) 2022c. *Site B-2 Hotel Traffic Impact Study*. April. PDF.

---. 2022d. *Garden Grove Hotel Site B-2 ULI Shared Parking Study*. April. PDF.

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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XVIII. TRIBAL CULTURAL RESOURCES. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §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:

- a) 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 § 5020.1(k), or
- b) 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 § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

X

X

Discussion:

- a) **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 § 5020.1(k), or**
- b) **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 § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

Less than Significant with Mitigation Incorporated (a-b). According to the *Site B-2 Hotel Project: Cultural, Paleontological and Tribal Cultural Resources Technical Memorandum* prepared by AECOM (2022) (Appendix D), the sensitivity of the project site for tribal cultural resources appears low. The Native American Heritage Commission (NAHC) conducted a Sacred Lands File (SLF) search, which was negative indicating no resources in the NAHC SLF database were present at the project site. In addition, a Native American contact program was also conducted to solicit input from regional Native American individuals and organizations in compliance with Assembly Bill 52. No resources were identified as a result of outreach to Native American representatives and no tribes requested consultation under AB 52. No potential tribal cultural resources were identified during the archival research, and any prehistoric archaeological remains are likely to have been destroyed in the middle twentieth century when residential and commercial uses were constructed at the project site. However, if any Native American cultural material is encountered within the project site, Mitigation Measure

TCR-1 is provided to reduce potential impacts. With implementation of Mitigation Measure TCR-1, the proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource pursuant to Public Resources Code §21074. Therefore, impacts would be less than significant with mitigation incorporated.

Tribal Cultural Resources Mitigation Measure

TCR-1 If any tribal cultural resources are encountered within the project site, interested Native American parties established in the contact program, in compliance with Assembly Bill 52 (AB 52), will be notified. The City of Garden Grove will coordinate with interested Native American parties, as established during AB 52 consultation, to determine whether the resources constitute tribal cultural resources and solicit any comments the Native American parties may have regarding appropriate treatment and disposition of the resources. All attempts will be made to preserve tribal cultural resources in place or leave resources in an undisturbed state in compliance with all applicable laws. Work in the vicinity of the discovery (15-meter radius) will halt until the appropriate assessment and treatment of the resource is determined in consultation with Native American parties (work can continue elsewhere on the project site).

Source

AECOM. 2022. *Site B-2 Hotel Project: Cultural, Paleontological and Tribal Cultural Resources Technical Memorandum*. March 2022. PDF.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
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?			X	
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?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

Discussion:

- a) **Require or result in the relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?**

Less than Significant Impact. The project site is located in a highly urbanized area where existing water, wastewater treatment, storm drainage, electric power, natural gas, and telecommunication facilities are in place. Specifically, there are existing water, sewer, natural gas, and electric/telecommunication lines that are located on the east side of the project site along Harbor Boulevard. Also, as discussed previously in Section X, Hydrology and Water Quality, of this IS/MND, existing drainage surface flows on the project site flows to Thackery Drive, then west onto Twintree Avenue, and south onto Buaro Street where it flows into a curb opening catch basin and enters the public storm drain system. The proposed project would be served by the existing water, wastewater treatment, storm drainage, electric power, natural gas, and telecommunication facilities and would not require the relocation of such facilities or construction of new or expansion of such facilities (OCSD, 2022).

Also, as discussed previously in Section X, Hydrology and Water Quality, of this IS/MND, the post development drainage would be similar to the pre-development drainage and would be designed in compliance with the North Orange County WQMP requirements, including installation of bioretention BMPs with no underdrain, where the proposed drainage would be collected using roof downspouts, and flow directly into the bioretention BMPs on the south side of the project site; all flows beyond the full design capture volume would then follow the pre-development drainage pattern to leave the project site and thus could be accommodated by the existing storm water drainage system.

Lastly, as discussed previously in Section VIII, Greenhouse Gas Emissions, of this IS/MND, per PDF-11, the proposed project would be designed in compliance with the California Building Energy Efficiency Standards and Garden Grove Municipal Code Section 18.04.0101, including the provisions for bicycle parking, electric vehicle charging stations, energy efficiency, material conservation, and water/waste reduction. To further ensure the operation of the proposed project would not result in inefficient or wasteful energy consumption or conflict with the City's energy goals CON-4 and CON-5, the proposed project would implement Mitigation Measures GHG-2 through GHG-6, which would promote the use of renewable energy sources and increase energy efficiency, such as installing on-site renewable energy sources capable of generating up to 25 percent of the proposed project's total electricity demand, implementing water conservation strategies, and prohibiting the use of onsite natural gas fire places or fire pits, thereby reducing the proposed project's demand on the existing electrical, natural gas, and water/waste infrastructure system. Please see (b) below regarding the project's water demand and related water facilities. Therefore, impacts would be less than significant.

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 Impact. A WSA was prepared for the proposed project pursuant to Senate Bill 610 (Appendix G), which evaluated whether the City could supply the water demands from development of the proposed project in conjunction with the remainder of the water demands within its water service area after the proposed project is completed, both now and 20 years into the future (Psomas, 2022). According to the WSA, the City's sources of water supply consist of groundwater (from Orange County Groundwater Basin [Basin] managed by the OCWD) and imported surface water (from the Metropolitan Water District of Southern California [Metropolitan] supplied by the City's Metropolitan member agency, the Municipal Water District of Orange County [MWDOC]). In addition, the City's Water Services Division maintains eight emergency interconnections with adjacent water retailers that can be temporarily utilized on an as needed basis. As reported in the City's 2020 UWMP, the City's water demand in Fiscal Year (FY) 2019/20 was 21,979 AFY (including water losses). The City's water use for FY 2045 is projected to be approximately 22,792 AFY. Analysis of water supply projections for the City demonstrated that projected supplies would meet demand through FY 2045. These projections considered water development programs and projects as well as water conservation, as described in the City's 2020 UWMP, MWDOC's 2020 UWMP, and Metropolitan's 2020 UWMP. The City's groundwater and imported water supplies are anticipated to remain stable based on studies and reports from OCWD and Metropolitan, respectively.

According to the WSA, the total water demand for the proposed project would be 93.5 AFY without water losses or non-revenue water, and is projected to require a total supply of 99.4 AFY (which takes into account potential water losses at 5.95 percent of total production, consistent with the City's most recently adopted UWMP). Non-revenue water occurs due to meter inaccuracies, fire suppression, fire flow testing, hydrant and pipe flushing, pipeline breaks, etc. The proposed project's water demand was included in the projections utilized in the City's 2020 UWMP (as it included future planned development of hotels within the International West Resort Area along Harbor Boulevard [Focus Area A] consistent with the City's 2030 General Plan, which the project site is located within). Given this, as stated above, the City would meet water demand through FY 2045, including the water demand generated by the proposed project. Furthermore, reliability of future water supplies to the region would be ensured through continued implementation of the OCWD Groundwater Management Plan, OCWD's Long Term Facilities Plan, local agency programs, and the combined efforts and programs among member and cooperative agencies of Metropolitan. Thus, the WSA concluded a sufficient and reliable water supply for the City, now and into the future, including a sufficient water supply for the proposed project, during normal, dry and multiple dry years. Therefore, impacts would be less than significant.

- 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 Impact. All of the wastewater generated within the service area is collected by the City, discharged to OCSD interceptor sewers, then treated by OCSD and OCWD's joint Groundwater Replenishment System (GWRS) project (Psomas, 2022). Per correspondence received from OCSD dated May 3, 2022, there is adequate wastewater treatment capacity to serve the proposed project's projected demand in addition to OCSD's existing commitments. Therefore, 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?**
- e) **Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

Less than Significant Impact (d-e). Solid waste collection and disposal service in the City is provided via the Garden Grove Sanitary District's (GGSD) private contract with Republic Services (City of Garden Grove, 2021a). As part of their contract, Republic Services implements the City's recycling program (Recycle Garden Grove), which combines automated trash collection with a broad recycling and yard waste collection operation to reduce the volume of waste dumped in local landfills and to conserve natural resources. The waste stream generated by the City is processed and sorted at the CVT Regional Material Facility and Transfer Station in the City of Anaheim, which is permitted to handle 6,000 tons/day of solid waste (City of Garden Grove, 2021b; California Department of Resources Recycling and Recovery [CalRecycle], 2021b). The non-recyclable waste is primarily disposed of at one of the three active Orange County Landfills - Frank R. Bowerman (FRB) Landfill, located at 11002 Bee Canyon Access Road in the City of Irvine, which is permitted to accept a maximum of 11,500 tons of waste per day with an operational end date of 2053; Olinda Alpha Landfill, located at 1942 N. Valencia Avenue in the City of Brea, which is permitted to accept a maximum of 8,000 tons of waste per day with an operational end date of 2036; and, Prima Deshecha Landfill, located at 32250 Avenida La Pata in the

City of San Juan Capistrano, which is permitted to accept a maximum of 4,000 tons of waste per day with an operational end date of 2102 (Orange County Waste & Recycling, 2021; CalRecycle, 2021c, 2021d, and 2021e).

The proposed project would generate approximately 1.4 tons of waste per day (RK, 2022).⁶ Republic Services would provide solid waste collection and disposal services to the proposed project, which would include participation in the City's recycling program. The solid waste generated by the proposed project could be accommodated by the CVT Regional Material Facility and Transfer Station as well as any of these three Orange County Landfills. Furthermore, the proposed project would comply with all applicable federal, state, and local management and reduction statutes and regulations related to solid waste, including the CALGreen waste diversion requirements (International Code Council, 2019) and mandatory recycling requirements per the GGSD Code of Regulations (GGSD, 2010). Given this, the proposed project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Therefore, impacts would be less than significant.

Sources

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⁶ RK's *Garden Grove Hotel Site B-2 Air Quality and Greenhouse Gas Impact Study* (2022) indicates that operation of the proposed project would generate a total of approximately 525.24 tons/year of waste. This total was divided by 365 to calculate the tons/day rate.

International Code Council. 2019. 2019 California Green Building Standards Code (CALGreen). Available at: <https://codes.iccsafe.org/content/CAGBSC2019/cover> (accessed August 2021).

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Psomas. 2022. *Site B-2 Hotel Water Supply Assessment*. March. PDF.

RK ENGINEERING GROUP, INC. (RK). 2022. *Garden Grove Hotel Site B-2 Air Quality and Greenhouse Gas Impact Study*. April. PDF.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
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?				X
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
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?				X

Discussion:

- a) **Substantially impair an adopted emergency response plan or emergency evacuation plan?**
- 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?**
- c) **Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?**
- 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?**

No Impact (a-d). The project site is not at risk of wildfire as there are no high fire severity zones or wildland-urban interface areas within the City (City of Garden Grove, 2021). As discussed previously, the project site is located in an urbanized area of the City and according to the California Department of Forestry and Fire Protection’s (CAL FIRE) Fire Hazard Severity Zone Map, the project site and surrounding areas are classified as Local Responsibility Areas (CAL FIRE, 2021). Refer to Response XVII. Transportation d) for discussion on emergency access and Response X. Hydrology and Water Quality for discussion on project site drainage. Therefore, no impact would occur.

Source

CAL FIRE. 2021. FHSZ Viewer Map. Available at: <https://egis.fire.ca.gov/fhsz/> (accessed May 2021).

City of Garden Grove. 2021. *Garden Grove General Plan, Chapter 11, Safety Element*. Public Review DRAFT – August 2021. Adopted November 9, 2021. Available at: https://ggcity.org/sites/default/files/2021-09/Chapter11GG_SafetyElement_PublicReview_08-2021.pdf (accessed March 2022).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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XXI. MANDATORY FINDINGS OF SIGNIFICANCE.

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

X

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)?

X

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

X

Discussion:

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

Less than Significant with Mitigation Incorporated. As stated previously, the California black rail is the only sensitive species (State Threatened) with the potential to be found on the project site. However, the project site is located in a highly urbanized area and was previously disturbed and occupied by former residential and commercial uses. As such, the project site does not provide suitable habitat for the California black rail. Additionally, the California black rail was last sighted in December 1986 in the City of Orange. On this basis, it is unlikely that there would be an occurrence of this species at the project site. During construction, the proposed project would require removal of the non-native grass and the two (2) ornamental trees. While no sensitive plants or wildlife would be impacted by vegetation removal activities, there is a potential for impacts

to occur to raptors and other nesting birds protected under the MBTA that could nest within these trees. Implementation of Mitigation Measure BIO-1 would reduce the potential impacts to raptors and other nesting birds to less than significant.

As stated previously, no historical resources were identified on the project site. However, there is a potential for unknown or undiscovered archaeological resources to be encountered during construction activities. Therefore, Mitigation Measure CR-1 would be implemented. If human remains are discovered during construction activities, Mitigation Measure CR-2 would be implemented. To address the low to moderate potential for encountering paleontological remains during construction activities, Mitigation Measure G-1 is proposed. Lastly, if tribal cultural resources are encountered during construction activities, Mitigation Measure TCR-1 would be implemented. Therefore, with implementation of Mitigation Measures, CR-1 and CR-2, G-1, and TCR-1, the impacts to archaeological resources, human remains, paleontological resources, and tribal cultural resources would be less than significant.

- 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 with Mitigation Incorporated. As described in the analysis within this IS/MND, the proposed project would not result in cumulatively considerable significant impact since all potentially significant impacts would be less than significant based on compliance with regulatory requirements, implementations of BMPs, and mitigation measures identified in this IS/MND. Impacts during construction would be short-term, temporary, and localized to the project site. All project construction and operational impacts would be mitigated to a less than significant level.

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

Less than Significant with Mitigation Incorporated. As described in the analysis within this IS/MND, implementation of the proposed project would not result in any impacts that are significant and unavoidable or cumulatively considerable. The implementation of the mitigation measures, BMPs, and regulatory requirements identified in this IS/MND would reduce all potentially significant impacts to a less than significant level. Therefore, the proposed project would not result in impacts that would cause substantial adverse effects on human beings, either directly or indirectly.

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