INITIAL STUDY
FOR
31451 COAST HIGHWAY

Prepared For:

City of Laguna Beach
Community Development Department
505 Forest Avenue
Laguna Beach, CA 92651

May 2023

EcoTierra consulting

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I. INTRODUCTION

A. INTRODUCTION AND REGULATORY GUIDANCE

An Initial Study (IS) is conducted by a lead agency to determine if a project may have a significant effect on the environment (CEQA Guidelines Section 15063[a]). If there is substantial evidence that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) must be prepared, in accordance with California Environmental Quality Act (CEQA) Guidelines Section 15064(a). However, if the lead agency determines the impacts are, or can be reduced to, less than significant, a Mitigated Negative Declaration (MND) or Negative Declaration (ND) may be prepared instead of an EIR (CEQA Guidelines Section 15070[b]). Pursuant to CEQA Guidelines Section 15070, a MND or ND is appropriate when the project's Initial Study identifies potentially significant effects, but:

a. Revisions to the project plan were made that would avoid or reduce the effects to a point where clearly no significant effects would occur; and

b. There is no substantial evidence that the project, as revised, may have a significant effect on the environment.

This IS prepared by the City of Laguna Beach (including an attached Environmental Checklist form) determined that the proposed project will not have a significant environmental effect, and the preparation of an EIR is not required. This IS/MND has been prepared in accordance with Section 15070 of the State California Environmental Quality Act (CEQA) Guidelines.

B. LEAD AGENCY

The lead agency is the public agency with primary responsibility over a proposed project. In accordance with CEQA Guidelines Section 15051(b)(1), "the lead agency will normally be the agency with general governmental powers." The project would be approved by the City of Laguna Beach. Therefore, based on the criteria described above, the City of Laguna Beach, Community Development Department, Planning Division is the lead agency for the proposed project.

C. PURPOSE AND DOCUMENT OGRANIZATION

The purpose of this IS/MND is to evaluate the potential environmental effects of the project. The document is divided into the following sections:

I. INTRODUCTION

This section provides an introduction and describes the purpose and organization of this document.

II. INITIAL STUDY CHECKLIST

This section includes the project background and a detailed description of the project. This section describes the environmental setting for each of the environmental subject areas; evaluates a range of impacts classified as “no impact,” “less than significant impact,” “less than significant impact with mitigation incorporated,” or “potentially significant impact” in response to the environmental checklist and provides an environmental determination for the project.

III. REFERENCES

This section identifies resources used in the preparation of the IS/MND.

II. INITIAL STUDY CHECKLIST

A. PROJECT DESCRIPTION

1. Project Title:

31451 Coast Highway Project

2. Lead Agency Name and Address:

City of Laguna Beach
Community Development Department, Planning Division
505 Forest Avenue
Laguna Beach, CA 92651

3. Lead Agency Contact Person and Phone Number:

Martina Caron, AICP
Principal Planner

Amber Dobson
Planning Manager
949.464.0362
mcaron@lagunabeachcity.net
adobson@lagunabeachcity.net

4. Project Location:

31451 Coast Highway
Laguna Beach, CA 92651

5. Applicant's Name and Address:

Tonya Reyna
16530 Ventura Boulevard, Suite 305
Encino, CA 91436

6. General Plan Land Use Designations:

Village Low Density (3-7 D.U./Acre)

7. Zoning Designation:

R-1, Residential Low Density

8. Surrounding Land Uses and Setting:

The project site is located within an urbanized setting in the City of Laguna Beach (City). Property in the surrounding area is characterized by low-density neighborhoods. Surrounding land uses include the Pacific Ocean shoreline to the west, Coast Highway to the east and single-family residential land uses beyond, and single-family residential land uses to the north and south. There is a partially in-filled natural drainage channel to the north. Similar to the project site, surrounding land use designations are Village Low Density. Refer to **Figure 1** and **Figure 2, Views of Surrounding Uses**.

9. Description of Project:

The proposed development ("project") involves the construction of a new single-family residential structure on a vacant bluff top parcel lot on Coast Highway in the City of Laguna Beach. The project site is comprised of one parcel with a total buildable lot area of approximately 0.56 acre. The project consists of a new three level structure with a total of 7,584 square feet of livable space with related retaining walls, driveway, deck, pool, and an attached three-car garage. Please see Figures 3 through Figure 7, below, for proposed site plans and building sections. Table 1, below, is a project summary to help illustrate what is proposed.

Project Setting

The project site is located at 31451 Coast Highway in the City of Laguna Beach in south Orange County, just west of the intersection of Coast Highway and Bluff Drive, a private street. Regional vehicular access to the site includes California State Route 1 (Coast Highway), to I-5, and I-405 via Laguna Canyon Road. **Figure 3, Regional and Vicinity Location Map** show the project's regional location.

Existing Conditions

The project site, which consists of a bluff top parcel within Assessor Parcel Number (APN) 056-032-26, is rectangular in shaped, and totals approximately 0.56-acre (24,338 square feet). The project site is currently undeveloped with the exception of an existing electrical utility box and an associated three-foot high retaining wall along the northern edge of the project site. Site vegetation consists of weeds, grasses, shrubs, and sparse trees. The project site consists of a gently sloping pad trending southwesterly adjacent to Coast Highway, followed by a steeply sloping area to a second pad area, followed by a coastal bluff descending to the Pacific Ocean shoreline. Site elevations vary between approximately 15 feet and 123 feet for an overall relief of roughly 108 feet.[1] **Figure 4, Aerial Photograph** show the project site boundaries. **Figure 5, Views of the Project Site**, show the existing conditions of the site.

The project site is located in a Very High Fire Hazard Severity Zone (VHFHSZ) and a Seismic Hazard Landslide Area.[2]

Project Components

The project would include vegetation clearing, grading, and construction of a single-family residential use, retaining walls, driveway, deck, pool, and other site finishes (e.g., landscaping) on an undeveloped project site that fronts the Pacific Ocean. The project would be comprised of a three-story, approximately 7,584 square foot single-family residence with an approximate 604 square foot three car garage, 5 bedrooms, 1,425 square feet of elevated decks, new site/retaining walls, pool, spa, BBQ, reflecting pond, and landscaping. Refer to **Table 1, Project Development Summary,** for a

[1] Coastal Bluff Edge Evaluation, Proposed Single-Family Development, 31451 S. Coast Highway, Laguna Beach, Orange County, California 92651, Assessor's Parcel Number (APN) 056-032-26, prepared by GeoSoils, Inc., May 15, 2020. Refer to **Appendix A** of this document.

[2] City of Laguna Beach, GIS Map, https://lagunabeach.maps.arcgis.com/apps/webappviewer/index.html?id=75a3aa3236c7475bb5e81925d130a763. Accessed October 2022.

summary of the project. **Figures 6, 7, and 8** show the Lower, Middle, and Upper Level living areas. **Figures 9** and **10** show the project elevations.

Other project components include the installation of landscaping, site lighting, driveway construction, and connection to offsite utilities (sewer, domestic water, electrical, telecommunications) in the right-of-way on Coast Highway. The project would include stormwater detention features, including a Biofiltration system, located at the rear yard, located on the western end of the project site.

Table 1
Project Development Summary

Land Use	Amount (SF)
Residential	
Lower Level	1,754.28
Middle Level	2,956.60
Upper Level	2,873.35
Total Square Footage	**7,584.23**
Other	
Garage (3-car)	603.89
Mechanical	240.34
Deck Area	1,424.67
sf = square feet *Source: HORST Architects, November 2022.*	

Landscaping improvements would include planting of drought resistant trees, shrubs, and ornamental grasses and would be compatible with the surrounding neighborhood. Non-view impacting trees and shrubs would be used and maintained at proper height. The planting plans are shown in **Figures 11** and **12**.

All exterior lighting to be low voltage and 5 Watt max. The chosen light fixtures for landscape lighting would only light and highlight elements within the project site. Lighting would be placed so as not to have negative visual impact on neighboring uses. Wall sconces would have light deflectors or diffusers.

The project would include implementation of a Fuel Modification Plan on the project site.[3]

Construction

Typical construction equipment would be used during project construction, including bulldozers, dump trucks, and excavator trucks. Construction staging would be located on the project site and an Erosion Control Plan, including sediment control best management practices (BMPs) would be implemented during construction.

The project would include up to 4,340 cubic yards (CY) of soil cut, 1,070 CY of soil fill, for a total of 3,270 CY of net soil export.

[3] AM&M Request for Joe Reyna, 718 The Strand, Hermosa Beach, CA 90254, prepared by FIREWISE 2000, LLC, January 27, 2022. Refer to **Appendix B** of this document.

The length of time anticipated for construction of the project is approximately 25 months, starting March 2024. Project phases and duration are anticipated below:

- Grading and Excavation—24 weeks
- Foundations—36 weeks
- Interiors and finishing—50 weeks (includes framing)

The project would be operational in March 2026.

Permits and Approvals

The project would require the following permits and approvals:

- Design Review
- Coastal Development Permit
- Building Permit
- Grading Permit

10. Other Public Agencies Whose Approval Is Required:

No other approvals by outside public agencies are required.

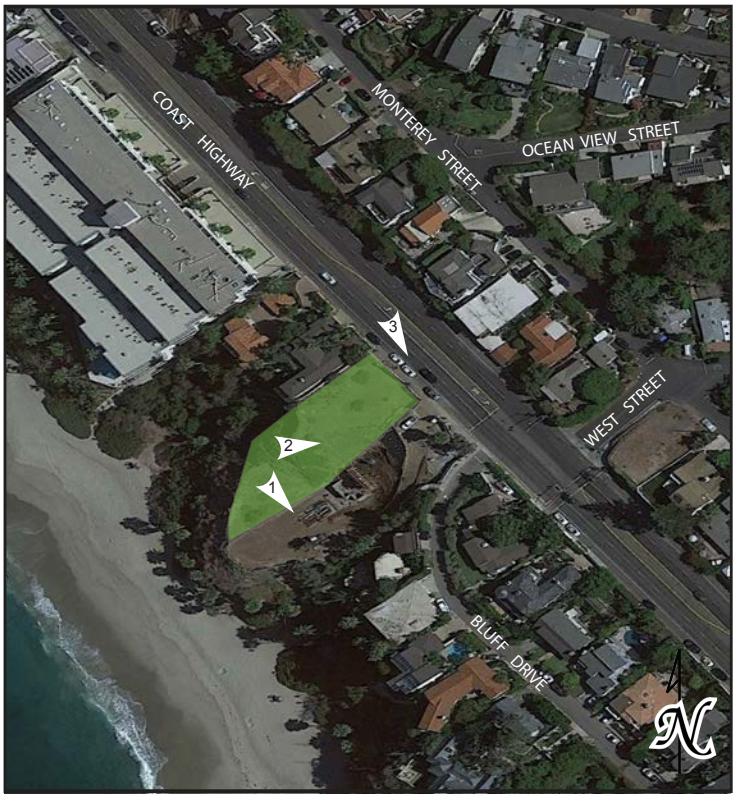
11. Have California Native American Tribes Traditionally and Culturally Affiliated with the project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1:

As part of the process of identifying cultural resources issues in or near the project site, the City sent letters inviting tribes to consult with the City on October 10, 2022. The City requested a response within 30 days of receipt as specified by Assembly Bill 52 (AB 52). One tribe responded, the Gabrielino Tongva Indians of California. The City of Laguna Beach initiated consultation with the tribe and the requests were addressed through discussions with the representative and email correspondence.

View 1: View looking southeast from the Project Site towards adjacent residential uses.

View 2: View looking east from the Project Site towards the construction site of the proposed adjacent residential use.

View 3: View looking southeast from Coast Highway towards the construction site of the proposed adjacent residential use.



PROJECT SITE

PHOTO LOCATION MAP

Source: GoogleEarth, December 2022.

Figure 1
Views of Surrounding Uses
Views 1, 2, and 3

View 4: View looking north from Coast Highway towards residential uses.

View 5: View looking north from Coast Highway towards residential uses.

View 6: View looking southwest from Coast Highway towards an adjacent residential use.

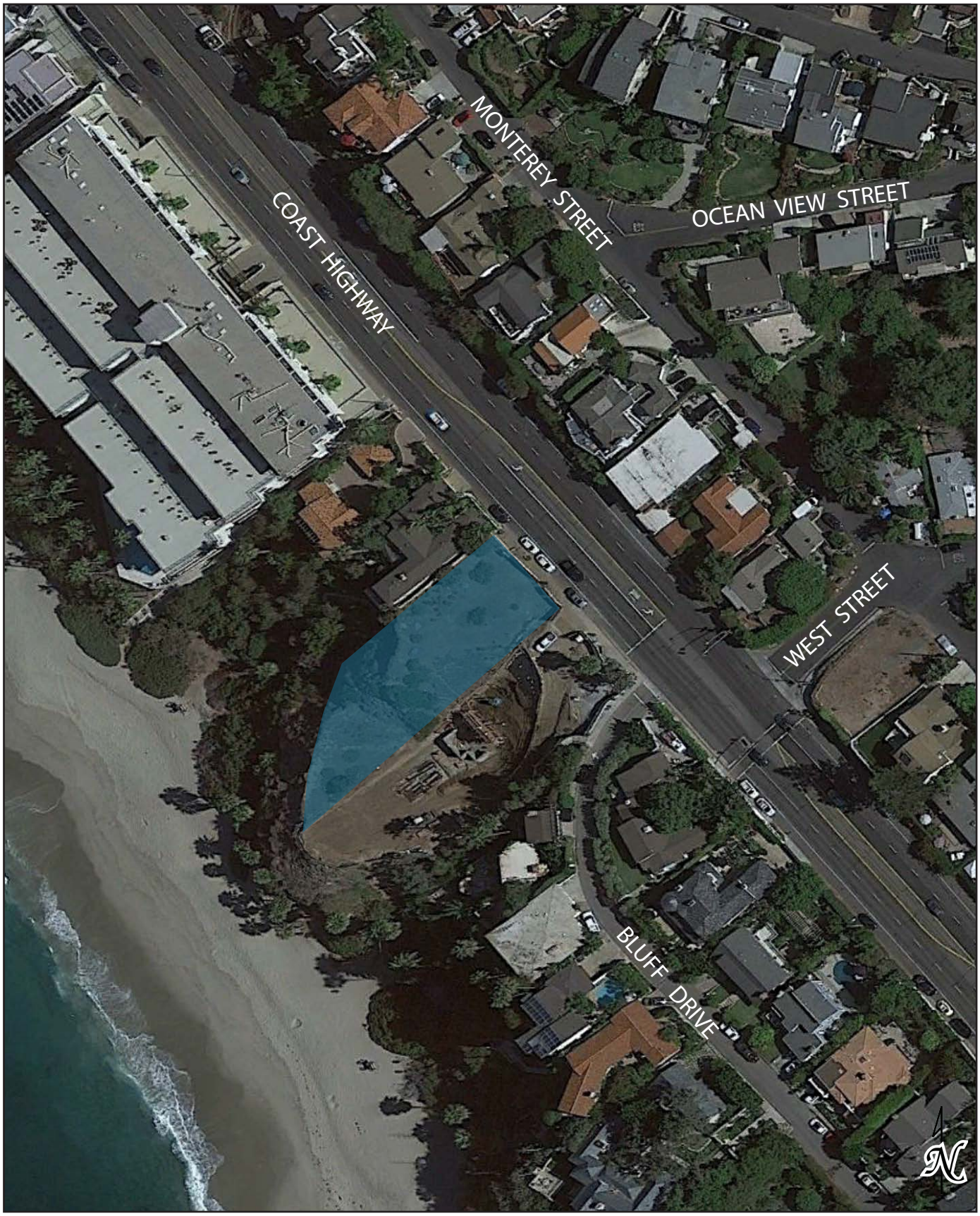
PHOTO LOCATION MAP

Source: GoogleEarth, December 2022.

Figure 2
Views of Surrounding Uses
Views 4, 5, and 6

Source: OpenStreetMaps, September 2022.

Figure 3
Regional and Vicinity Location Map



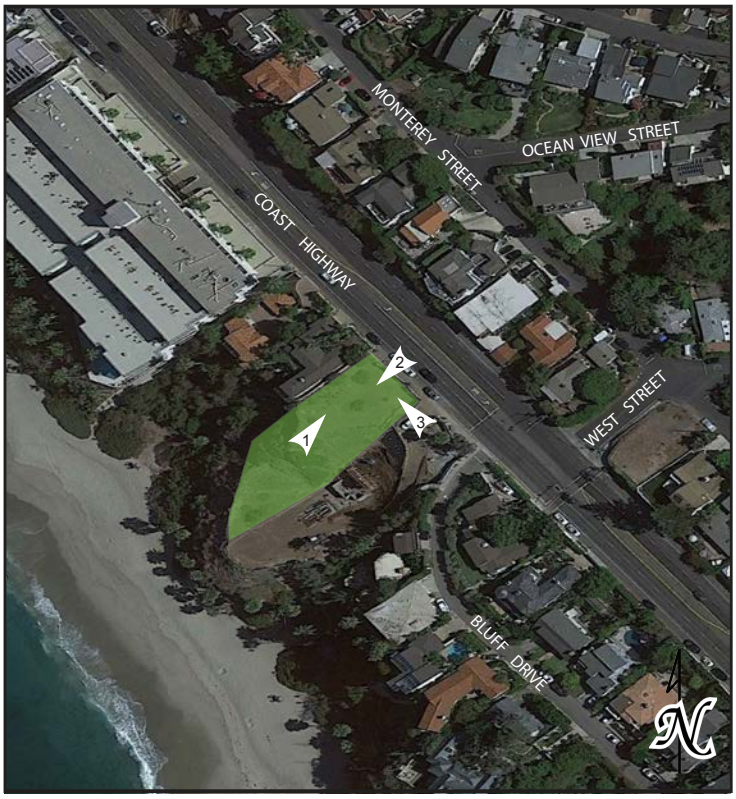
Project Site
Source: Google Earth, September 2022.

Figure 4
Aerial Photograph

View 1: View looking northeast across the Project Site towards Coast Highway.

View 2: View looking southwest from Coast Highway across the Project Site.

View 3: View looking northwest across the Project Site.

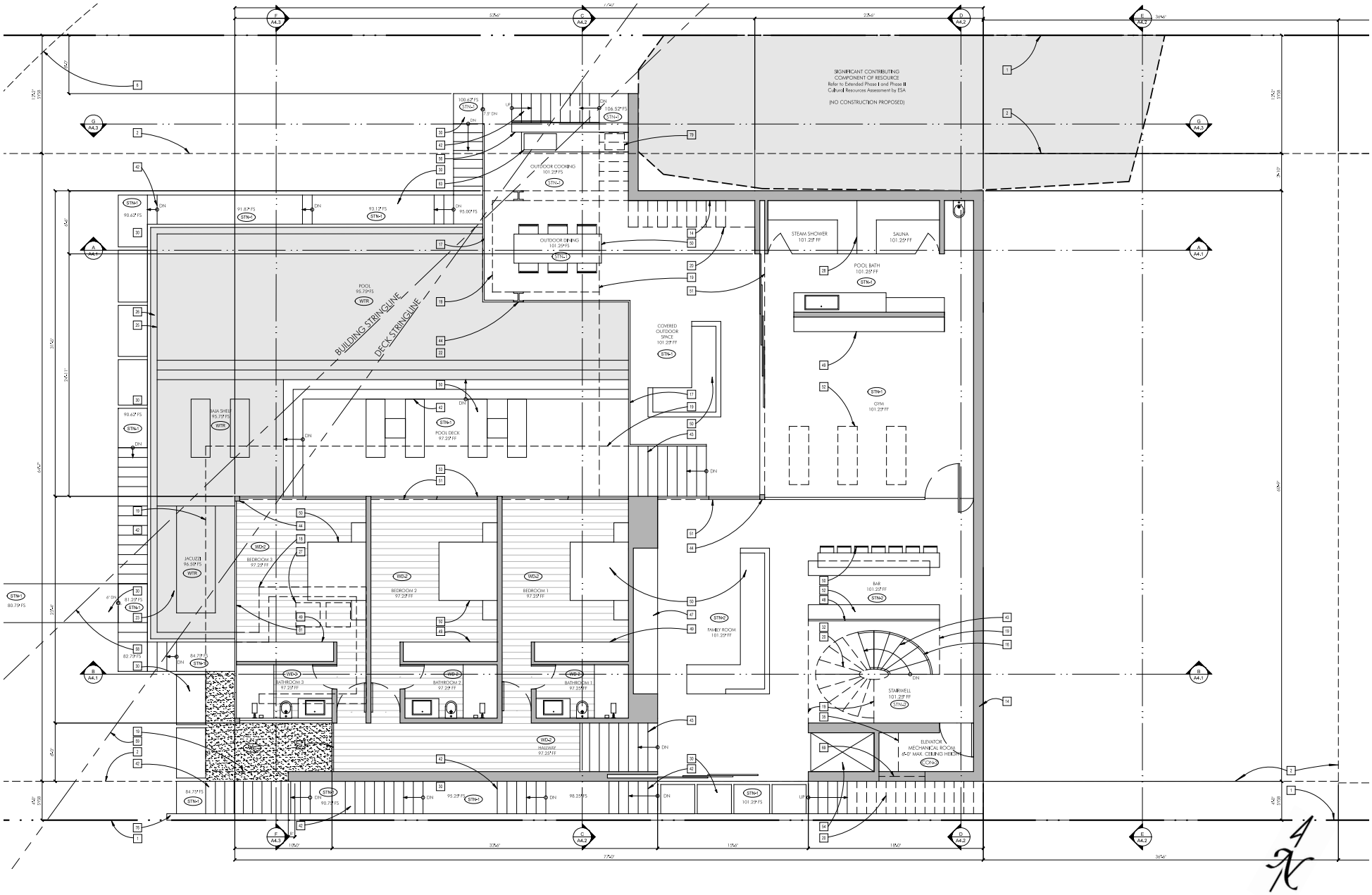


PROJECT SITE

PHOTO LOCATION MAP

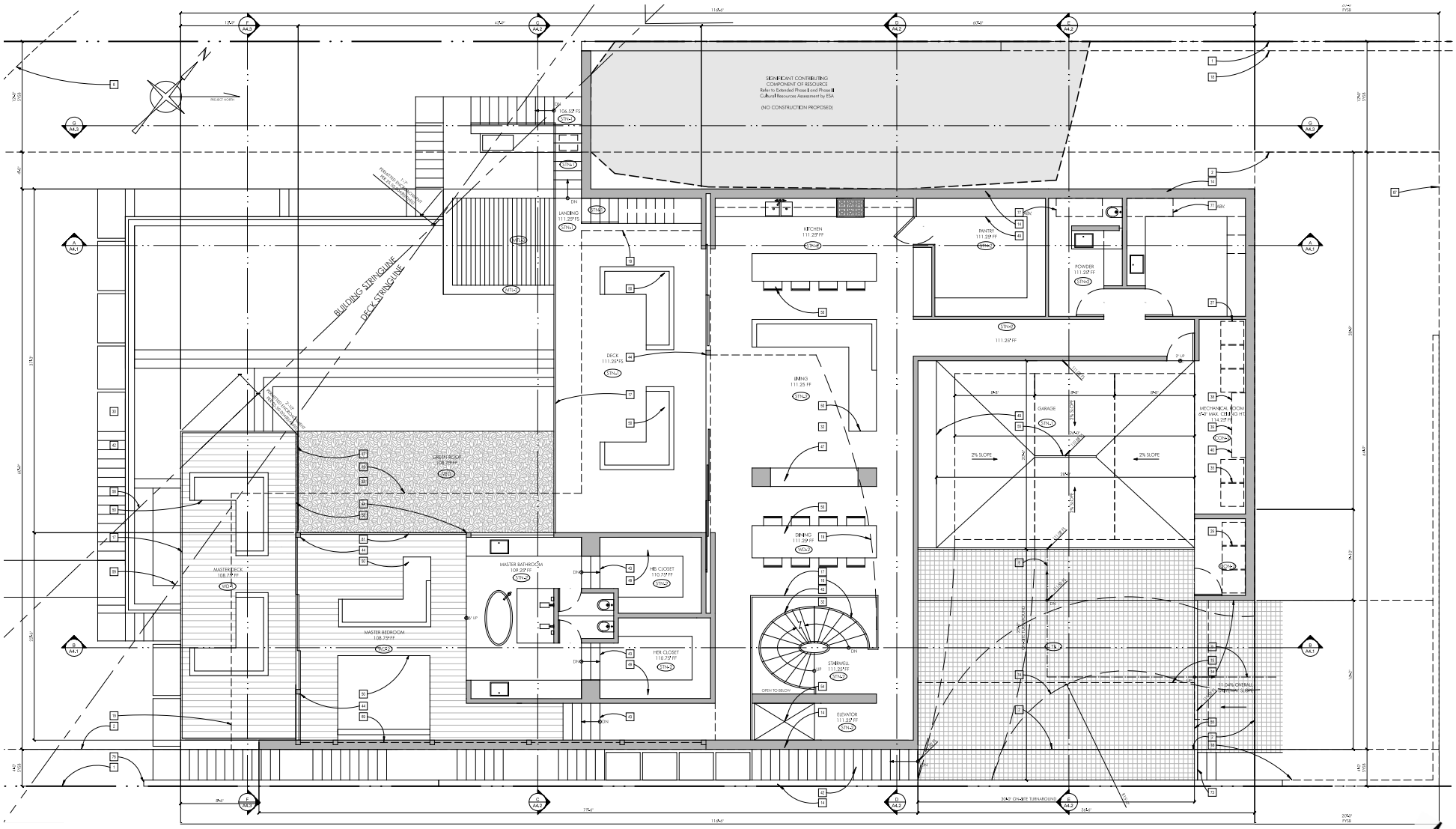
Source: GoogleEarth, December 2022.

Figure 5
Views of the Project Site
Views 1, 2, and 3



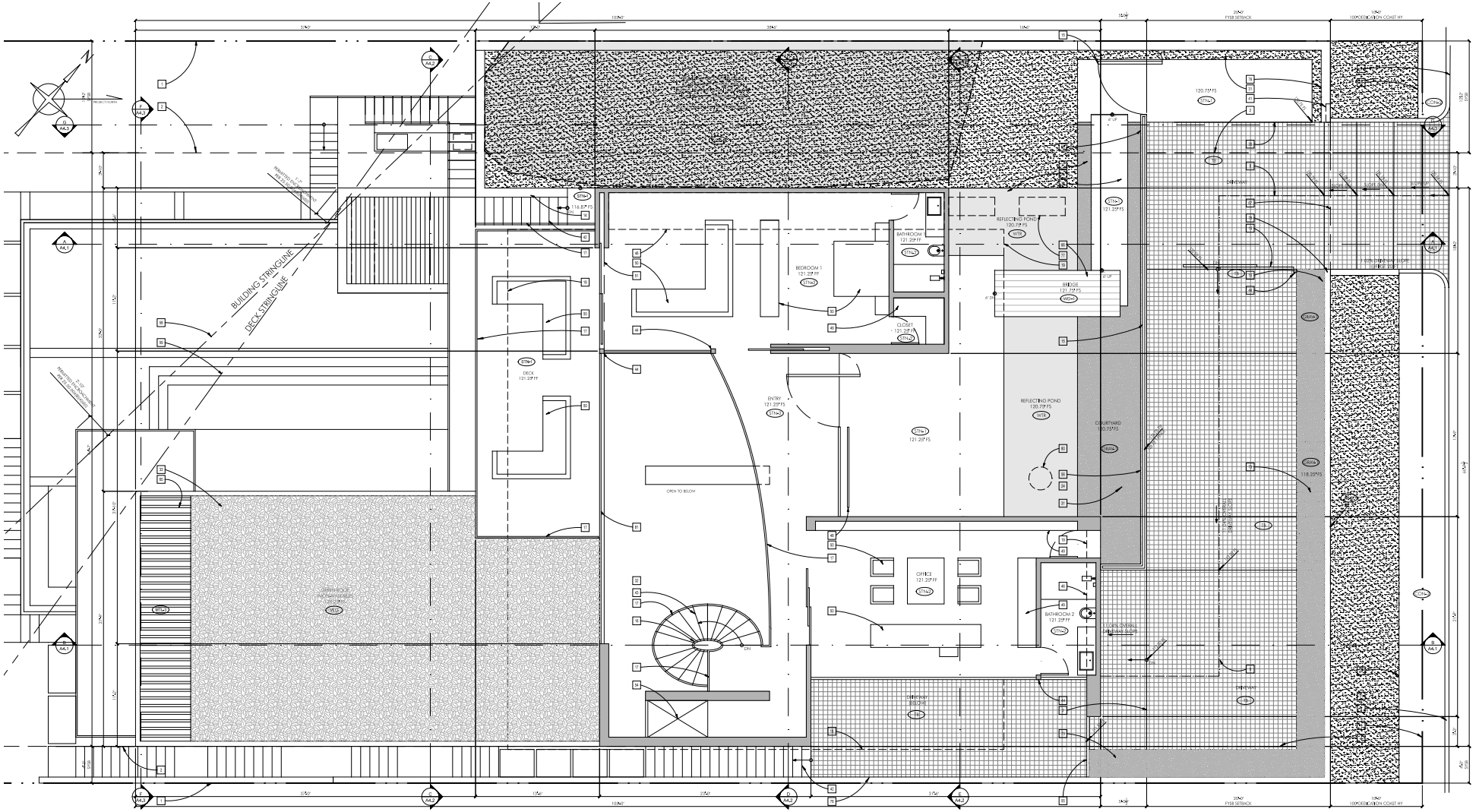
Source: HORST Architects, November 2022.

Figure 6
Lower Level Floor Plan



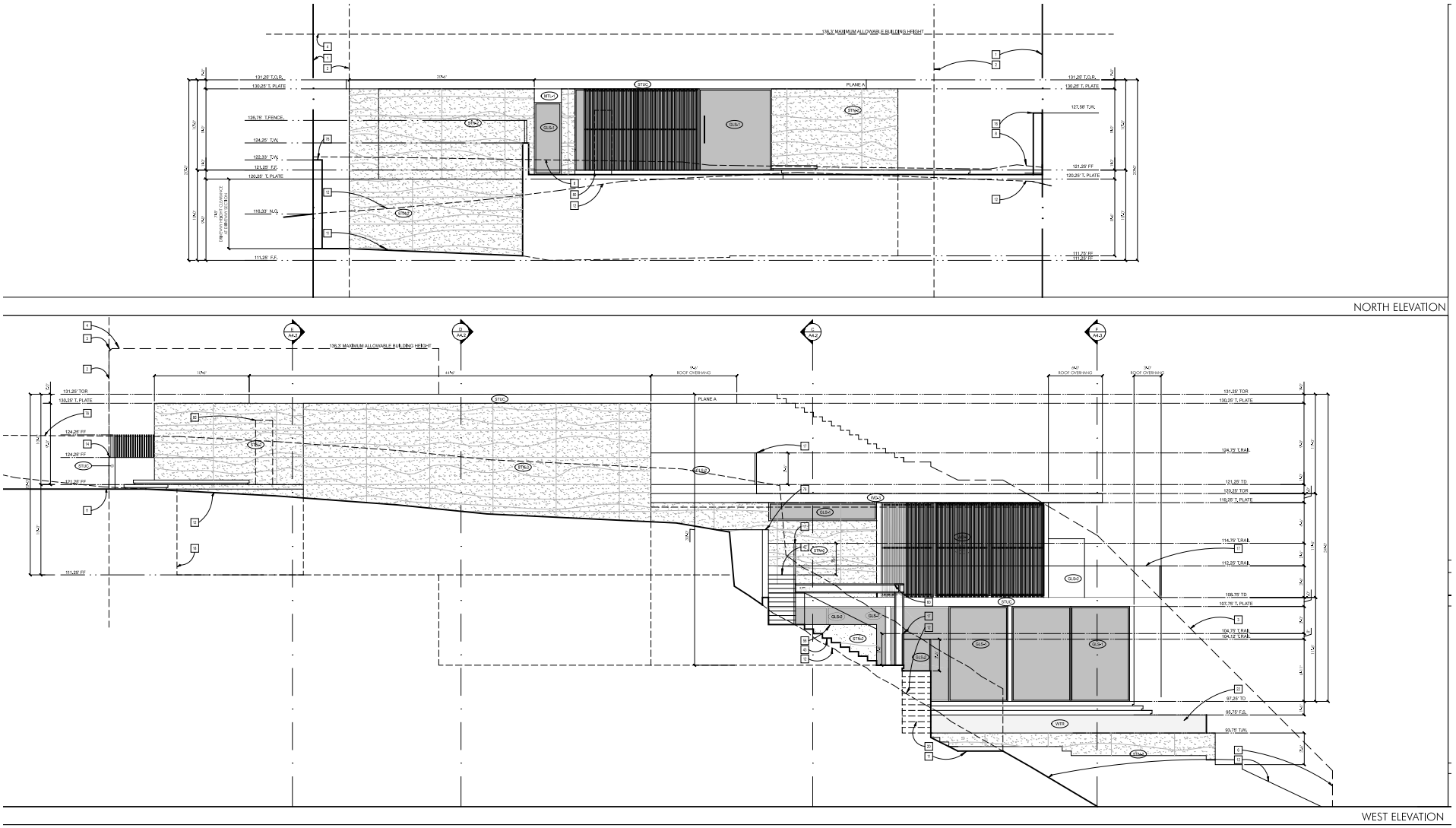
Source: HORST Architects, November 2022.

Figure 7
Middle Level Floor Plan



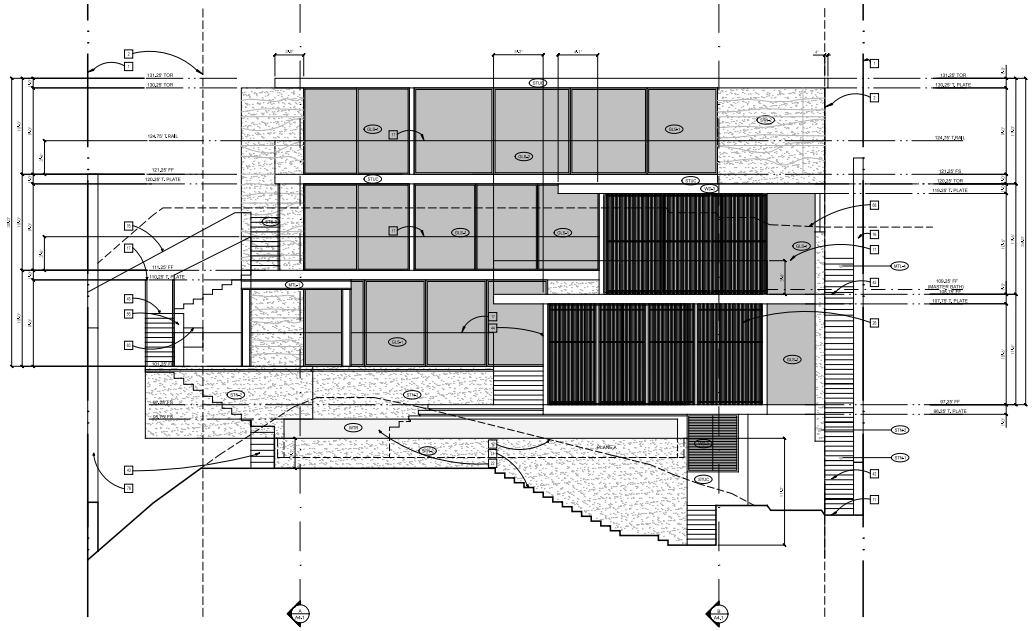
Source: HORST Architects, November 2022.

Figure 8
Upper Level Floor Plan

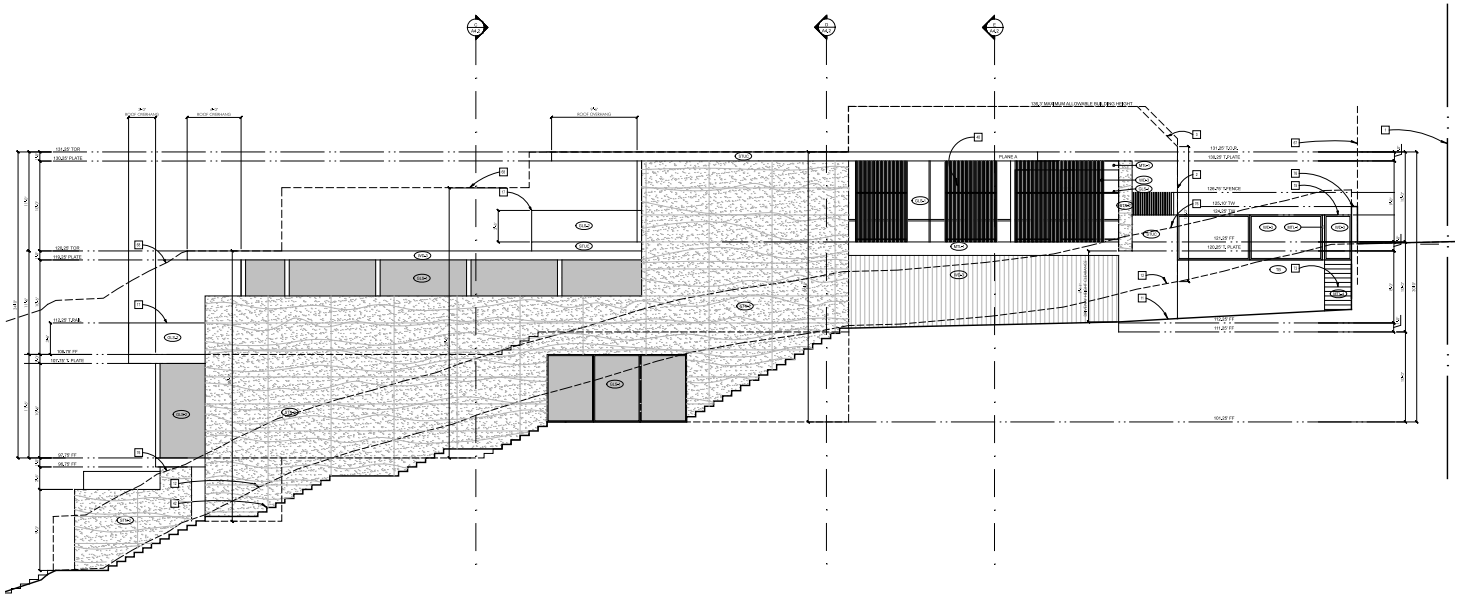


Source: HORST Architects, November 2022.

Figure 9
North and West Elevations



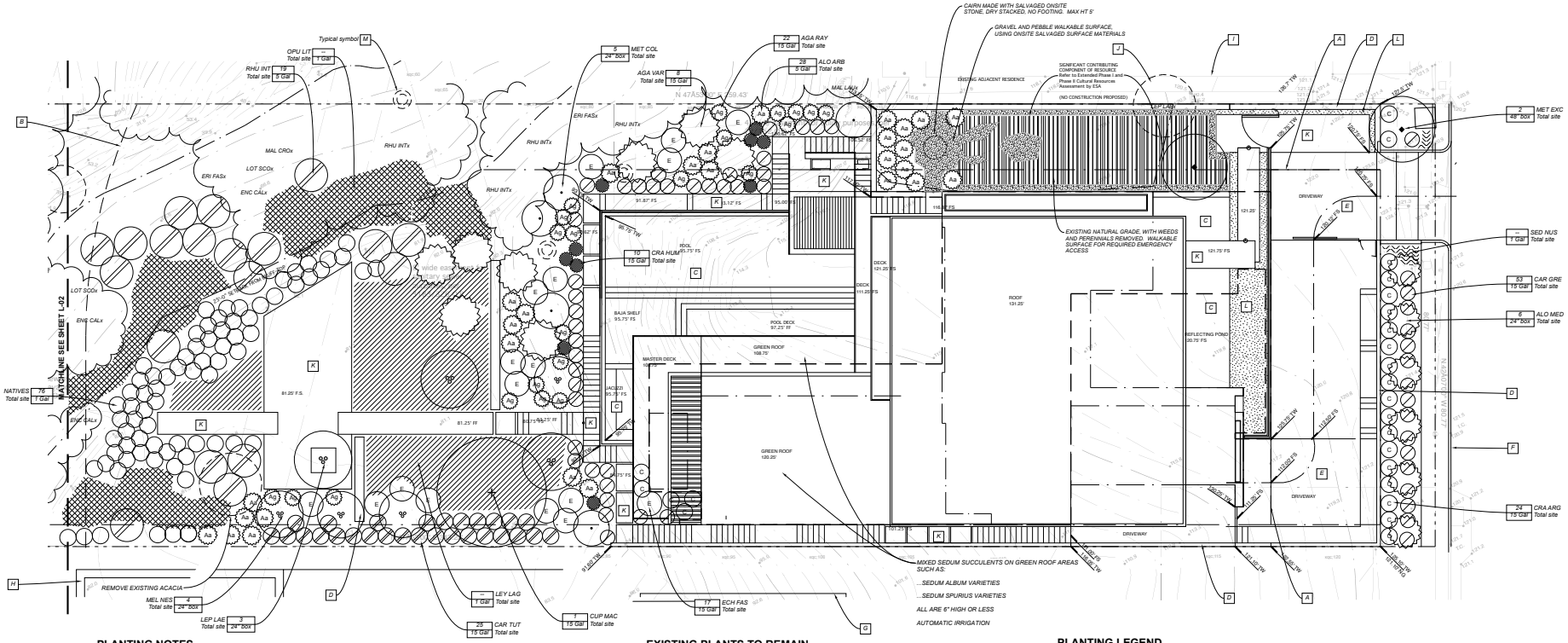
SOUTH ELEVATION



EAST ELEVATION

Source: HORST Architects, November 2022.

Figure 10
South and East Elevations



PLANTING NOTES

PROVIDE AUTOMATIC IRRIGATION FOR ALL PLANTED AREAS. IRRIGATION WILL CONSIST OF A COMBINATION OF LOW VOLUME DRIP TUBING AND SPRAY HEADS, CONTROLLED WITH AUTOMATIC VALVES AND A FLEXIBLE AUTOMATIC CONTROLLER HAVING WEATHER SENSITIVITY. A REDUCED PRESSURE BACKFLOW PREVENTER WILL BE USED AND WILL NOT BE LOCATED IN THE RIGHT OF WAY.

THIS PRELIMINARY PLAN IS NOT INTENDED TO BE A CONSTRUCTION DOCUMENT

ALL VEGETATION EXISTING ONSITE ABOVE THE BLUFF SETBACK WILL BE REMOVED UNLESS OTHERWISE INDICATED.

PER THE CITY'S GIS MAP, THIS PROPERTY FALLS WITHIN THE CITY'S VERY HIGH FIRE HAZARD SEVERITY ZONE (VHFHSZ). THE PRELIMINARY PLANTING PLAN IS INTENDED TO BE CONSISTENT WITH VHFHSZ REQUIREMENTS FOR PLANTING. ***WHICH DOES NOT CURRENTLY INCLUDE THE 2019 FM GUIDELINES SINCE APPLICATION HAS BEEN SUSPENDED BY CITY COUNCIL. FUTURE MAINTENANCE WILL BE CONSISTENT WITH THE CITY'S DEFENSIBLE SPACE GUIDELINE.***

EXISTING PLANTS TO REMAIN

		Ult ht x w	Maint
SHRUBS AND PERENNIALS			
ACA LON	*ACACIA LONGIFOLIA / Sydney Golden Wattle*	*10' x 10'*	*10'*
CAP EDU	*CAPROBROTUS EDULIS / Hot N Tot Fig*	*1' x 4'*	*1'*
*ENC CAL**	*ENCELIA CALIFORNICA / Bush Sunflower*	*3' x 3'*	*3'*
*EUP MIS**	*EUPHORBIA MISERA / Cliff Spurge* *Locations shown this plan, and on Biological Resources Assessment*	*1' x 1'*	*1'*
LEP LAE	*LEPTOSPERMUM LAEVIGATUM / Australian Tea*	*15' x 15'*	*15'*
*LOT SCO**	*LOTUS SCOPARIUS / Deerweed*	*1' x 2'*	*1'*
MAL CRO	*MALEPHORA CROCEA / Iceplant*	*1' x 2'*	*1'*
*MAL LAU**	*MALOSMA LAURINA / Sumac*	*8' x 8'*	*8'*
MES CRY	*MESEMBRYANTHEMUM CRYSTALINUM / Crystal Iceplant*	*1' x 2'*	*1'*
*RHU INT**	*RHUS INTEGRIFOLIA / Lemonade Berry* *(Most likely stays lower in bluff conditions)*	*6' x 6'*	*6'*
WAS ROB	*WASHINGTONIA ROBUSTA / Fan Palm*	*70' x 12'*	*Ult*

**Indicates plants native to Southern California coasts*

See also the Biological Resources Assessment prepared by LSA for a complete description of existing vegetation, including minor natives and non-natives.

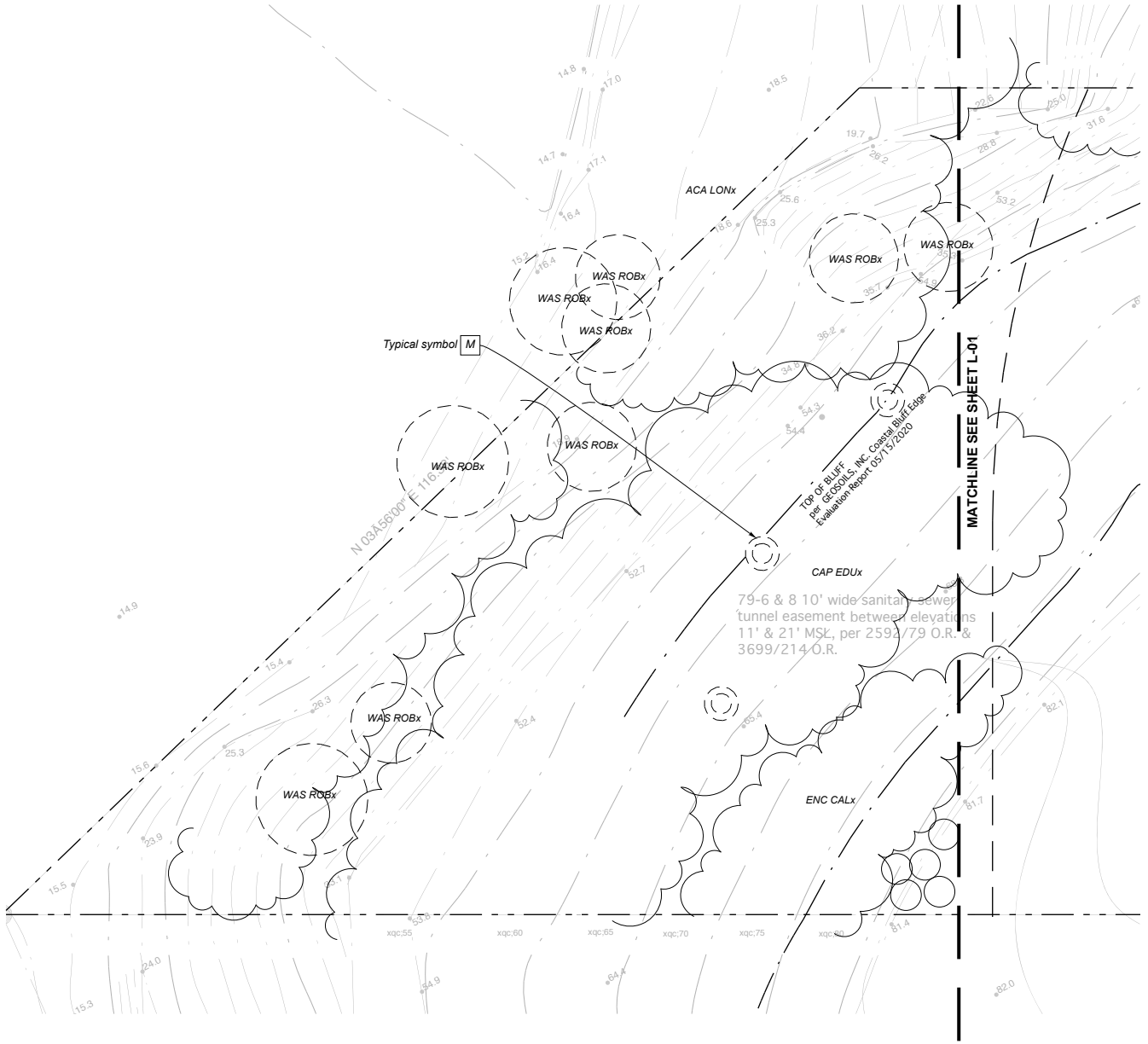
PLANTING LEGEND

		Ult ht x w	Maint
TREES			
*CUP MAC**	*CUPRESSUS MACROCARPA / Monterey Cypress*	*30' x 30'*	*20'*
LEP LAE	*LEPTOSPERMUM LAEVIGATUM / Australian Tea Tree*	*10' x 10'*	*10'*
MEL NES	*MELALEUCA NESPHILA / Pink Powder Puff*	*10' x 10'*	*10'*
MET SPR	*METROSIDEROS SPRINGFIRE / Dwarf NZ Christmas Tree*	*10' x 10'*	*10'*
MET EXC	*METROSIDEROS EXCELSA / New Zealand Christmas Tree*	*15' x 15'*	*15'*
SHRUBS AND PERENNIALS			
AGA VAR	*AGAVE AMERICANA VARIEGATA / Variegated Century Plan*	*6' x 8'*	*6'*
AGA RAY	*AGAVE RAY OF LIGHT / Variegated Foxtail Agave*	*3' x 3'*	*3'*
ALO ARB	*ALOE ARBORESCENS / Tree Aloe*	*3' x 3'*	*3'*
ALO MED	*ALOE MEDUSA / Aloe*	*6' x 4'*	*6'*
*BLU NAT**	*BLUFF NATIVE PERENNIALS / Encelia californica / Bush Sunflower (20%), Salvia Bees Bliss / Sage (10%), Isomeris arborea / Bladderpod (20%), Isocoma menziesii (10%), Eriogonum parvifolium/Seacliff Buckwheat (20%), Coreopsis maritimus / Beach Coreopsis (20%)*	*3' x 3'*	*3'*
CAR GRE	*CARISSA GREEN CARPET / Dwarf Natal Plum*	*2' x 3'*	*2'*
CAR TUT	*CARISSA TUTTLEI / Natal Plum*	*3' x 3'*	*3'*
CRA ARG	*CRASSULA ARGENTEA / Jade Plant*		
CRA HUM	*CRASSULA HUMMEL'S SUNSET / Variegated Jade*	*2' x 3'*	
ECH FAS	*ECHIUM FASTUOSUM / Pride of Madeira*	*4' X 5'*	*4'*
*LEY LAG**	*LEYMUS TRITICOIDES LAGUNITA / Lagunita Wild Rye* *Alternative: Muhlenbergia dubia / Dwarf Deer Grass*	*2' x 3'*	*2'*
*OPU LIT**	*OPUNTIA LITTORALIS / Beavertail Cactus*	*3' x 3'*	*3'*
SED NUS	*SEDUM NUSSBAUMERIANUM / Orange Stonecrop*	*1' x 1'*	*1'*

**Indicates plants native to California coasts*

Source: HORST Architects, November 2022.

Figure 11
Upper Landscape Plan



Source: HORST Architects, November 2022.

Figure 12
Lower Landscape Plan

II. INITIAL STUDY CHECKLIST

B. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors that would be potentially affected by this project and are mitigated to a less than significant impact are indicated below.

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

C. DETERMINATION

On the basis of this initial evaluation:

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

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because of the incorporated mitigation measures and 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 earlier 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.

Signature	Date
Amber Dobson	Planning Manager

D. 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 cited. 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.

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, and construction as well as operational impacts.

3) A "Less Than Significant Impact" applies when the proposed project would not result in a substantial and adverse change in the environment. This impact level does not require mitigation measures.

4) "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

5) "Potentially Significant Unless Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The initial study must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.

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

Regulatory Setting

Regulations exist at state and local levels that guide development and influence the physical form and aesthetic character of the City. These include:

- California Coastal Act
- California Scenic Highway Program
- Orange County General Plan
- Laguna Beach General Plan Landscape and Scenic Highway Element
- Laguna Beach Landscape and Scenic Highways Resource Document
- Laguna Beach Municipal Code

Environmental Setting

Scenic Vistas and Scenic Resources

According to the City's General Plan Landscape and Scenic Highway Element, Laguna Beach is a coastal community, which is comprised of 38 distinct neighborhoods and surrounded by natural open space within the City's nine square mile jurisdiction. The open space encompasses approximately 30,000 acres of largely undeveloped lands and includes Laguna Coast Wilderness Park, Aliso and Wood Canyons Wilderness Park, Crystal Cove State Park, and Laguna Laurel Ecological Reserve. This public open-space land is principally under the jurisdiction of the State and Orange County and physically separates the City from the urbanization occurring elsewhere in the Orange County. The predominate land use in the City is open space, recreational, and environmentally sensitive lands making up approximately 59 percent of the

total area. Residential land use make up approximately 35 percent, commercial uses make up approximately 4 percent, and industrial and institutional make up approximately 1 percent each.[4]

Scenic resources consist predominantly of the San Joaquin Hills that surround the City and the Pacific Ocean to the west. Public views of these resources are primarily available from Coast Highway, Laguna Canyon Road, other local roads, and public areas such as parks, beaches, and trails.[5] The Laguna Beach Landscape and Scenic Highways Resources Document (LSHRD), which was adopted along with the General Plan Landscape and Scenic Highways Element, includes a vision and overview of landscape issues; including goals, policies, and implementing action items for topics that include Neighborhood Character, View Management, Scenic Highways, Streetscape/Parks, Heritage Trees, Fire Safety, Landform Stability, and Design and Maintenance.[6] According to the LSHRD, the project site is within the Zone J, which is a characterized by scenic rock outcroppings above steep bluffs with plantings on the inland side, and a residential development with little landscaping on the ocean side.[7] Public scenic vistas, while traveling south on Coast Highway, include views that are channeled between single-family homes and residential privacy walls with landscaping on the right, and a steep bluff with single-family homes above on the left. While houses are visible above the bluff on the inland side, the scenic rock outcroppings, plants, and a view to Aliso Peak dominate the landscape, which is possible because residential vehicular access is primarily taken from Monterey Street above, and is not visible from Coast Highway.[8]

Scenic Highways

The California Scenic Highway System indicates that no existing or proposed state scenic highways located in the vicinity of the project site.[9] Coast Highway, Laguna Canyon Road, and El Toro Road are the three arterial roads within and adjacent to City that meet scenic highways designation guidelines. Coast Highway, which the project site fronts, is an eligible State Scenic Highway and Orange County considers Coast Highway, Laguna Canyon Road, and El Toro Road as Viewscape Corridors in the Scenic Highway Plan in the Orange County's General Plan.[10] According to the City's General Plan Landscape and Scenic Highways Element, the City intends to eventually implement a Corridor Protection Plan for Coast Highway.[11] The LSHRD classifies the Coast Highway into zones and provides landscaping and streetscape improvement recommendations for each zone. As previously mentioned, the project site is within LSHRD Zone J of the Coast Highway.

Light and Glare

The project is located in a well-lit urbanized area of the City where there are moderate levels of ambient nighttime lighting, including street lighting, vehicle headlights from Coast Highway, architectural and security lighting, and indoor building illumination (light emanating from structures that passes through windows). Glare is generally a result of reflections off of pavement, vehicle windows and chrome, and building materials that include reflective glass and other shiny materials. Potential impacts from light and

4 Laguna Beach General Plan, Land Use Element, Scenic Highway Plan, December 7, 2011. Page 5-2.
5 Laguna Beach General Plan, Land Use Element, Scenic Highway Plan, December 7, 2011. Page 5-2.
6 Laguna Beach Landscape and Scenic Highways Resource Document, November 2018. Page 1.
7 Laguna Beach Landscape and Scenic Highways Resource Document, November 2018. Page 28.
8 Laguna Beach Landscape and Scenic Highways Resource Document, November 2018. Page 42.
9 California Department of Transportation, California Scenic Highway Mapping System, List of eligible and officially designated State Scenic Highways, Los Angeles County, August 2019.
10 Orange County, Scenic Highway Plan, April 18, 2005.
11 Laguna Beach Landscape and Scenic Highways Resource Document, November 2018. Page 34.

glare are directly related to the level of urbanization in the vicinity of the project site and the design of the proposed residential use.

Checklist Discussion

a) Would the project have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. A significant impact may occur if a proposed project introduces incompatible visual elements within a field of view containing a scenic vista or substantially blocks a scenic vista.

According to the City's Landscape and Scenic Highways Element, aesthetic resources in the City predominantly consist of the San Joaquin Hills that surround the City, the Pacific Ocean to the west, and the Aliso and Laguna Canyons to the east. Public views would be scenic views from Coast Highway, Laguna Canyon Road, or other streets up to the hillsides, canyons, or down to the ocean, or views to or from other public areas including parks, beaches, trails, and viewpoints.[12] Aliso Canyon is located approximately 0.7 mile northeast of the project site and the southern terminus of Laguna Canyon is located approximately 3.6 miles north of the project site, where Laguna Canyon Road becomes Broadway Street. Public views of both Aliso Canyon and Laguna Canyon are not visible from the project vicinity due to the distance between them and the project site, as well as intervening commercial and residential structures located along Coast Highway.

The project site fronts Coast Highway, in an area of the City that is developed with single-family residential uses and several multi-family residential uses. Views from the project site include the Pacific Ocean to the west, single-family residential uses to the south and north, and Coast Highway and single-family residential uses to the north. Scenic vistas to the north and south include views of the San Joaquin Hills. Views to the west are comprised of the Pacific Ocean and the shoreline. The City's land use make up is comprised of approximately 35 percent residential uses, approximately four percent commercial uses, and approximately one percent each of industrial and institutional uses.[13]

The project site is currently undeveloped and fenced, with no pedestrian or vehicular access. Therefore, although views are available from the project site, those views are not accessible to the public. The project would result in the construction of a three-story, approximately 7,584 square foot single-family residence on a 0.56-acre site. According to LBMC Section 25.10.008, Property Development Standards, the maximum allowable building height for the project site is 30-feet. The proposed single-family residential use would be a maximum of 30 feet on the eastern half of the site, which is in line with existing residential development in the vicinity and does not exceed the City's building height standards. Furthermore, the project would not block views of Aliso Peak and the San Joaquin Hills to the north, east, and south due to the low height and stepped down design of the project and existing development surrounding the project site. Views of Aliso Peak, the San Joaquin Hills, and the Pacific Ocean would still be available via street corridors, as are currently available. Further, there are no focal views available in the vicinity that would be completely blocked by the project. While development of the project could partially obstruct views of the Pacific Ocean from properties to the north, views would not be significantly impacted. The Design Review Board project site ensure the new residential development complies with the City's zoning

[12] Laguna Beach Landscape and Scenic Highways Resource Document, November 2018. Page 30.

[13] Laguna Beach General Plan, Land Use Element, Scenic Highway Plan, December 7, 2011. Page 5-2.

standards and Design Guidelines in order to make the finding of LBMC Section 25.05.040(H)(4) Environmental Context.

Further, the project site lies within the Coastal Zone. The Coastal Act includes several basic goals and policies to ensure that development within the Coastal Zone is consistent and compatible with the unique characteristics of coastal resources. The project would not interfere with the public's access to the sea, significantly interfere with traffic circulation (refer to Section 17, Transportation/Traffic), affect marine resources, or environmentally sensitive habitat areas (refer to Section 3, Biological Resources). In addition, the project would not result in significant impacts to scenic and visual qualities of the coast, as the development is consistent with the area's height restrictions (30 feet) and has been designed to minimize the obstruction of the existing coastal views. As the entire project site lies within the Coastal Zone, as designated by the Coastal Act, the project site is therefore under the jurisdiction of the City of Laguna Beach and the Coastal Commission. With procurement of a Coastal Development Permit from the City and approval from the Coastal Commission, development of the project would be consistent with the Coast Act Policies and requirements. **Therefore, impacts would be less than significant**.

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

Less Than Significant Impact. A significant impact may occur only where scenic resources would be damaged or removed by the project.

The California Scenic Highway System indicates that no existing or proposed state scenic highways located in the vicinity of the project site.[14] The nearest State-designated scenic highway to the project site is State Route 91, known as Riverside Freeway, is located over 30 miles north, between State Route 55 and the eastern boundary of the City of Anaheim.[15] However, Coast Highway is eligible for listing as a state scenic highway.

The project site, which is currently undeveloped, contains no designated historic buildings. However, the site does contain natural vegetation and the project construction activities would result in permanent direct impacts to this vegetation. The habitat is, however, degraded due to the prevalence of nonnative weeds and ornamental species.[16] Furthermore, the project as proposed would involve grading of a portion of the site (0.375 acre of the 0.56-acre site). The project would not require the removal of any trees. Therefore, because the project is not located adjacent to a designated state scenic highway, the project would not result in substantial damage to scenic resources in a state scenic highway. **Impacts would be less than significant**.

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[14] California Department of Transportation, California Scenic Highway Mapping System, List of eligible and officially designated State Scenic Highways, https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed October 2022.

[15] California Department of Transportation, California Scenic Highway Mapping System, List of eligible and officially designated State Scenic Highways, https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed October 2022.

[16] Biological Resources Assessment for 31451 Coast Highway, Laguna Beach, Orange County, California, prepared by LSA, May 21, 2020 (Available in **Appendix C** of this document).

c) Would the project, 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. A significant impact may occur if a project introduces incompatible visual elements on the project site or visual elements that would be incompatible with the character of the area surrounding the project site. The project is located in a developed residential area of the City of Laguna Beach; therefore, the applicable threshold with respect to the project is consistency with applicable zoning and other regulations governing scenic quality. However, because the project site is undeveloped, visual character and public views are also discussed below for informational purposes.

Height

The project site is located in an area characterized by single- and multi-family residential, uses, all of which are constructed with a variety of styles and materials. The topographic relief within the boundaries of the property is approximately 107-feet, with elevations ranging from approximately 122-feet (msl) along the northeast property boundary near Coast Highway to approximately 15-feet (msl) along the general western property boundary and toe of the seacliff.[17] Based on an average lot slope of over 20-percent, the building envelope is limited to a height of 30 feet. The project would be a maximum of 30 feet (three stories) and built in a split-level style, and would therefore not significantly impair private or public ocean views.

Massing

In addition to the increased height, the project's proposed building would increase the building mass on the project site. The project would likely be visually prominent in the immediately surrounding area compared to the existing undeveloped site and would have increased visibility on Coast Highway and the adjoining sidewalk. Additionally, the greater height and mass would increase the visibility of the project site from nearby residential properties. However, the project's façade would be comprised of high quality, contemporary, and neutral colored building materials that are compatible with the surrounding low density residential uses and the native vegetation and views of the Pacific Ocean. Furthermore, the project would be a maximum of 30 feet (three stories), built in a split-level style, and maintain a 25-foot buffer from the bluff top that would contain only native groundcover and set the building back from direct views from the Pacific Ocean shoreline.

Even with this increased visual prominence, however, the project would not include development that would be out of character with the Laguna Beach residential area, or with other development surrounding the project site. It would replace the existing undeveloped lot with a low-scale, single-family residential use that would be reflective of the expected visual character of the area as it develops in the future in accordance with adopted land use plans, including regional plans, and the General Plan. Accordingly, with respect to building mass, the project would not result in a contrast between proposed features and existing features; would not result in a building that would detract from the non-descript style or image

[17] Preliminary Geotechnical Investigation Proposed Single-Family Residence for 31451 South Coast Highway, Laguna Beach, California, prepared by Coastal Geotechnical, September 16, 2004 (Available in **Appendix D.1** of this document).

of the area; and would positively contribute to the area's aesthetic value. Therefore, the visual character impact associated with building mass would be less than significant.

Architectural Style and Urban Design

The buildings in the area of the project site vary in age and architectural style from more contemporary buildings to older buildings with little architectural interest and style. The project's design is high quality, contemporary architecture with cohesive building color and materials palette that is compatible with the more contemporary designs that have been incorporated in buildings, such as the multi-family residential use located north of the project site, constructed in the area over the recent decade. The project has been designed to incorporate the design and landscaping recommendations of the LSHRD for Zone J of the Coast Highway to the extent feasible. Furthermore, the project site Improvements surrounding the building would include a new curb adjustment, and new sidewalks as required. The project maintains a 25-foot buffer from the bluff top with only native groundcover, to meet the City of Laguna Beach Design Guidelines for residential projects.[18] Overall, while the project would change the visual character of the project site, the height of the proposed building, design, massing, and scale would be compatible with the existing residential uses that set the aesthetic character of the vicinity. Based on the analysis above, the project would not substantially degrade the existing visual character or quality of the project site or surrounding vicinity.

Zoning Consistency

The LBMC establishes the zoning for the project site as R-1 (Residential Low Density). According to LBMC Section 25.10.008, Property Development Standards, regarding height, where the slope of the lot measured from the lowest point of elevation of the lot to the highest point is 20 percent or more, and is limited to no building or structure shall exceed 30 feet in height as measured from grade.[19] The lot proposed for the project would also meet the minimum 6,000 square-foot lot size required in the R-1 zone, with a lot size of 0.56 acre (approximately 24,338 square feet). The single-family residential use proposed would be 7,584 square feet with a maximum height of 30 feet tall. Therefore, impacts with regards to zoning consistency would be less than significant.

Other Regulations Governing Scenic Quality

The project would incorporate the design and landscaping recommendations of the LSHRD for Zone J of the Coast Highway to the extent feasible. Project entitlements include approval of the building by the Design Review Board, a Coastal Development Permit, a Building Permit, and a Grading Permit. Design review by the City would ensure that the project would align with regulations governing scenic quality. Upon approval of the project, the addition of the three-story single-family residential use would not degrade the existing visual character or quality of the site and its immediate surroundings and would be consistent with the City's envisioned visual character and quality of the project site. Therefore, impacts would be less than significant.

Therefore, the project would not conflict with applicable zoning or regulations governing scenic quality. **Accordingly, impacts would be less than significant**.

[18] Laguna Beach Design Guidelines-A Guide to Residential Development, December 2010.

[19] LBMC Section 25.10.008 (D)(1).

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

Less Than Significant Impact. A significant impact may occur if a project introduces new sources of light or glare on the project site which would be incompatible with the areas surrounding the project site or which pose a safety hazard, such as to motorists utilizing adjacent streets.

Light

The project site is located within an urban residential environment; thus, light emanating from any one source contributes to the overall lighting impacts rather than being solely responsible for lighting impacts on a particular use. As uses surrounding the project site are already impacted by lighting from existing development within the area, any additional amount of new light sources must be noticeably visible to light-sensitive uses to have any notable effect.

The project would have the potential to alter lighting patterns in the area of the project site as compared with the existing undeveloped setting of the Site. Night lighting for the project would be provided to illuminate home entrances and the driveway. Although the amount of light emanating from the project would represent an increase over current light levels, the project would be designed to comply with the Laguna Beach Municipal Code (LBMC) Section 25.05.040 (H)(8) (Design Review Criteria, Light and Glare) which prohibits reflective materials and appurtenances that cause glare or a negative visual impact on neighboring properties.

It is anticipated that the amount of light emanating from the project would represent an increase over current light levels. Even so, the project's compliance with the City's regulatory compliance measures, including LBMC Section 7.70 (Good Neighbor Outdoor Lighting), regulates outdoor lighting in order to reduce or prevent light pollution, to reduce or prevent glare and light trespass, to promote the conservation of energy, and to preserve and enhance neighborhood character and night-sky beauty of the City, while also respecting the need for safety and security. Therefore, the project would not create a new source of substantial light that would adversely affect day or nighttime views in the area. **Impacts would be less than significant**.

Glare

Potential reflective surfaces in the project vicinity include vehicles traveling and parked on streets in the vicinity of the project site and exterior building windows. Excessive glare not only restricts visibility, but also increases the ambient heat reflectivity in a given area.

The project would incorporate both solid and glass surfaces. Exterior building materials of the proposed building would use various non-reflective material designed to minimize the transmission of glare from the project's building. The proposed home includes a garage, thereby minimizing potential glare from vehicles. Furthermore, the project's compliance with the City's existing regulations, including LBMC Section 25.05.040 (H)(8) (Design Review Criteria, Light and Glare) which prohibits reflective materials and appurtenances that cause glare or a negative visual impact on neighboring properties, would ensure potential glare impacts are not significant. Moreover, the project would not use polished metals in its design. Therefore, the project would not create a new source of substantial glare that would adversely affect day or nighttime views in the area. **Therefore, impacts would be less than significant**.

Mitigation Measures

None required.

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

Regulatory Setting

The Department of Conservation, the Division of Land Resource Protection (DLRP) serves as the state's leader in conserving California's agricultural lands. The Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) produces maps and statistical data used for analyzing impacts on California's agricultural resources.

The DLRP also collects data on Williamson Act contracts, which are formed between a county or city and a landowner for the purpose of restricting specific parcels of land to agricultural or related open space use. Private land within locally-designated agricultural preserve areas are eligible for enrollment under a contract. The minimum term for contracts is ten years.

Environmental Setting

The City of Laguna Beach is an urban environment designated for residential and commercial uses and is essentially built out. There is no land within the City of Laguna Beach designated as farmland, forest, or timber production nor are there any existing agricultural, farmland, forest or timber production uses. Pursuant to the Farmland Mapping and Monitoring Program, the City is designated as Urban and Built-Up

Land.[20] The project site is designated as zoned R-1 and has a General Plan land use designation of Village Low Density. The project site is not under a Williamson Act contract.

Checklist 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. A significant impact may occur if a project were to result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use. The project site, which is currently undeveloped, is approximately 20 to 120 feet above mean sea level in elevation and is surrounded by residential land uses to the north and south, Coast Highway, residential land uses, and commercial land uses to the east, and the Pacific Ocean shoreline to the west. According to the State Farmland Mapping and Monitoring Program's most recent Farmland mapping data for Orange County, neither the project site nor the surrounding area are designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.[21] **Thus, the project would not result in the loss of State-designated Farmland and no impact would occur**.

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

No Impact. A significant impact may occur if a project were to result in the conversion of land zoned for agricultural use or under a Williamson Act contract from agricultural use to another non-agricultural use. The project site is zoned R-1 and has a General Plan land use designation of Village Low Density. Thus, the project site is not zoned for agricultural use, nor are there any agricultural uses currently occurring at the project site or within the surrounding area. Additionally, according to the State's most recent Williamson Act land data, neither the project site nor surrounding area are under a Williamson Act contract.[22] **Therefore, no impacts would occur**.

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

***No Impact*.** A significant impact may occur if a project results in the conversion of farmland to another, non-agricultural use, and/or if a project results in the conversion of forest land to another, non-forest use. There are no forest or timberland resources the immediate project area. The project site is zoned R-1 and has a General Plan land use designation of Village Low Density. The project site is not zoned for forest land, timberland, or timberland production land uses. Further, The City of Laguna Beach does not have any land that is designated or zoned for forest use or timber production. **Therefore, no impact would occur**.

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

No Impact. A significant impact may occur if a project results in the conversion of forest land to another, non-forest use. The project site is undeveloped; however, it is located in an urbanized area of the City. No

[20] State of California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, Orange County Important Farmland 2018, published 2018.

[21] State of California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, Orange County Important Farmland 2018, published 2018.

[22] State of California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, Orange County Important Farmland 2018, published 2018.

forest land exists on or in the vicinity of the project site, and project implementation would not result in the loss or conversion of forest land. **Therefore, no impacts would occur**.

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

***No Impact*.** A significant impact may occur if a project results in the conversion of farmland to another, non-agricultural use, and/or if a project results in the conversion of forest land to another, non-forest use. The project site is previously undeveloped; however, it is located in an urbanized area of the City. No agricultural uses, designated Farmland, or forest land uses occur at the project site or within the surrounding area. As such, implementation of the project would not result in the conversion of existing Farmland, agricultural uses, or forest land on- or off-site. **Therefore, no impacts would occur**.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
3. AIR QUALITY. Would the project:				
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 nonattainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Regulatory Setting

Regulations exist at federal, state, and local levels with regard to air quality and include:

a) Federal Clean Air Act
b) California Clean Air Act
c) State Implementation Plan
d) California Energy Code
e) Regional Air Quality Strategy
f) South Coast Air Quality Management District Rules and Regulations:

Environmental Setting

Both the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established ambient air quality standards for common pollutants. Ambient air quality standards are set to protect public health and are levels of pollutants which represent safe levels that avoid specific adverse health effects. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. The major criteria pollutants are ozone, carbon monoxide, nitrogen dioxide, and particulate matter. Both federal and state ambient air quality standards apply, as established by the U.S. Environmental Protection Agency (USEPA) and state air quality agencies (CALEPA for California). California air quality standards are generally more stringent that federal standards.

The City of Laguna Beach is within the South Coast Air Basin (basin). In Orange County, the South Coast Air Quality Management District (SCAQMD) is the agency responsible for protecting the public health and welfare through the administration of federal and state air quality laws and policies. This regional agency regulates air quality through its permit authority over most types of stationary emission sources and through its planning and review process.

Attainment Designations

Specific geographic areas that do not meet federal air quality standards (National Ambient Air Quality Standards [NAASQS]) or state air quality standards (California Ambient Air Quality Standards [CAAQS]) for a particular air quality pollutant are in "nonattainment" areas for the pollutant. The current federal and state attainment status for the basin is provided in **Table 2, Federal and State Air Quality Designations in the South Coast Air Basin**.

Table 2
South Coast Air Basin Attainment Status

Pollutant	Standard[1]	Averaging Time	Designation[2]	Attainment Date[3]
1-Hour Ozone	NAAQS	1979 1-Hour (0.12 ppm)	Nonattainment (Extreme)	2/6/2023 (not attained)[4]
	CAAQS	1-Hour (0.09 ppm)	Nonattainment	N/A
8-Hour Ozone[5]	NAAQS	1997 8-Hour (0.08 ppm)	Nonattainment (Extreme)	6/15/2024
	NAAQS	2008 8-Hour (0.075 ppm)	Nonattainment (Extreme)	7/20/2032
	NAAQS	2015 8-Hour (0.070 ppm)	Nonattainment (Extreme)	8/3/2038
	CAAQS	8-Hour (0.070 ppm)	Nonattainment	Beyond 2032
CO	NAAQS	1-Hour (35 ppm)	Attainment (Maintenance)	6/11/2007 (attained)
	CAAQS	8-Hour (9 ppm)	Attainment	6/11/2007 (attained)
NO_2 [6]	NAAQS	1-Hour (0.1 ppm)	Unclassifiable/Attainment	N/A (attained)
	NAAQS	Annual (0.053 ppm)	Attainment (Maintenance)	9/22/1998 (attained)
	CAAQS	1-hour (0.18 ppm) Annual (0.030 ppm)	Attainment	-
SO_2[7]	NAAQS	1-Hour (75 ppb)	Designations Pending (expect Uncl./Attainment)	N/A (attained)
	NAAQS	24-Hour (0.14 ppm) Annual (0.03 ppm)	Unclassifiable/Attainment	3/19/1979 (attained)
PM10	NAAQS	1987 24-Hour (150 µg/m^3)	Attainment (Maintenance)[8]	7/26/2013 (attained)
	CAAQS	24-Hour (50 µg/m^3) Annual (20 µg/m^3)	Nonattainment	N/A
PM2.5 [9]	NAAQS	2006 24-Hour (35 µg/m^3)	Nonattainment (Serious)	12/31/2019
	NAAQS	1997 Annual (15.0 µg/m^3)	Attainment	8/24/2016
	NAAQS	2021 Annual (12.0 µg/m^3)	Nonattainment (Serious)	12/31/2025
	CAAQS	Annual (12.0 µg/m^3)	Nonattainment	N/A

Table 2
South Coast Air Basin Attainment Status

Lead	NAAQS	3-Months Rolling (0.15 µg/m^3)	Nonattainment (Partial)[10]	12/31/2015

Notes:
Source: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf
[1] NAAQS = National Ambient Air Quality Standards, CAAQS = California Ambient Air Quality Standards
[2] U.S. EPA often only declares Nonattainment areas; everywhere else is listed as Unclassifiable/Attainment or Unclassifiable.
[3] A design value below the NAAQS for data through the full year or smog season prior to the attainment date is typically required for attainment demonstration.
[4] 1-hour O3 standard (0.12 ppm) was revoked, effective June 15, 2005; however, the Basin has not attained this standard based on 2008-2010 data and is still subject to anti-backsliding requirements.
[-*5] 1997 8-hour O3 standard (0.08 ppm) was reduced (0.075 ppm), effective May 27, 2008; the revoked 1997 O3 standard is still subject to anti-backsliding requirements.
[6] New NO2 1-hour standard, effective August 2, 2010; attainment designations January 20, 2012; annual NO2 standard retained.
[7] The 1971 annual and 24-hour SO2 standards were revoked, effective August 23, 2010; however, these 1971 standards will remain in effect until one year after U.S. EPA promulgates area designations for the 2010 SO2 1-hour standard. Area designations are still pending, with Basin expected to be designated Unclassifiable /Attainment.
[8] Annual PM10 standard was revoked, effective December 18, 2006; 24-hour PM10 NAAQS deadline was 12/31/2006; SCAQMD request for attainment redesignation and PM10 maintenance plan was approved by U.S. EPA on June 26, 2013, effective July 26, 2013.
[9] Attainment deadline for the 2006 24-Hour PM2.5 NAAQS (designation effective December 14, 2009) is December 31, 2019 (end of the 10th calendar year after effective date of designations for Serious nonattainment areas). Annual PM2.5 standard was revised on January 15, 2013, effective March 18, 2013, from 15 to 12 µg/m3. Designations effective April 15, 2015, so Serious area attainment deadline is December 31, 2025.
[10] Partial Nonattainment designation – Los Angeles County portion of Basin only for near-source monitors. Expect redesignation to attainment based on current monitoring data.

Air Quality Management Plan

Every three (3) years the SCAQMD prepares a new AQMP, updating the previous plan and having a 20-year horizon.[23] The 2022 AQMP was adopted December 2, 2022 by SCAQMD. The 2022 AQMP will be considered by CARB for approval and adoption on January 26, 2023.

On March 23, 2017 CARB approved the 2016 AQMP. The 2016 AQMP is a regional blueprint for achieving the federal air quality standards and healthful air. The 2016 AQMP includes both stationary and mobile source strategies to ensure that rapidly approaching attainment deadlines are met, that public health is protected to the maximum extent feasible, and that the region is not faced with burdensome sanctions if the Plan is not approved or if the NAAQS are not met on time.

The California Environmental Quality Act (CEQA) requires a discussion of any inconsistencies between a proposed project and applicable General Plans and Regional Plans (CEQA Guidelines Section 15125). The regional plan that applies to the project includes the SCAQMD Air Quality Management Plan (AQMP). The SCAQMD CEQA Handbook states that "New or amended General Plan Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP." Strict consistency with all aspects of the plan is usually not required. A proposed project would be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies.

[23] CARB is in the process of adopting the 2022 AQMP; however, it has not been adopted at this time and the 2016 AQMP is the operating plan.

Sensitive Receptors

CARB and the Office of Environmental Health Hazard Assessment (OEHHA) have identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, infants (including in utero in the third trimester of pregnancy), and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved and are referred to as sensitive receptors.

For purposes of CEQA, the SCAQMD considers a sensitive receptor to be a location where a sensitive individual could remain for 24 hours, such as residences, hospitals, or convalescent facilities.[24] Commercial and industrial facilities are not included in the definition because employees do not typically remain on-site for 24 hours.

The closest sensitive receptors to the project site include: the single-family dwelling units located adjacent to the north and south of the site, and the single-family dwelling units located across Coast Highway, approximately 85 feet from the project site.

Checklist Discussion

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

Less Than Significant Impact. CEQA requires a discussion of any inconsistencies between a proposed project and applicable General Plans and Regional Plans (CEQA Guidelines Section 15125). The regional plan that applies to the project includes the SCAQMD AQMP. Therefore, this section discusses any potential inconsistencies of the project with the AQMP.

The purpose of this discussion is to set forth the issues regarding consistency with the assumptions and objectives of the AQMP and discuss whether the project would interfere with the region's ability to comply with Federal and State air quality standards. If the decision-makers determine that the project is inconsistent, the lead agency may consider project modifications or inclusion of mitigation to eliminate the inconsistency.

The SCAQMD CEQA Handbook states that "New or amended General Plan Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP". Strict consistency with all aspects of the plan is usually not required. A proposed project should be considered to be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies. The SCAQMD CEQA Handbook identifies two key indicators of consistency:

[24] SCAQMD 2008. Final Localized Significance Threshold Methodology (revised).

1. Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

2. Whether the project will exceed the assumptions in the AQMP in 2016 or increments based on the year of project buildout and phase.

Both of these criteria are evaluated in the following sections.

Criteria 1 – Increase in the Frequency or Severity of Violations

Based on the air quality modeling analysis (see b and c below), short-term construction impacts would not result in significant impacts based on the SCAQMD regional and local thresholds of significance. This analysis also found that long-term operations impacts would not result in significant impacts based on the SCAQMD local and regional thresholds of significance.

Therefore, the project is not projected to contribute to the exceedance of any air pollutant concentration standards and is found to be consistent with the AQMP for the first criterion.

Criteria 2 – Exceed Assumptions in the AQMP?

Consistency with the AQMP assumptions is determined by performing an analysis of the project with the assumptions in the AQMP. The emphasis of this criterion is to ensure that the analyses conducted for the proposed project are based on the same forecasts as the AQMP. The 2020-2045 Regional Transportation/Sustainable Communities Strategy prepared by SCAG (2020) includes chapters on: the challenges in a changing region, creating a plan for our future, and the road to greater mobility and sustainable growth. These chapters currently respond directly to federal and state requirements placed on SCAG. Local governments are required to use these as the basis of their plans for purposes of consistency with applicable regional plans under CEQA. For this project, the City's General Plan defines the assumptions that are represented in the AQMP.

The project site is within the Village Low Density General Plan land use designation, which primarily provides for residential uses, such as the project. This classification is intended for detached single-family residential uses in areas that are already developed and support existing homes. The district is intended to provide a residential living environment that is adjacent to local services and businesses. Building density ranges from 1 to 10 dwelling units per acre. The project is a single-family residence, located on an infill lot that would be surrounded by existing residential development. The project site is near several local restaurants and small commercial businesses. Thus, the project would be consistent with the Village Low Density General Plan land use designation. Therefore, the project is not anticipated to exceed the AQMP assumptions for the project site and is found to be consistent with the AQMP for the second criterion.

Based on the above, the project would not result in an inconsistency with the SCAQMD AQMP. Therefore, impacts would be less than significant.

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.

The SCAQMD has developed significance thresholds for regulated pollutants, as summarized in **Table 3, SCAQMD Air Quality Significance Thresholds**. The SCAQMD's CEQA Air Quality Significance Thresholds (April 2019) indicate that any projects in the SCAB with daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact.

Table 3
SCAQMD Air Quality Significance Thresholds

Mass Daily Thresholds [a]		
Pollutant	**Construction**	**Operation**
NO_x	100 pounds/day	55 pounds/day
VOC[b]	75 pounds/day	55 pounds/day
PM_{10}	150 pounds/day	150 pounds/day
$PM_{2.5}$	55 pounds/day	55 pounds/day
SO_x	150 pounds/day	150 pounds/day
CO	550 pounds/day	550 pounds/day
Lead	3 pounds/day	3 pounds/day
Toxic Air Contaminants and Odor Thresholds		
Toxic Air Contaminants (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
GHG	10,000 MT/yr CO2eq for industrial facilities	
Ambient Air Quality for Criteria Pollutants [c]		
NO_2 1-hour average Annual arithmetic mean	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal)	
PM_{10} 24-hour average Annual average	10.4 µg/m^3 (construction)[d] & 2.5 µg/m^3 (operation) 1.0 µg/m^3	
$PM_{2.5}$ 24-hour average	10.4 µg/m^3 (construction)[d] & 2.5 µg/m^3 (operation)	
Sulfate 24-hour average	25 µg/m^3 (state)	
CO 1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	

Notes: ppm = parts per million by volume; µg/m^3 = micrograms per cubic meter
a Source: SCAQMD CEQA Handbook (SCAQMD, 1993).
b The definition of VOC includes ROG compounds and additional organic compounds not included in the definition of ROG. However, for the purposes of this evaluation, VOC and ROG will be considered synonymous.
c Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, table A-2 unless otherwise stated.
d Ambient air quality threshold based on SCAQMD Rule 403.
Source: SCAQMD CEQA Handbook (SCAQMD, 1993), SCAQMD Air Quality Significance Thresholds, revised April 2019.

It should be noted that the SCAQMD provides a threshold for emissions of lead, however for purposes of this analysis no lead emissions are calculated as there are no substantive sources of lead emissions. Additionally, the air quality modeling program (discussed below) does not calculate any emissions of lead from typical construction or operational activities.

Short-Term (Construction) Emissions

Emissions are estimated using the CalEEMod (Version 2022.1) software, which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant emissions from a variety of land use projects. CalEEMod was developed in collaboration with the air districts of California. Regional data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California air districts to account for local requirements and conditions. The model is considered to be an accurate and comprehensive tool for quantifying air quality impacts from land use projects throughout California and is recommended by the SCAQMD.[25]

Daily regional emissions during construction are forecasted by assuming a conservative estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date) and applying the mobile source and fugitive dust emissions factors. The input values used in this analysis were adjusted to be project-specific for the construction schedule and the equipment used was based on CalEEMod defaults. The CalEEMod program uses the EMFAC2021 computer program to calculate the emission rates specific for Orange County for construction-related employee vehicle trips and the OFFROAD2017 computer program to calculate emission rates for heavy truck operations. EMFAC2021 and OFFROAD2017 are computer programs generated by CARB that calculates composite emission rates for vehicles. Emission rates are reported by the program in grams per trip and grams per mile or grams per running hour. Daily truck trips and CalEEMod default trip length data were used to assess roadway emissions from truck exhaust. The maximum daily emissions are estimated values for the worst-case day and do not represent the emissions that would occur for every day of project construction. The maximum daily emissions are compared to the SCAQMD daily regional numeric indicators. Detailed construction equipment lists, construction scheduling, and emission calculations are available in the CalEEMod Output provided in **Appendix E.1** of this document.

Construction activities associated with the project would result in emissions of VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$. Construction related emissions are expected from the following construction activities:

- Grading/Excavation
- Foundation and Building Construction
- Architectural Coating

Construction activities are expected to start no sooner than March 2024, take approximately 25 months and construction completion and occupancy is anticipated in March 2026. The construction schedule utilized in the analysis represents a “worst-case” analysis scenario even if construction was to occur any time after the respective dates since emission factors for construction decrease as time passes and the

[25] South Coast Air Quality Management District, California Emissions Estimator Model.

analysis year increases due to emission regulations becoming more stringent.[26] The construction activities for the project are anticipated to include: grading/excavation, foundation work and construction of an approximately 7,584.23 square foot single-family residential dwelling plus a 603.89 square foot garage, a 240.34 square foot mechanical area, and a 1,424.67 square foot deck area (for a total of 9,853.13 square feet), and application of architectural coatings. The irrigated landscape area would be comprised of a total area of 6,281.22 square feet and the site is 0.56 acres.

Dust is typically a major concern during demolition, site preparation and rough grading activities. Because such emissions are not amenable to collection and discharge through a controlled source, they are called "fugitive emissions." Fugitive dust emissions rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). CalEEMod was utilized to calculate fugitive dust emissions resulting from this phase of activity. The project would be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures. Compliance with this rule is achieved through application of standard best management practices in construction and operation activities, such as application of water or chemical stabilizers to disturbed soils, managing haul road dust by application of water, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 mile per hour (mph), sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph and establishing a permanent, stabilizing ground cover on finished sites. In addition, projects that disturb 50 acres or more of soil or move 5,000 cubic yards of materials per day are required to submit a Fugitive Dust Control Plan or a Large Operation Notification Form to SCAQMD. Based on the size of the project area (approximately 0.56 acres) a Fugitive Dust Control Plan or Large Operation Notification would not be required.

SCAQMD's Rule 403 minimum requirements require that the best available dust control measures are applied for all grading operations and include the application of water or other soil stabilizers in sufficient quantity to prevent the generation of visible dust plumes. Compliance with Rule 403 would require the use of water trucks during all phases where earth moving operations would occur and is incorporated into the emissions modeling for the project.

Construction emissions for construction worker vehicles traveling to and from the project site, as well as vendor trips (construction materials delivered to the project site) were estimated based on CalEEMod. SCAQMD Rules that are currently applicable during construction activity for this project include but are not limited to: Rule 1113 (Architectural Coatings) and Rule 403 (Fugitive Dust). Best Available Control Measures (BACMs) are considered standard regulatory requirements. As such, credit for Rule 403 and Rule 1113 have been taken.

The estimated maximum daily construction emissions are summarized in **Table 4, Construction-Related Regional Pollutant Emissions**. Detailed construction model outputs are presented in **Appendix E.1** to this document.

[26] As shown in the California Emissions Estimator Model (CalEEMod) User's Guide Version 2020.4.0, Section 4.3 "OFFROAD Equipment" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

Table 4
Construction-Related Regional Pollutant Emissions

Activity	Pollutant Emissions (pounds/day)					
	ROG	**NOx**	**CO**	**SO_2**	**PM10**	**PM2.5**
Maximum Daily Emissions[1,2]	1.91	13.8	13.2	0.02	2.89	1.63
SCAQMD Thresholds	75	100	550	150	150	55
Exceeds Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

[1] Includes both on-site and off-site emissions. On-site emissions from equipment operated on-site that is not operated on public roads. Grading/excavation PM-10 and PM-2.5 emissions include compliance with SCAQMD Rule 403.
[2] Construction and painting phases may overlap.
*Source: CalEEMod Version 2022.1. Output, available in **Appendix E.1**.*

As shown in **Table 4, Construction-Related Regional Pollutant Emissions**, the maximum emissions resulting from the project construction would not exceed criteria pollutant thresholds established by the SCAQMD for emissions of any criteria pollutant. **Therefore, construction impacts would be less than significant**.

Long-Term (Operational) Emissions

Emissions were calculated for the project. Operational activities associated with the project would result in emissions of VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$. Operational emissions would be expected from the following primary sources:

- Area Source Emissions
- Energy Source Emissions
- Mobile Source Emissions

Area Source Emissions

Architectural Coatings

Over a period of time the buildings that are part of this project would be subject to emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings as part of project maintenance. Rule 1113 (Architectural Coatings) limits paints applied to buildings to 50g/L VOC content.

Consumer Products

Consumer products include, but are not limited to detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds which when released in the atmosphere can react to form ozone and other photochemically reactive pollutants.

Fireplaces

To be conservative, the CalEEMod default for gas 90 percent of dwelling units with gas fireplaces was retained. The single-family dwelling unit would include a fireplace and an outdoor BBQ area fueled by gas.

Landscape Maintenance Equipment

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the project.

Energy Source Emissions

Combustion Emissions Associated with Natural Gas and Electricity

Electricity and natural gas are used by almost every project. Criteria pollutant emissions are emitted through the generation of electricity and consumption of natural gas. However, because electrical generating facilities for the project area are located either outside the region (State) or offset through the use of pollution credits (RECLAIM) for generation within the SCAB, criteria pollutant emissions from off-site generation of electricity are generally excluded from the evaluation of significance and only natural gas use is considered.

Mobile Source Emissions

Vehicles

Project mobile source air quality impacts are dependent on both overall daily vehicle trip generation and the effect of the project on peak hour traffic volumes and traffic operations in the vicinity of the project. The project-related operational air quality impacts are derived primarily from vehicle trips generated by the project. As there was no traffic study required for this project, CalEEMod default trip generation rates for a single-family dwelling use were used.

Fugitive Dust Related to Vehicular Travel

Vehicles traveling on paved roads would be a source of fugitive emissions due to the generation of road dust inclusive of tire wear particulates.

Operational Emissions Summary

The potential operations-related air emissions have been analyzed below for the criteria pollutants and cumulative impacts. The worst-case summer or winter criteria pollutant emissions created from the project's long-term operations have been calculated and are shown below in **Table 5, Regional Operational Pollutant Emissions.**

Table 5
Regional Operational Pollutant Emissions

Operational Activities	Pollutant Emissions (pounds/day)					
	VOC	**NOx**	**CO**	**SOx**	**PM_{10}**	**$PM_{2.5}$**
Maximum Daily Emissions	**0.53**	**0.06**	**0.88**	**<0.005**	**0.10**	**0.08**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**
*Source: CalEEMod Version 2022.1 the higher of either summer or winter emissions, available in **Appendix E.1**.*						

The results from **Table 5, Regional Operational Pollutant Emissions,** show that none of the SCAQMD regional emissions thresholds would be exceeded. **Therefore, operational impacts would be less than significant**.

Cumulative Air Quality Impacts

There are a number of cumulative projects in the project area that have not yet been built or are currently under construction. Since the timing or sequencing of the cumulative projects is unknown, any quantitative analysis to ascertain daily construction emissions that assumes multiple, concurrent construction projects would be speculative. Further, cumulative projects include local development as well as general growth within the project area. However, as with most development, the greatest source of emissions is from mobile sources, which travel well out of the local area. Therefore, from an air quality standpoint, the cumulative analysis would extend beyond any local projects and when wind patterns are considered would cover an even larger area. The SCAQMD recommends using two different methodologies: (1) that project-specific air quality impacts be used to determine the potential cumulative impacts to regional air quality;[27] and (2) that a project's consistency with the current AQMP be used to determine its potential cumulative impacts.

The project area is out of attainment for ozone, PM_{10}, and $PM_{2.5}$. Construction and operation of cumulative projects project site further degrade the local air quality, as well as the air quality of the basin. The greatest cumulative impact on the quality of regional air cell would be the incremental addition of pollutants mainly from increased traffic volumes from residential, commercial, and industrial development and the use of heavy equipment and trucks associated with the construction of these projects. Air quality project site be temporarily degraded during construction activities that occur separately or simultaneously. However, in accordance with the SCAQMD methodology, projects that do not exceed the SCAQMD criteria or can be mitigated to less than criteria levels are not significant and do not add to the overall cumulative impact. A significant impact may occur if a project would add a cumulatively considerable contribution of a federal or state non-attainment pollutant.

Project operations would generate emissions of NO_x, ROG, CO, PM_{10}, and $PM_{2.5}$, which would not exceed the SCAQMD regional thresholds and would not be expected to result in ground level concentrations that exceed the NAAQS or CAAQS. Therefore, the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. **Cumulative impacts would be less than significant.**

[27] South Coast Air Quality Management District, Potential Control Strategies to Address Cumulative Impacts from Air Pollution White Paper, 1993, http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact.

Short-Term (Construction) Localized Emissions

The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the federal and/or state ambient air quality standards (NAAQS/CAAQS). Collectively, these are referred to as localized significance thresholds (LSTs).

The significance of localized emissions impacts depends on whether ambient levels in the vicinity of any given project are above or below State standards. In the case of CO and NO_2, if ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a state or federal standard, then project emissions are considered significant if they increase ambient concentrations by a measurable amount. This would apply to PM_{10} and $PM_{2.5}$; both of which are non-attainment pollutants.

The SCAQMD established LSTs in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses.

To address the issue of localized significance, the SCAQMD adopted LSTs that show whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects. The analysis makes use of methodology included in the SCAQMD Final Localized Significance Threshold Methodology (LST Methodology). SCAQMD's Methodology clearly states that "off-site mobile emissions from the project should NOT be included in the emissions compared to LSTs."[28] Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered. The CalEEMod output in **Appendix E.1** of this document show the equipment used for this analysis.

The local air quality emissions from construction were analyzed using the SCAQMD's Mass Rate Localized Significant Threshold Look-up Tables and the methodology described in LST Methodology prepared by SCAQMD (revised July 2008). The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily emissions of CO, NO_X, PM_{10}, and $PM_{2.5}$ from the project could result in a significant impact to the local air quality. The emission thresholds were calculated based on the Central Orange County Coastal source receptor area (SRA) 20 and a disturbance value of one acre per day (as the site is approximately 0.56 acres).

According to LST Methodology, any receptor located closer than 25 meters (82 feet) shall be based on the 25-meter thresholds. The nearest sensitive receptors to the project site include: the residential uses adjacent to the northern and southern boundaries of the project site and the residential uses located across the Coast Highway, approximately 85 feet (26 meters) from the site; therefore, the SCAQMD Look-up Tables for 25 meters was used. Other air quality sensitive land uses located further from the project

[28] South Coast Air Quality Management District, Final Localized Significance Thresholds Methodology, 2003 (Revised July 2008).

site and would experience lower impacts. **Table 6, Local Construction Emissions at the Nearest Receptors,** shows the on-site emissions from the CalEEMod model for the different construction phases and the LST emissions thresholds.

The data provided in **Table 6**, **Local Construction Emissions at the Nearest Receptors,** shows that none of the analyzed criteria pollutants would exceed the local emissions thresholds at the nearest sensitive receptors.

Table 6
Local Construction Emissions at the Nearest Receptors

Activity	On-Site Pollutant Emissions (pounds/day)			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Grading/Excavation	13.5	12.4	2.7	1.58
Foundation and Building Construction	8.71	10.2	0.38	0.35
Architectural Coating	1.42	1.72	0.03	0.03
SCAQMD Thresholds[a]	**92**	**647**	**4**	**3**
Exceeds Threshold?	**No**	**No**	**No**	**No**

[a] The nearest sensitive receptors to the project include: the residential uses adjacent to the northern and southern boundaries of the project site and the residential uses located across the Coast Highway, approximately 85 feet (26 meters) from the Site; therefore, the 25 meter threshold was used.

Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for 1 acre at a distance of 25 m in SRA 20 (Central Orange County Coastal).

Construction-Related Toxic Air Contaminants (TACs)

With respect to TACs, the greatest potential for TAC emissions resulting from construction of the project would involve diesel particulate emissions associated with trucks and heavy equipment. Based on SCAQMD guidance, health effects from TACs are usually described in terms of individual cancer risk, which is the likelihood that a person exposed to TACs over a 70-year lifetime will contract cancer. Project construction activity would not result in long-term substantial sources of TAC emissions (i.e., 30 or 70 years) and would not generate ongoing construction TAC emissions. Given the temporary and short-term construction schedule (approximately 25 months), the project would not result in a long-term (i.e., lifetime or 30-year) exposure as a result of project construction. Furthermore, as shown above, construction-based particulate matter (PM) emissions (including diesel exhaust emissions) do not exceed any local or regional thresholds.

In addition, the construction activities associated with the project would be similar to other development projects in the City, and would be subject to the regulations and laws relating to toxic air pollutants at the regional, State, and federal level that would protect sensitive receptors from substantial concentrations of these emissions. The project would be consistent with applicable AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities. The project would comply with the CARB Air Toxics Control Measure that limits diesel powered equipment and vehicle idling to no more than five (5) minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation;

compliance with these would minimize emissions of TACs during construction. The project would also comply with the requirements of SCAQMD Rule 1403 if asbestos is found during the demolition activities.

Long-Term (Operational) Localized Emissions

Project-related air emissions from on-site sources such as architectural coatings, landscaping equipment, onsite usage of natural gas appliances as well as the operation of vehicles on-site may have the potential to exceed the State and federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin. According to SCAQMD LST methodology, LSTs would apply to the operational phase of a project, if the project includes stationary sources, or attracts mobile sources (such as heavy-duty trucks) that may spend long periods queuing and idling at the site; such as industrial warehouse/transfer facilities. The project involves the construction and operation of a single-family residential use. However, due to the lack of on-site/stationary source emissions, no long-term localized significance threshold analysis is warranted.

CO Hot Spots

CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential local air quality impacts. Local air quality impacts can be assessed by comparing future without and with project CO levels to the State and federal CO standards which were presented above.

To determine if the project could cause emission levels in excess of the CO standards discussed above, a sensitivity analysis is typically conducted to determine the potential for CO "hot spots" at a number of intersections in the general project vicinity. Because of reduced speeds and vehicle queuing, "hot spots" potentially can occur at high traffic volume intersections with a Level of Service E or worse.

The analysis prepared for CO attainment in the South Coast Air Basin by the SCAQMD can be used to assist in evaluating the potential for CO exceedances in the South Coast Air Basin. CO attainment was thoroughly analyzed as part of the SCAQMD's 2003 Air Quality Management Plan (2003 AQMP) and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan). As discussed in the 1992 CO Plan, peak carbon monoxide concentrations in the South Coast Air Basin are due to unusual meteorological and topographical conditions, and not due to the impact of particular intersections. Considering the region's unique meteorological conditions and the increasingly stringent CO emissions standards, CO modeling was performed as part of 1992 CO Plan and subsequent plan updates and air quality management plans. In the 1992 CO Plan, a CO hot spot analysis was conducted for four busy intersections in Los Angeles at the peak morning and afternoon time periods. The intersections evaluated included: South Long Beach Boulevard and Imperial Highway (Lynwood); Wilshire Boulevard and Veteran Avenue (Westwood); Sunset Boulevard and Highland Avenue (Hollywood); and La Cienega Boulevard and Century Boulevard (Inglewood). These analyses did not predict a violation of CO standards. The busiest intersection evaluated was that at Wilshire Boulevard and Veteran Avenue, which has a daily traffic volume of approximately 100,000 vehicles per day. The Los Angeles County Metropolitan Transportation Authority evaluated the Level of Service in the vicinity of the Wilshire Boulevard/Veteran Avenue intersection and found it to be Level of Service E during the morning peak hour and Level of Service F during the afternoon peak hour.

The project proposes the construction and operation of a single-family dwelling and did not meet the minimum threshold to require any kind of traffic study. Per the CalEEMod output, the default trip

generation rate is 9.44 trips per weekday. Therefore, as the project is not anticipated to generate a significant number of trips, the traffic volume would fall far short of 100,000 vehicles per day. No CO "hot spot" modeling was performed and no significant long-term air quality impact is anticipated to local air quality with the on-going operation of the project. As shown above, the 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.

Short-Term (Construction) Emissions

Construction activities could result in minor amounts of odor compounds associated with diesel heavy equipment exhaust and architectural coatings. These compounds would be emitted in various amounts at various locations during construction and potentially effect nearby sensitive receptors. However, odors are highest near the source and would quickly dissipate away from the source. Such odors are temporary and generally occur at magnitudes that would not affect a substantial number of people. **Therefore, construction impacts would be less than significant**.

Long-Term (Operational) Emissions

As the project involves no operational elements related to industrial projects, no long-term operational objectionable odors are anticipated. **Therefore, operational impacts would be less than significant**.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
4. 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 or US Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☐	☒	☐
c) Have a substantial adverse effect on state or federally protected wetlands a (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
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?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

The following analysis in this section is based on the Biological Resources Assessment (Biological Report) that was prepared for 31451 Coast Highway, Laguna Beach, Orange County, California by LSA, dated January 18, 2023. The full Biological Report is available in **Appendix C** of this document.

Regulatory Setting

Regulations exist at federal, state, and local levels with regard to biological resources and include:

a) Federal Endangered Species Act
b) Federal Migratory Bird Treaty Act
c) Federal Clean Water Act
d) U.S. Army Corps of Engineers

e) California Coastal Zone
f) California Endangered Species Act
g) California Fish and Game Code
h) Natural Community Conservation Planning Act
i) Porter-Cologne Water Quality Control Act
j) Laguna Beach General Plan Open Space Conservation Element
k) Laguna Beach Municipal Code

Environmental Setting

Current electronic database records reviewed included the California Natural Diversity Database Information (CNDDB-RareFind 5), the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants, the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) Online System, the USFWS Critical Habitat Mapper, and the USFWS National Wetlands Inventory.

The project site occurs in a developed, residential neighborhood of the City, on the west side of Coast Highway in a primarily urbanized landscape. The project site is located approximately 0.7-mile southwest of Aliso Canyon and the Pacific Ocean is approximately 50 feet west of the project site. Species that have adapted to human-dominated landscapes are able to take greatest advantage of the developed, landscaped, and remaining open areas in Laguna Beach and the region.

The 0.56-acre project site is currently undeveloped and covered with low lying vegetation.

Land Cover

Existing vegetation on-site is comprised of low lying vegetation. The field survey concluded there are no "high value" or "very high value" habitats, as designated by the Laguna Beach General Plan, Open Space Conservation Element[29] mapped within or adjacent to the proposed project area limits. With the exception of coastal bluff scrub, which in this case is considered a "moderate value" habitat, the other existing habitats (described in further detail below) are considered "low value" habitats.

Soils

Based on available mapping, the project site is underlain by Bosanko clay, Cieneba sandy loam, and Modjeska gravelly loam soils.[30]

Wildlife

The disturbed vegetation occurring on the majority of the project site is considered low-quality habitat for most native wildlife species. The westernmost portion of the parcel contains coastal bluff scrub that provides marginally suitable foraging, breeding, and sheltering habitat for native wildlife species. A total

[29] "High value" habitats are defined by the City of Laguna Beach as extensive areas dominated by indigenous plant communities that possess good species diversity and are often linked to extensive open space areas. Habitats having the characteristics of "high value" habitats may be considered "very high value" when associated with the occurrence of endangered, rare, or locally unique native species and/or their habitats.

[30] United States Department of Agriculture Natural Resources Conservation Service. 2019. Web Soil Survey. https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed August 2019.

of 15 wildlife species were observed on or near the project site during the field survey). All of these species are commonly encountered in and around developed areas within Orange County.

Checklist 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 or U.S. Fish and Wildlife Service?

Less than Significant Impact with Mitigation. A significant impact may occur if a project were to remove or modify habitat for any species identified or designated as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the State or federal regulatory agencies cited.

Prior to beginning field surveys LSA consulted conducted a literature review and records search to identify the existence and potential for occurrence of special-status[31] plant and animal species and sensitive natural communities in the vicinity of the project site. Federal and State lists of special-status species were also examined. Current electronic database records reviewed included the following:

- **CNDDB—RareFind 5** is administered by the California Department of Fish and Wildlife (CDFW). This database covers special-status plant and animal species as well as sensitive natural communities that occur in California. Records from eight USGS quadrangles surrounding the project site (Laguna Beach, San Juan Capistrano, Canada Gobernadora, Dana Point, San Clemente, Tustin, El Toro, and Santiago Peak) were obtained from this database to inform the field survey.

- **CNPS Electronic Inventory of Rare and Endangered Vascular Plants** utilizes four specific categories or "lists" of special-status plant species to assist with the conservation of rare or endangered botanical resources. All of the plants constituting California Rare Plant Ranks (CRPRs) 1A, 1B, 2A, and 2B are intended to meet the status definitions of "threatened" or "endangered" in CESA and the California Department of Fish and Game Code, and are considered by CNPS to be eligible for State listing. At the discretion of the CEQA Lead Agency, impacts to these species may be analyzed as such, pursuant to the State CEQA Guidelines Sections 15125(c) and 15380. Plants that are CRPR 3 (limited information; review list) or CRPR 4 (limited distribution; watch list) or that are considered Locally Unusual and Significant may be analyzed under CEQA if there is sufficient information to assess potential significant impacts. Records from the eight USGS quadrangles surrounding the project area were obtained from this database to inform the field survey.

[31] For the purposes of this report, the term "special-status species" refers to those species that are listed or proposed for listing under the California Endangered Species Act and/or Federal Endangered Species Act; California Fully Protected Species; plants with a California Rare Plant Rank of 1, 2, or 3; California Species of Special Concern; and California Special Animals. It should be noted that "Species of Special Concern" and "California Special Animal" are administrative designations made by the California Department of Fish and Wildlife and carry no formal legal protection status. However, Section 15380 of the State CEQA Guidelines indicates that these species should be included in an analysis of project impacts if they can be shown to meet the criteria of sensitivity outlined therein.

- **USFWS IPaC Online System** lists all proposed, candidate, threatened, and endangered species managed by the Endangered Species Program of the USFWS that have the potential to occur on or near a particular site. This database also lists known critical habitats, national wildlife refuges, jurisdictional wetlands, and migratory birds that could potentially be impacted by activities from a proposed project. An IPaC Trust Resource Report was generated for the project site and was used to inform the field survey.

- **USFWS Critical Habitat Mapper** was reviewed to determine whether critical habitat has been designated within or in the vicinity of the project area.

- **USFWS National Wetlands Inventory** was reviewed to determine whether any wetlands or surface waters of the United States have been previously identified in the project area.

In addition to the databases listed above, historic and current aerial imagery, existing environmental reports for developments in the project vicinity, and regional habitat conservation plans and local land use policies related to biological resources were reviewed.

A general biological survey of the project site was conducted on January 14, 2020, and surveyed on foot, and all biological resources observed were noted and mapped. Suitable habitat for any species of interest or concern was noted, and general site conditions were photographed. The field survey took place on a sunny afternoon with weather conditions conducive to the detection of plant and animal species. A follow-up springtime special-status plant survey was conducted, to confirm the presence or absence of special-status plant species during the typical blooming season. The project site was surveyed on foot to determine locations and quantities of any special-status plant species occurring on site. It was determined that the April 24, 2020, survey date would be the optimal time to survey for those special-status plant species having a reasonable probability of occurring on site. Those special-status plant species from the record searches having a blooming period after April were not considered to have a reasonable likelihood of occurring on site, primarily due to the lack of suitable conditions on site or past site disturbances. Therefore, additional focused plant surveys following the April 24 survey were not deemed to be necessary.

The study area is located on an undeveloped lot (Assessor's Parcel Number 056-032-26) situated in the southwest corner of the San Juan Capistrano, California 7.5-minute USGS topographic quadrangle map in Orange County. The project site is approximately 20 to 120 feet above mean sea level in elevation and is surrounded by residential land uses to the north and south, residential and commercial land uses to the east, and coastal bluffs and beaches along the Pacific Ocean to the west. Representative photos of the study area are provided in Attachment C of the Biological Report (available in **Appendix C** of this document).

Vegetation Communities and Land Cover Types

Descriptions of the vegetation and land cover types occurring within the project site are listed below, using the Orange County Habitat Classification System (HCS) as articulated by Jones & Stokes Associates, Inc.[32] The acreages of each vegetation community and land cover type occurring in the project parcel are shown in **Table 7, Vegetation and Land Cover Types within the Project Area**, and **Figure 13, Vegetation**

[32] Jones & Stokes Associates, Inc. 1993. Methods Used to Survey the Vegetation of Orange County Parks and Open Space Areas and the Irvine Company Property. February 10.

Types and Special-Status Plant Occurrences, for a map of vegetation and land cover types within the project parcel boundary.

A complete list of plant species identified within and adjacent to the proposed project site is available in Attachment B of the Biological Report, and representative site photographs taken during the field survey are provided in Attachment C of the Biological Report (available in **Appendix C** of this document). There are no "high value" or "very high value" habitats, as designated by the Laguna Beach General Plan, Open Space Conservation Element[33] mapped within or adjacent to the proposed project area limits. With the exception of coastal bluff scrub, which in this case is considered a "moderate value" habitat (see the description below), the other existing habitats described below are considered "low value" habitats.

Table 7
Vegetation and Land Cover Types within the Project Area

Vegetation/Land Cover Type	Acreage
Coastal Bluff Scrub	0.27
Disturbed Encelia Scrub	0.04
Disturbed Sage Scrub-Grassland Ecotone	0.02
Ruderal	0.23
Total Project Area	**0.56**
Source: LSA, January 2020.	

Coastal Bluff Scrub (2.1 of the HCS): Areas classified as coastal bluff scrub have at least 20 percent cover by native perennial shrubs and occur on the slopes seaward of the undeveloped parcel, downslope of disturbed vegetation. Dominant plant species in this mixed scrub community include California encelia (Encelia californica) and lemonade berry (Rhus integrifolia). Other native components of this habitat type observed on site include cliff spurge (Euphorbia misera) (a special-status species having a CNPS California Rare Plant Rank of 2B.2), coastal prickly pear (Opuntia littoralis), lance-leaved dudleya (Dudleya lanceolata), wild cucumber (Marah macrocarpus), California wishbone bush (Mirabilis laevis var. crassifolia), seacliff wild buckwheat (Eriogonum parvifolium), bushrue (Cneoridium dumosum), California box-thorn (Lycium californicum), and salt grass (Distichlis spicata). Several cliff spurge individuals were observed on site within coastal bluff scrub during the field surveys.

Several nonnative species were also observed within coastal bluff scrub habitat, including hottentot-fig (Carpobrotus edulis), coppery mesembryanthemum (Malephora crocea), crystal iceplant (Mesembryanthemum crystallinum), Australian saltbush (Atriplex semibaccata), Russian-thistle (Salsola tragus), pig's ear (Cotyledon orbiculata), acacia (Acacia sp.), tree tobacco (Nicotiana glauca), Mexican fan palm (Washingtonia robusta), and pampas grass (Cortaderia selloana).

[33] "High value" habitats are defined by the City of Laguna Beach as extensive areas dominated by indigenous plant communities that possess good species diversity and are often linked to extensive open space areas. Habitats having the characteristics of "high value" habitats may be considered "very high value" when associated with the occurrence of endangered, rare, or locally unique native species and/or their habitats.

LEGEND

Project Location

Special-Status Plants

Euphorbia misera (Multiple Plants)

Euphorbia misera (Single Plant)

Vegetation Type

Coastal Bluff Scrub

Disturbed Encelia Scrub

Disturbed Sage Scrub-Grassland

Ruderal

N

0 25 50

FEET

Source: LSA, January 2023.

Figure 13
Vegetation Types and Special-Status Plant Occurrences

The coastal bluff scrub habitat occurring on-site is a mixture of native and nonnative (ruderal and ornamental) plant species, as described above. Moreover, the project site is surrounded by urban development and is fragmented or isolated from larger open space areas. As such, the faunal carrying capacity and native floral diversity is lower than that of "high value" or "very high value" habitats described previously.

In addition, the remaining habitats described below have an even greater degree of previous disturbance and overall habitat degradation than the "moderate value" coastal bluff scrub habitat on site, and native plant species diversity is lower. Therefore, the following habitats are considered "low value." Because of the fragmentation of habitats on site and lack of connectivity to larger open space habitats in the region, the impacts associated with development of the site are not expected to have an adverse effect on higher-value habitats in the vicinity.

Disturbed Encelia Scrub (2.3.13 of the HCS): Areas mapped as disturbed encelia scrub were dominated by California encelia. Lemonade berry was also present in small numbers. The understory in these areas comprised weedy, nonnative species including hottentot-fig, redstem filaree (Erodium cicutarium), common burclover (Medicago polymorpha), and common sow-thistle (Sonchus oleraceus), among many others.

Disturbed Sage Scrub-Grassland Ecotone (2.8 of the HCS): The area classified as disturbed sage scrub-grassland ecotone has approximately 15 percent cover by shrubs including coastal goldenbush (Isocoma menziesii var. vernonioides) and California encelia. There is also an understory composed of subshrubs and forbs including coastal deerweed (Acmispon glaber), redstem filaree, hottentot-fig, and various nonnative grasses including ripgut grass (Bromus diandrus), red brome (Bromus madritensis ssp. rubens), hare barley (Hordeum murinum ssp. leporinum), and Mediterranean grass (Schismus barbatus).

Ruderal (4.6 of the HCS): Ruderal areas consist of early successional grassland dominated by pioneering herbaceous plants that readily colonize disturbed ground. Areas mapped as ruderal look to have been graded in the past. These areas consist of nonnative annual grasses and herbaceous plants including purple false brome (Brachypodium distachyon), red brome, hare barley, redstem filaree, sourclover (Melilotus indicus), scarlet pimpernel (Anagallis arvensis), Russian-thistle, common burclover, sow thistles (Sonchus spp.), tocalote (Centaurea melitensis), shortpod mustard (Hirschfeldia incana), and sweet fennel (Foeniculum vulgare). Patches of escaped ornamental species including hottentot-fig, coppery mesembryanthemum, and crystal iceplant occur throughout areas mapped as ruderal. Isolated native and nonnative shrubs also occur in these areas.

Wildlife

The disturbed vegetation occurring on the majority of the project site is considered low-quality habitat for most native wildlife species. The westernmost portion of the parcel contains coastal bluff scrub that provides marginally suitable foraging, breeding, and sheltering habitat for native wildlife species. A total of 15 wildlife species were observed on or near the project site during the field survey: American crow (Corvus brachyrhynchos), northern mockingbird (Mimus polyglottos), western gull (Larus occidentalis), Heermann's gull (Larus heermanni), brown pelican (Pelecanus occidentalis), red-shouldered hawk (Buteo lineatus), Anna's hummingbird (Calypte anna), rufous/Allen's hummingbird (Selasphorus rufus/sasin), California towhee (Melozone crissalis), black phoebe (Sayornis nigricans), Say's phoebe (Sayornis saya), white-crowned sparrow (Zonotrichia leucophrys), western fence lizard (Sceloporus occidentalis),

European honeybee (Apis mellifera), and California ground squirrel (Otospermophilus beecheyi). All of these species are commonly encountered in and around developed areas within Orange County.

Special-Status Species

Attachment D of Biological Report (available in **Appendix C** of this document) contains tables that identify those special-status plant and animal species known to occur or that potentially occur in the vicinity of the project site and includes detailed information about each species' habitat and distribution, activity period, State and federal status designations, and probability of occurrence within the construction footprint and associated fuel modification areas. These species were compiled from the CNPS and CNDDB records search from the eight USGS quadrangles surrounding the project site and from through extensive knowledge and experience in the region.

One special-status species—i.e., cliff spurge—was observed during the January and April field surveys. While cliff spurge does have a California Rare Plant Rank of 2B.2 (considered rare, threatened, or endangered in California but more common elsewhere) by CNPS, this plant species is neither federally listed nor State-listed and is not proposed for either federal or State listing status. The project would result in the permanent loss of 40 cliff spurge individuals out of a total of 45 individuals within the project area limits (see **Figure 14, Impacts to Vegetation Types and Special-Status Plant Occurrences**). Due to the rarity ranking, cliff spurge, as well as California box-thorn and bushrue (both of which are of local interest to the City of Laguna Beach), should be added to the plant palette of the Landscape and Planting Plans as an impact minimization measure (see Mitigation Measures MM-BIO-5, below).

Wetlands and Potential Jurisdictional Drainage Features

There are no records or maps of any wetlands, potentially jurisdictional waterbodies, riparian resources, or significant drainage courses within or adjoining the project area, and none were observed during the site surveys. The Pacific Ocean, a jurisdictional navigable water of the United States, does occur to the west of the project site but is outside of the proposed project disturbance limits.

Conclusion

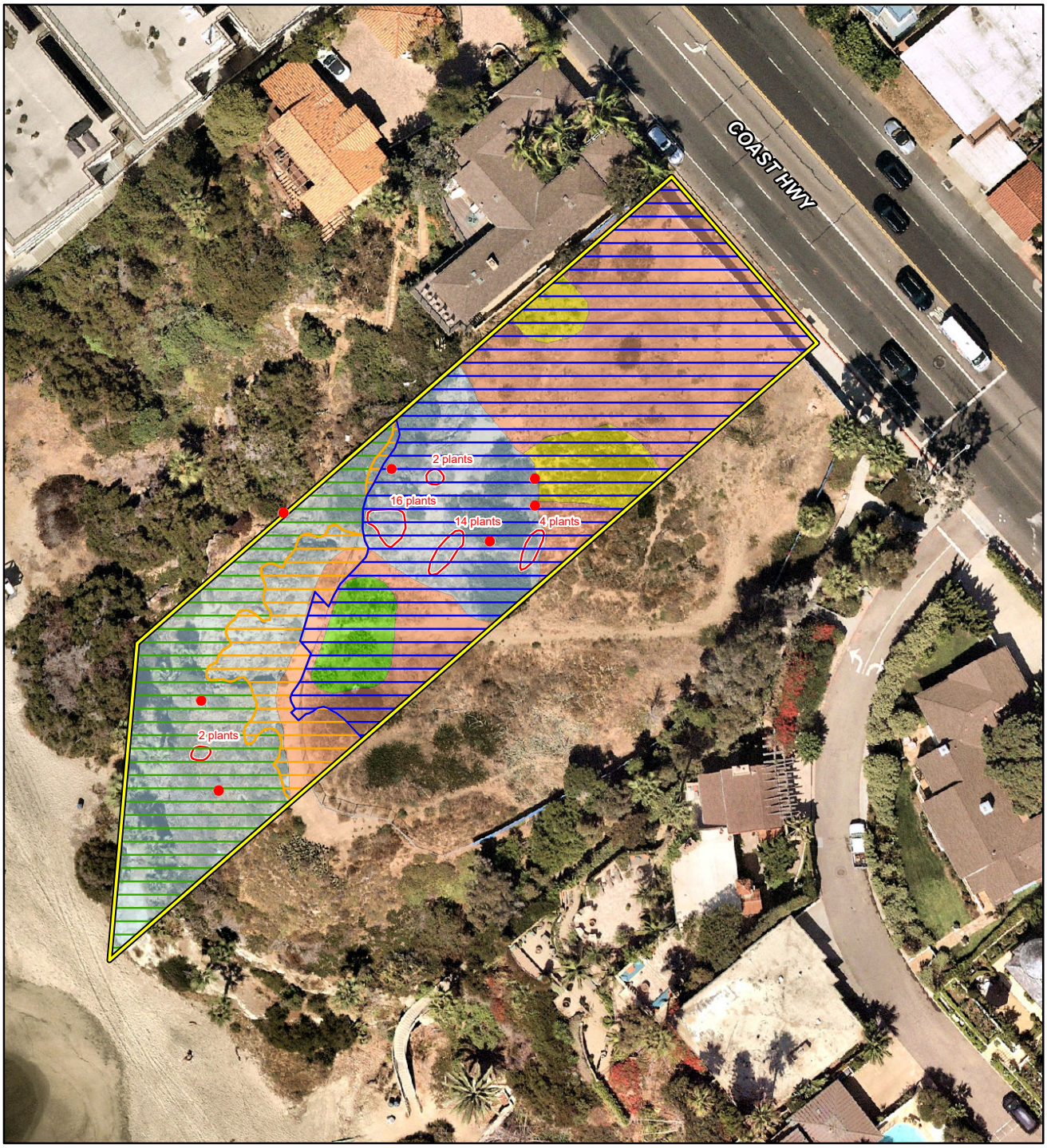
The project construction activities would result in permanent direct impacts to coastal bluff scrub, disturbed encelia scrub, disturbed sage scrub-grassland, and ruderal habitats (see **Figure 14, Impacts to Vegetation Types and Special-Status Plant Occurrences**). The permanent impact area shown on **Figure 14** includes all areas corresponding to the proposed residential footprint (e.g., structures, hardscape) as well as associated irrigated landscape areas. Temporary impact areas shown on **Figure 14** correspond to nonirrigated landscape areas where native plants (consisting of native plant species occurring on site) would be planted and established. Watering of the new plants in these temporary impact areas would be conducted manually and only as needed initially to establish the plants. The remainder of the Project Site (0.14 acre of coastal bluff scrub) would be preserved in place. **Table 8, Impacts to and Preservation of Vegetation and Land Cover Types within the Project Area**, provides a summary of permanent and temporary impacts to vegetation types identified on the Project Site and identifies the vegetation (i.e., coastal bluff scrub) to be preserved in place. Due to the highly disturbed habitat quality and regionally isolated nature of the disturbed encelia scrub and disturbed sage scrub-grassland, permanent impacts to these habitat types are not expected to require mitigation.

Table 8
Impacts to and Preservation of Vegetation and Land Cover Types within the Project Area

Vegetation/Land Cover Type	Permanent Impacts (ac.)	Temporary Impacts (ac.)	Preserved In Place (ac.)
Coastal Bluff Scrub	0.09	0.04	0.14
Disturbed Encelia Scrub	0.04	--	--
Disturbed Sage Scrub-Grassland Ecotone	0.02	--	--
Ruderal	0.21	0.02	--
Total Project Area	**0.36**	**0.06**	**0.14**
Source: LSA, January 2023.			

While the coastal bluff scrub existing on site is a "moderate value" habitat, it is also regionally isolated from other larger, contiguous habitat and open space areas. The habitat is degraded due to the prevalence of nonnative weeds and ornamental species. Because of the degraded and fragmented nature of the coastal bluff scrub existing on the project site, this habitat is considered low-quality habitat for most native wildlife species. Furthermore, the project as proposed would permanently impact only a small quantity of coastal bluff scrub (0.09 acre), and more than twice as much coastal bluff scrub (0.20 acre) would be either restored to equal or greater quality habitat or preserved in place. Therefore, permanent impacts to coastal bluff scrub are not expected to warrant mitigation.

In addition, it is anticipated that construction activities on-site would result in temporary impacts to biological resources/habitats adjacent to permanent impact areas, as shown in **Figure 14, Impacts to Vegetation Types and Special-Status Plant Occurrences**. However, in such cases the temporarily impacted areas which correspond to non-irrigated landscape areas, would be restored in place to predisturbance conditions of equal or greater quality in order to avoid adverse impacts to these resources. This would involve the planting and establishment of additional native plant species (including cliff spurge, California box-thorn, bushrue, and other native species identified **Figures 11 and 12** the landscape plans) in these temporary impact areas. Mitigation Measures MM-BIO-1 through MM-BIO-5 would minimize any potential project-related impacts on adjacent native habitat, wildlife, water quality, and nesting birds during construction activities. **Therefore, impacts would be less than significant with implementation of mitigation measures**.



LEGEND

- Project Location
- Permanent Impact Area
- Temporary Impact Area (Native Vegetation Planting)
- Conditions/Resources Preserved in Place

Special-Status Plants

- *Euphorbia misera* (Multiple Plants)
- *Euphorbia misera* (Single Plant)

Vegetation Type

- Coastal Bluff Scrub
- Disturbed Encelia Scrub
- Disturbed Sage Scrub-Grassland
- Ruderal

N

0 25 50
FEET

Source: LSA, January 2023.

Figure 14
Impacts to Vegetation Types and Special-Status Plant Occurrences

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

Less Than Significant Impact. A significant impact may occur if riparian habitat or any other sensitive natural community identified locally, regionally, or by the State and federal regulatory agencies cited were to be adversely modified without adequate mitigation.

Coastal Zone

The project site is located within the Coastal Zone. Therefore, through provisions of the California Coastal Act, the California Coastal Commission is empowered to issue a Coastal Development Permit for many projects located within the Coastal Zone. In areas where a local entity has a certified Local Coastal Program (LCP), the local entity (e.g., the City) can issue a Coastal Development Permit only if it is consistent with the LCP. The project may require authorization under the City's LCP. However, there are no "high value" or "very high value" habitats or designated or proposed Environmentally Sensitive Habitat Areas (ESHAs) within the project site limits. In addition, there are no significant drainages courses on site or within 100 ft of the project limits. Consequently, the project would be considered consistent with the California Coastal Zone Act.

Critical Habitat

No portion of the project site is within designated or proposed critical habitat for any federally listed species. Thus, no impacts to critical habitat would result from project implementation.

No riparian or other sensitive natural communities exists on the project site or in the surrounding area.[34] Furthermore, the project site and surroundings are not located in or adjacent to a High Value Habitat as defined by the City or in the Biology Report.[35] In addition, there are no other sensitive natural communities identified by the CDFW.[36] Implementation of the project would not result in any adverse impacts to riparian habitat or other sensitive natural communities. **Therefore, impacts would be less than significant**.

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

No Impact. A significant impact may occur if state or federally protected wetlands are modified or removed without adequate mitigation. There are no records or maps of any wetlands, potentially jurisdictional waterbodies, riparian resources, or significant drainage courses within or adjoining the project area, and none were observed during the site surveys. The Pacific Ocean, a jurisdictional navigable

[34] US EPA, NEPAssist, https://nepassisttool.epa.gov/nepassist/nepamap.aspx. Accessed October 2022.

[35] Laguna Beach GIS Map, https://lagunabeach.maps.arcgis.com/apps/webappviewer/index.html?id=75a3aa3236c7475bb5e81925d130a763. Accessed October 2022.

[36] California Department of Fish and Wildlife, CDFQ Lands, website: https://apps.wildlife.ca.gov/lands/, accessed: May 2020.

water of the United States, does occur to the west of the project site but is outside of the project disturbance limits. **Therefore, no impacts 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 Impact with Mitigation. A significant impact may occur if a project would interfere or remove access to a migratory wildlife corridor or impede the use of native wildlife nursery sites.

The project site is located in a developed urban area and surrounded by urbanized uses in each direction, including roads and residential uses and does not function as a wildlife corridor or linkage, or as a native wildlife nursery site. The nearest potential wildlife corridor occurs in the undeveloped natural areas associated with Aliso Canyon area approximately 0.5 mile east of the site, which would not be affected by project implementation.

Nesting Birds

The project site and immediate vicinity contain vegetation that provides suitable nesting habitat for a variety of native and migratory bird species. To ensure compliance with the Federal Migratory Bird Treaty Act and California Fish and Game Code Sections 3500–3516, preconstruction nesting bird surveys are recommended to occur prior to any vegetation clearing or construction activities planned to occur during the nesting bird season (February 15 through August 31). **Therefore, with successful implementation of the Mitigation Measure MM-BIO-3, impacts to nesting birds would be avoided.**

Wildlife Movement

Because the project site is adjacent to existing residential developments outside of any known wildlife movement corridor, project implementation would not have a substantial impact on wildlife movement.

Therefore, the project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species. The project would not interfere with established native resident or migratory wildlife corridors, nor would the project impede the use of native wildlife nursery sites. **Therefore, impacts would be less than significant**.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands)?

No Impact. A project-related significant adverse effect could occur if a project is inconsistent with local regulations pertaining to biological resources.

While the project site is located in the Coastal Zone, it is not located in or adjacent to any area designated by the City's General Plan Open Space Conservation Element as potentially having high or very high value habitat. Chapter 12.06, Tree Removal Permit Process, of the LBMC regulates the removal of trees on public and private property in the City. In addition, Chapter 12.08, Preservation of Heritage Trees, provides for the protection of original native tree stands and historically and scenically important trees. There are no trees currently on the project site. Therefore, no conflict with local policies or ordinances protecting

biological resources would occur and construction of the project would not affect any protected trees. **Therefore, no impacts would occur**.

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

Less Than Significant Impact. A significant impact may occur if a project is inconsistent with resource policies of any conservation plans of the types cited above.

The project site is within the Orange County Central-Coastal Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) Planning Area. However, the City is not a signatory jurisdiction under the NCCP/HCP. Nonparticipating landowners within a nonsignatory jurisdiction in the Planning Area may satisfy the requirements of FESA and CESA with respect to potential incidental take of listed species in either of the following ways: (1) on-site avoidance of take; or (2) satisfaction of applicable FESA and CESA provisions under the consultation and permit provisions of these statutes (e.g., Section 10(a)(1)(B) of FESA or Section 2081(b) of the California Fish and Game Code, respectively).

The project site is not located within a designated NCCP/HCP Reserve Area or Existing Use Area, or otherwise restricted/conservation area. While cliff spurge is mentioned in the NCCP/HCP as a covered species, coverage for incidental take/management applies only to the Dana Point Headlands property. Therefore, the project is not anticipated to adversely impact any species covered under the NCCP/HCP or other regional/local plans. **Thus, implementation of the project would not conflict with any adopted State, regional, or local conservation plan, and impacts would be less than significant**.

Mitigation Measures

MM-BIO-1 **Invasive Species Control**: Prior to ground disturbance and during construction activities, measures should be included to ensure that invasive plant material is not spread to areas outside the proposed project limits by tracking seed on equipment, clothing, and/or shoes. Equipment/material imported from an area where invasive plants exist must be identified, and measures (e.g., equipment cleaning) must be implemented to prevent importation and spreading of nonnative plant material within and outside the proposed project limits. All construction equipment accessing unpaved areas would be cleaned with water to remove dirt, seeds, vegetative material, or other debris that could contain or hold seeds of noxious weeds before arriving at and leaving the proposed project limits. Only certified weed-free straw, mulch, and/or fiber rolls would be used for erosion control.

MM-BIO-2 **Construction Site Housekeeping**:

A. Prior to ground disturbance, the project Contractor should install adequate erosion and sedimentation barriers (e.g., silt fencing) at the project site boundaries to prevent any sediment-laden runoff or debris from reaching the coastal bluffs and Pacific Ocean located to the west of the project site.

B. The project disturbance limits should be clearly marked with construction fencing (or other highly visible material), and vehicle/equipment maintenance and fueling areas should be located at least 100 ft away from the western project site boundaries.

C. To prevent inadvertent entrapment of animals during the construction phase of the proposed project, all excavated, steep-walled holes or trenches more than 2 ft deep should be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen fill or wooden planks should be installed. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals. In the case of trapped animals, escape ramps or structures should be installed immediately to allow the animal(s) to escape.

D. For the duration of construction activities, all food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in securely closed containers and removed at least daily from the construction site.

E. Use of rodenticides and herbicides in project sites should be restricted. This is necessary to prevent primary or secondary poisoning of predators and the depletion of prey populations on which they depend. All uses of such compounds should observe label and other restrictions mandated by the United States Environmental Protection Agency, California Department of Food and Agriculture, and other State and federal legislation.

Construction site housekeeping measures would effectively minimize temporary construction effects on biological resources by limiting construction equipment and personnel from entering areas where wildlife may be impacted; limiting the potential for erosion, fuel, or chemical spills that could adversely impact water quality and adjacent aquatic habitats; reducing the likelihood of attracting or introducing predators of special-status species; and preventing the primary or secondary poisoning of wildlife in the project vicinity.

MM-BIO-3 **Preconstruction Nesting Bird Surveys and Active Nest Avoidance Buffers**: If vegetation removal, construction, or grading activities are planned to occur within the active nesting bird season (February 15 through August 31), a qualified biologist should conduct a preconstruction nesting bird survey no more than 3 days prior to the start of such activities. The nesting bird survey should include the project site and areas immediately adjacent to the site that could potentially be affected by project-related activities such as noise, vibration, increased human activity, and dust. If active bird nests are found within areas that could be directly or indirectly impacted by project-related activities, the qualified biologist should establish an appropriate buffer zone around the active nest(s). The appropriate buffer should be determined by the qualified biologist based on species, location, and the nature of the proposed activities. Project activities should be avoided within the buffer zone until the nest is deemed no longer active by the qualified biologist.

MM-BIO-4 **Restoration of Temporary Impact Areas**: Where construction activities on site would result in temporary impacts to biological resources/habitats adjacent to permanent impact areas, the temporarily impacted areas, which correspond to non-irrigated landscape areas, would be restored in place to predisturbance conditions of equal or greater quality in order to avoid adverse impacts to these resources. This includes the restoration of 0.02 acre of ruderal habitat to coastal bluff scrub and the enhancement, or improvement, of 0.04 acre of coastal bluff scrub by augmenting the existing conditions

with a variety of native species that occur on site, including cliff spurge, California box-thorn, bushrue, and other native species identified on the Landscape and Planting Plans. The restoration plan shall include cliff spurge individuals be replaced on site at a 3:1 ratio.

MM-BIO-5 **Add Select Plants to Landscape and Planting Plans**: To offset any potential impacts to cliff spurge, California box-thorn, and bushrue, these three species would be added to the plant palette identified on the Landscape and Planting Plans for the project.

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

The following analysis in this section is based on the Extended Phase I and Phase II Cultural Resources Assessment (Phase I and II) that was prepared for 31451 Coast Highway Project, City of Laguna Beach, California by ESA, dated November 2022. The Phase I and II is available in **Appendix F.1** of this document.

Regulatory Setting

Regulations exist at federal, state, and local levels with regard to cultural resources and include:

a) National Historic Preservation
b) National Register of Historic Places
c) Federal Native American Graves Protection and Repatriation Act
d) California Register of Historic Resources
e) CEQA Guidelines Section 15064.5
f) California Native American Graves Protection and Repatriation Act
g) California Health and Safety Code Section 7050.5
h) California Public Resources Code Section 5097
i) California Government Code Section 6254
j) Assembly Bill 52
k) Senate Bill 18
l) Orange County General Plan Resources Element

Environmental Setting

The City of Laguna Beach, which was incorporated on June 29, 1927, has a history dating back to the late 1870's. In 1871, George Thurston and his family were the first to arrive in South Laguna and settle in Aliso Canyon where they cultivated melons and vegetable for selling in Los Angeles. In 1876, Nathaniel and William Brooks arrived at Laguna Beach and because they stayed for more than a summer, they were considered the original pioneers. William claimed 170 acres at Arch Beach and built houses. Nathaniel worked to bring water via a series of pipes from Bluebird Canyon to Arch Beach. Arch Beach was later sold to Hubbard Goff. In 1905, the Thumb Brothers, LC McKnight, and Howard Heisler began to develop North Laguna with streets the bisect at right angles. Water was brought from Laguna Canyon. In the 1920s, Laguna Beach became known as an artist colony.

Checklist Discussion

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

***Less Than Significant Impact with Mitigation*.** Section 15064.5 of the State CEQA Guidelines defines an historical resources as: 1) a resource listed in or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources; 2) a resource listed in a local register of historical resources or identified as significant in an historical resource survey meeting certain state guidelines; or 3) an object, building, structure, site, area, place, record or manuscript which a lead agency determines to be significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided that the lead agency's determination is supported by substantial evidence in light of the whole record. A project-related significant adverse effect would occur if the project were to adversely affect a historical resource meeting one of the above definitions.

Section 15064.5 of the State CEQA Guidelines defines significant archaeological resources as resources which meet the criteria for historical resources, as discussed above, or resources which constitute unique archaeological resources. A project-related significant adverse effect could occur if the project were to affect archaeological resources which fall under either of these categories. Archaeological sites (such as are most often recommended eligible under Criterion 4 of the California Register, which is the potential for a resource to contribute information important to the study of history or prehistory. This is also known as the potential for a given resource to answer specific research questions (or its inherent "data or information potential"). In addition to meeting the Criteria for Evaluation, a property must have integrity. "Integrity is the ability of a property to convey its significance," (U.S. Department of the Interior 2002:44). For properties eligible under Criterion 4, less attention is given to their overall condition, than if they were being considered under Criteria 1, 2, or 3. Archeological sites, in particular, do not exist today exactly as they were formed as there are always cultural and natural processes that alter the deposited materials and their spatial relationships. For properties eligible under Criterion 4, integrity is based upon the property's potential to yield specific data that addresses important research questions.

Historical Structures

Generally, properties eligible for listing in the National Register are at least 50 years old. The California Office of Historic Preservation generally recommends an evaluation of buildings and structures older than 45 years of age by professionals meeting the Secretary of the Interior Standards Professional Qualifications for Architectural History and Archeology. The project site is currently undeveloped with the exception of an existing electrical utility box and an associated three-foot high retaining wall along the northern margin of the project site. Other than these current uses and the presence of a few dirt access roads in the more recent past, it appears to have never been improved based on review of aerials and topographic maps. The residence adjacent to the northwest of the project site was constructed between 1946 and 1952, while Coast Highway was constructed through Laguna Beach in 1926. The project site appears to have been bound by seaward trending drainages prior to the construction of Coast Highway. In particular, it appears that a relatively well-developed northeast/southwest trending drainage extended from east of Coast Highway and through the general southern portion of the project site to the beach. Furthermore, the project site, nor immediate surrounding uses were found eligible for listing in the

National Register of Historic Places (NRHP),[37] California Register of Historic Resources (CRHR),[38] and local designation.

Previous Cultural Resources Investigation at the Project Site

Previous cultural resource investigations identified two cultural resources (P-30-177513 and CA-ORA-842) within the project site. Resource P-30-177513 is described as the South Coast Water District Beach Interceptor Sewer and Tunnel, which is a two-mile subterranean tunnel constructed in 1954 that extends from just north of Aliso Point to the south point of Mussel Cove at South La Senda Drive. A subterranean segment of this linear resource crosses through the project site at the base of the cliffs where no construction activities are proposed; therefore, P-30-177513 would not be impacted by the project. CA-ORA-842 (West Locus), located in the northern portion of the project site, is discussed in further detail below.

Archeological Setting and Major Excavations

The South Central Coastal Information Center (SCCIC) records search conducted as part of the Phase I and II identified four previously recorded prehistoric archaeological sites (three habitation sites and one shell midden deposit) within a half-mile radius of the project site. CA-ORA-8/108/110, three major prehistoric habitation sites, are located approximately 0.75 miles northwest of the project site, just north of the Aliso Creek Estuary, and CA-ORA-3, a major archaeological excavation site at another prehistoric shell midden site, is located five miles northwest of the project site.

CA-ORA-8/108/110 Excavations

CA-ORA-8/108/110 (or the Goff's Island site) had been looted by locals and amateur archaeologists prior to major excavations by the Works Progress Administration (WPA). It was officially recorded by a sponsored survey in 1935 and described then as having a deep shell midden deposit that was nearly four feet in thickness an extended to the coastal bluff with a probable burial mound in the vicinity. The WPA conducted excavations at the site in 1939 and 1940 and recovered hundreds of lithics, bone and shell artifacts, and features, including burials with grave goods. Subsequent construction work in the area yielded isolated finds, including several burials. Archaeological test excavations in the 1990s produced shell fragments and isolated artifacts in disturbed contexts while more than 200 artifacts were recovered during archaeological construction monitoring in the early 2000s.

Two cultural components were identified at the resource consisting of a lower deposit which was called "Culture I," and an upper deposit which was called "Culture II." The inhabitants of Culture I used manos and metates for seed grinding while mortars and pestles appeared to be absent. Only a few projectile points were present and those that were had been regarded by Winterbourne as older, crudely made concave base and leaf-shaped styles. Shellfish remains were abundant and dominated by California mussel while very limited animal bone, indicative of hunting, was identified. Burials associated with Culture I were in a flexed position, with the head oriented towards the west or southwest, and generally lacked grave goods, which are traits that have been attributed to the later Millingstone horizon (8,000–

[37] National Parks Service, National Register of Historic Places, https://www.nps.gov/subjects/nationalregister/database-research.htm#table. Accessed October 2022.

[38] California State Parks, Office of Historic Preservation, https://ohp.parks.ca.gov/?page_id=21445. Accessed October 2022.

3,000 BP). Five radiocarbon dates collected by Scientific Resources Surveys, Inc. (SRS) in 1996 at the resource produced dates between 5050 and 4340 BP, consistent with the terminal Millingstone period.

The assemblage from the upper deposit, or Culture II, included the addition of the mortar and pestle for soft seed grinding while steatite objects and raw steatite were present. Side-notched projectile points (Gypsum and Elko), burials with grave goods, and house floors were present in much higher quantities than Culture I. These traits have been attributed to the Intermediate horizon, approximately 3,000 to 1,250 BP. Shellfish harvesting was still present and now included large amounts of abalone and fish and terrestrial mammal bone are abundant. Deep-water ocean resources were increasingly being utilized and more evidence for trade was present. SRS obtained two more radiocarbon samples that produced dates of 2980 and 2550 BP, which places this later occupation during the early Intermediate period.

CA-ORA-3 Excavations

A handful of archaeological excavations were carried out at CA-ORA-3 between the late 1970s and early 1990s, including those undertaken by Magalousis (1978a, 1978b, 1978c, and 1979a), Breece (1987), and Macko (1991). The following paragraphs summarize the previous excavations, providing insight into what the subsurface archaeological deposits associated with CA-ORA-842 (West Locus) may contain and what their vertical extent might be. CA-ORA-3 is located in the Crescent Bay neighborhood in northern Laguna Beach approximately five miles northwest of the project site.

Magalousis (1978-1979)

The Magalousis excavations were undertaken for residential development and improvements within lots 9, 17, and 40 (1978a, 1978b, and 1978c) of the Crescent Bay neighborhood which presently overlaps the east-central portion of resource CA-ORA-3, as well as the development of Crescent Bay Point Park (1979a), which overlaps the southern portion of the resource. A variety of methods were employed by Magalousis over the course of the four excavations and included mechanical trenching and the excavation of test units ranging in size from 1 meter by 1 meter to 4 meters by 4 meters. The excavations conducted within lots 9, 17, and 40 extended to a maximum depth of 140 centimeters (cm) and the midden deposits were highly disturbed as a result of historic land use and bioturbation. Cultural materials recovered include shellfish remains dominated by the presence of mussel, as well as lithic debitage and ground stone. No radiocarbon dates are provided for these excavations.

Magalousis' archaeological investigation at Crescent Bay Point Park (1979a) included the excavation of nine test units, which covered approximately 40 percent of the site's intact deposits within the investigation area. As a result of the excavations, Magalousis identified an intact midden deposit that extended from a depth of 50 cm to 70 cm and was characterized by a stable surface with narrow bands of sterile wind-blown sediments suggesting the site was occupied seasonally (Magalousis 1979a). Cultural material recovered from these intact deposits included 1,210 grams of lithic debitage and 93,755 grams of shellfish remains, as well as ground stone fragments, projectile points, stone discs ("gamestones"), and fish hooks. The lithic assemblage was largely comprised of locally derived materials such as quartz, rhyolite, basalt, and chert. The shellfish assemblage was comprised of rocky intertidal species and was dominated by mussel (approx. 90-95 percent), but also contained abalone, barnacle, limpet, and oyster. The intact deposit was overlain by disturbed midden soil containing fewer artifacts and shellfish remains

and exhibiting a lack of internal structure as a result of plowing and rodent burrowing. No radiocarbon dates are provided for this excavation.

Breece (1987)

In 1987, Breece undertook Phase II and data recovery excavations within a 10.5-acre residential lot located within the central portion of CA-ORA-3. At the time of the excavations, the parcel was developed with a main residence, a guest house, and landscaping. Breece excavated 15 1 meter by 1 meter units within the portions of the parcel exhibiting the least amount of previous disturbance. The excavations extended to a maximum depth of 120 cm and soils primarily consisted of semi-compact to compact dark brown silty to sandy loam. As a result of the excavations, 19,334 grams of shellfish and 471 artifacts were recovered. The large majority of the shellfish assemblage was comprised of mussel shell, with lesser amounts of abalone and barnacle. Artifacts recovered included one biface fragment, two hammerstones, three manos, one shell ornament, three cores, three utilized flakes, two metates, and 456 pieces of lithic debitage. The lithic assemblage largely consisted of quartz debitage, but included other lithic materials such as chert and chalcedony.

Macko (1991)

In 1991, Macko undertook excavations within a 10.5-acre lot in the western half of CA-ORA-3 in support of a residential development project. Macko employed a number of excavation methods, including mechanical trenching, test unit excavation, and post-hole excavation. Seven 1x1 m test units were excavated as were three 50 cm by 50 cm post holes. The excavations recovered 240,000 grams of shellfish, 185 grams of faunal bone, 15 pieces of ground stone, and 789 pieces of lithic debitage. The shellfish assemblage was largely comprised of mussel, but 36 additional species were also identified and included abalone, barnacle, *Chione* spp., and chiton.

The faunal assemblage was comprised of 2,029 specimens totaling 185 grams and representing 30 species of terrestrial mammals (deer, rabbit, jackrabbit, coyote), fish (jacksmelt, spotted sand bass, surfperch, California Corbina, yellowfin croaker, blacksmith, Pacific mackerel, and sheephead), shark (soupfin shark), and bird (duck). Three otoliths (fish ear bones) were identified within the faunal assemblage and analysis of the three specimens was undertaken to determine the season in which the fish were procured. The analysis is based on the presence of annual growth rings, similar to tree rings, which accumulate incrementally around the bone at a predictable rate allowing researchers to discern the season in which the fish died. The otolith analysis indicates the fish were procured sometime in the early summer (May or June).

The ground stone assemblage consisted of seven manos, two metates, and six undifferentiated ground stone. The ground stone was recovered from 12 separate units spread throughout the investigation area.

The lithic assemblage recovered by Macko included 789 pieces of debitage primarily comprised of quartz, but also included basalt, chert, rhyolite, and two pieces of obsidian. The debitage represents tool

manufacture and maintenance at the site indicating that lithic material procurement and initial core reduction activities were carried elsewhere, presumably closer to the lithic sources.

Macko obtained radiocarbon dates on a sample eight shell fragments consisting of hinge pieces collected from a broad cross section of the investigation area's horizontal and vertical extent. The radiocarbon dates range from 3080 BP to 5280 BP, indicating the site was used throughout the Middle Holocene.

Interpretations

The interpretations of all three researchers regarding the site's function are broadly similar given the assemblages produced by the respective investigations within CA-ORA-3 were largely consistent. The general consensus is that the site represents a series of seasonal resource-specific camp sites focused on the harvesting and processing of shellfish gathered from the rocky intertidal coastal zone immediately south of the bluffs on which the site is located. This is reflected in the preponderance of mussel shell coupled with the lack of diversity in the respective artifact assemblages. The presence of only a handful of artifact types indicates the site was used for a small set of specific tasks (i.e., shellfish harvesting and processing) requiring only a relatively small tool kit and does not represent long-term habitation, which would result in the accumulation of a broader set of artifacts types. Furthermore, the intact deposit identified by Magalousis (1979a) at Crescent Bay Point Park was layered with narrow bands of wind-blown sediments that may have accumulated during hiatuses in the site's use. This, coupled with Macko's (1991) otolith analysis indicating an early summer occupation, suggests that the site was occupied on a seasonal basis and does not represent permanent habitation.

The lack of diagnostic artifacts from all excavations within CA-ORA-3 made it difficult to determine the site's placement within the regional prehistoric chronology prior to the eight radiocarbon dates obtained by Macko, which place the site solidly within the Middle Holocene. As noted above in the *Prehistoric Setting*, the Middle Holocene's La Jolla Complex was characterized by subsistence practices focused on bays and estuaries of the Orange and San Diego County coastlines where shellfish and plant resources were abundant. This is reflected by the respective assemblages identified at CA-ORA-3, which point to shellfish collection and processing as the primary subsistence activity.

Previous Research

Resource CA-ORA-842 was originally recorded in 1979 as a prehistoric archaeological site consisting of a midden deposit with shell and lithic fragments on two non-contiguous parcels; an East Locus located at 31441 South Coast Highway (across Coast Highway from the project site) and a West Locus within the project site at 31451 South Coast Highway. The East Locus consists of a shell midden deposit that is currently visible in the profile of an exposed cut at the intersection of West St. and Coast Highway. It is possible that this cut was made during construction of West Street. and Coast Highway. Visible portions of the midden deposit are located within a 14 meter x 6 meter area within the southwest corner of a vacant lot. This locus was not analyzed as part of the Phase I and II. The West Locus is located approximately 70 meters southwest of the East Locus. The Archaeological Site Survey Record indicates that only a small portion of the midden was present at the West Locus within the Dolley property (current project site), that most has been destroyed, and that the remaining midden can be found under the house and property adjacent to the project site. The midden at the West Locus is described as encompassing an area of 25 by 25 meters with a depth of 50 centimeters (cm).

In July of 1979, an archaeological excavation [consisting of five test pits (Test Pits) of unreported size] was conducted within a portion of CA-ORA-842 West Locus in the project site and outside the project site. One Test Pit was placed in section A, one in section B and three in section C and that the "precise metric locations… may be acquired from official field notes"; however, no field notes were found attached to the testing report. Review of an Assessor's Map found in the testing report shows numbers 1 through 5 (with an asterisk next to each number) within the project site and within the adjacent parcel to the southeast, which was under construction at the time of the Phase I and II excavation efforts. Therefore, it is possible that these are the general locations of Test Pits #1 through #5. If that is the case, then Test Pits #3, #4, and #5 were excavated within the project site and within the current boundaries of CA-ORA-842 while Test Pits #1 and #2 were excavated on the adjacent parcel outside of the boundaries of the resource. Additionally, the letters A, B, and C are observed in the Assessor's Map, but no delineation is observed, so as to ascertain the boundaries of the sections. Moreover, the testing report first presents the results per section, but later goes into detail about Test Pits #4 and #5. For instance, it is mentioned that the Test Pits in sections A and B yielded sterile soils within the first 10 cm and that Section C was highly disturbed by bulldozing/dumping and yielded no in situ midden. The report then mentions that a "second TP (#4) was established in this section [which appears to refer to section C] … here light midden soil was detected 0–30 cm; shell was highly fragmented… no definable lithics or other cultural materials were found, with the exception of a glass fragment on sterile soil in association with the midden-like soil". Lastly, the report indicates that Test Pit #5 (which appears to be located on the southwest portion of the project site and adjacent to the 31441 South Coast Highway property) was excavated near the cliff's edge, which yielded a midden deposit down to 50 cm that extends west onto the adjacent home. The shell identified (consisting of abalone, barnacle, and mussel) was highly fragmented and appeared to be of "great antiquity." An abalone shell from Test Pit #5 was reportedly obtained for radiocarbon analysis.

In August of 1979, a site was recorded consisting of a shell midden and three artifacts (one quartz core, one possible ground stone fragment, and one bifacial hammer stone) within a vacant lot at the southeast corner of Coast Highway and West Street. The site (encompassing a 40 by 100-foot area) was described as a remnant of a larger site likely destroyed during construction of Coast Highway.

In 2004, an archaeological excavation was the first to identify both site loci (the location identified in 1979 [East Locus] and the location at 31441/31451 South Coast Highway identified in 1979 [West Locus]) as part of the same site (CA-ORA-842). Only shell was observed at the East and West loci.

In 2018 an updated site record was completed for CA-ORA-842 during a survey for the California Department of Transportation. The survey encompassed Coast Highway plus a 30-foot radius and yielded the identification of highly fragmented shell and fire affected rock (in a 10 by 10-meter area) at the East Locus. No cultural material was observed near the highway and within the easternmost portion of the project site.

In 2020, a Phase I Cultural Resources Assessment was conducted of the project site that included a records search through the SCCIC and a pedestrian survey of the project site. During the pedestrian survey, West Locus of CA-ORA-842 was relocated and some fire-affected rock, one quartz core, and a well-developed shell midden composed primarily of California mussel (Mytilus californianus) within a 35-meter by 20-meter area was identified in the northern portion of the project site.

Existing Conditions of CA-ORA-842

In 2021, a similar well-developed shell midden was identified on an elevated terrace within the northwestern portion of the project site. The area was undeveloped and mostly devoid of surface vegetation and therefore ground surface visibility was excellent (i.e., 80 to 100 percent visibility), although a few scattered shrubs and some patches of ice plant were observed. There is evidence of a recent fire on the surface in several locations due to the presence of torched trunks and root systems (of what appear to be shrubs) in close association with charred soils. The shell midden deposit appears to be isolated to the flatter areas of the terrace while dispersed and scattered shell was observed eroding down the south-facing slope. No shell midden was observed on the lower terrace of any other areas of the project site. The shell midden deposit is visible in the vertical cliff face of the upper terrace near the southern boundary of the resource. The deposit is visible in the cliff face for approximately 50 linear feet and extends into the adjacent property underneath the existing single-family residence there (31441 South Coast Highway). A rocky stratum underlies the shell midden deposit. Partially buried concrete chunks were observed in several locations including chunks that were eroding out of the aforementioned cliff face within the uppermost portion of the shell midden deposit. There was also the occurrence of concrete debris and "rubble" across the resource in 1979. Refer to the Phase I and II for photos of the project site (available in **Appendix F.1** of this document).[39]

In order to identify the vertical and horizontal boundaries of this resource and to determine whether it qualifies as a historical resource or a unique archaeological resource in accordance with CEQA, 13 shovel test pits (STPs) were excavated and three test units (TEUs) were excavation across the resource and subsequent laboratory processing and analysis was conducted of the materials that were excavated. The assessment also included an impact analysis and recommended mitigation measures to reduce potentially significant impacts to cultural resources to a less than significant level under CEQA.

The results revealed that resource CA-ORA-842 (West Locus) is composed of a multi-component prehistoric archaeological site that consists of a well-developed prehistoric shell midden deposit. The resource appears to contain two principal periods of occupation associated with the late Holocene, represented by Stratum II (between ~2500 BP and ~1000 BP or between ~1450 BP and ~1000 BP) and Stratum IIA (around ~3400 BP). One radiocarbon date from Stratum III produced a date of ~5600 BP, suggesting an even earlier occupation well into the middle Holocene; however, very limited archaeological materials were recovered from this otherwise culturally sterile stratum. Stratum II appears to represent an occupation that principally functioned as a shellfish processing station that was primarily focused on processing California mussel and was utilized on a seasonal basis.

Both occupations appear to have principally functioned as shell processing areas focused on processing California mussel and where stone manufacture activities, such as core reduction and biface reduction, took place. It appears that quartz was a favored raw material for stone tools and may have been quarried within the project site or vicinity based on the quartz clasts that are known to occur in the San Onofre Breccia geologic unit that is exposed at the project site. Although the vertebrate faunal collection is too fragmented and small in size and number to provide detailed information about subsistence practices at the resource, it does appear that late stage kill processing occurred within later occupation of the resource

[39] A Department of Parks and Recreation (DPR Site) Site Form update for CA-ORA-842 was prepared describing the current condition of the resource as observed and includes the results of the Phase I and II. The DPR Site form update is provided in Appendix B of the Phase I and II, available in **Appendix F.1** of this document.

(Stratum II). The occupants may have selected this location given its proximity to marine, terrestrial, and estuarine environments that would have supported a variety of flora and fauna and fresh water resources to exploit. The lack of features such as house floors or roasting pits suggests that CA-ORA-842 (West Locus) may not have been a residential base, and instead functioned as a satellite camp that was utilized on a temporary basis.

Moreover, future stable oxygen isotope analysis of shell specimens within Stratum II and IIA could determine which season the shellfish remains were harvested in and, in turn, the season of occupation for the resource. Future macrobotanical analysis of the light fraction materials (e.g., plant parts and seeds) produced form the floatation of the column samples could yield macrobotanical remains indicating seasonally available plant resources and could illuminate whether additional subsistence activities occurred at the resource. This could also lead to more insight on settlement mobility and resource intensification.

In summary, the results of the test excavations at CA-ORA-842 (West Locus) indicate the site retains data potential sufficient to address research questions regarding the prehistory of the Orange County coast during the middle and late Holocene, and is therefore eligible for listing in the California Register under Criterion 4 and qualifies as a historical resource under CEQA. In particular, it is recommended that the specific areas around TEU 1 and 2 contain the components of the resource that contribute to its eligibility given that the shell midden deposits in these areas were most intact (i.e., have structural "integrity"), relatively undisturbed, and the deepest. The area containing eligible deposits is discrete, measuring only approximately 17 meters x 5 meters (56 feet x 16 feet). All other areas of the resource are recommended as non-contributing components given their apparent poor integrity that is demonstrated by their lack of intact shell midden deposits or their heavily disturbed condition.

Project Design

Proposed cuts in some areas of the project site are anticipated to extend from 10 feet to 20 feet maximum below the ground surface (feet bgs) while other areas would either have no cuts at all or very shallow cuts. Original site plans had included proposed excavation cuts up to 10 to 12 feet bgs in some areas where the significant contributing components of resource CA-ORA-842 West Locus are located. However, the Applicant has revised the site plans to avoid the significant contributing components of resource. Specifically, the Applicant is proposing a larger 16-foot setback along the side yard (the original plans proposed a 12-foot setback) that would not require any extensive grading or cutting in the area. Instead, this area would be improved with St. Augustine grass, which is a Fire Department-approved ground cover, and would be utilized as a firefighter access route. Moreover, any shallow ground-disturbance or clearing associated with installing the grass and any subsequent root system associated with the grass would only impact the disturbed upper portions of the resource. The root system of the grass would also provide more support for the undisturbed intact portions of the resource by preventing future impacts from natural erosion. Therefore, the project would avoid the significant contributing components of resource CA-ORA-842 West Locus and would not cause a substantial adverse change to the significance of a historical resource under CEQA.

Conclusion

The results of the Phase I and II has revealed that resource CA-ORA-842 (West Locus) is composed of a multi-component prehistoric archaeological site that consists of a well-developed prehistoric shell midden deposit. Therefore, it is recommended that CA-ORA-842 (West Locus) is eligible for listing in the California

Register under Criterion 4 because it contains sufficient data important in prehistory. As a result, CA-ORA-842 (West Locus) qualifies as a historical resource under CEQA. Eligibility of the resource is limited to a discrete area around TEU 1 and 2 where shell midden deposits were deep and largely intact. All other areas of the resource are recommended as non-contributing elements given their lack of intact shell midden deposits or their heavily disturbed condition. However, the Applicant has revised the site plans to avoid the significant contributing components of resource and; therefore, the project would not cause a substantial adverse change to the significance of a historical resource under CEQA and mitigation measures related to the resource are not warranted.

Nonetheless, given the presence of CA-ORA-842 (West Locus) within the project site, the identification of several prehistoric archaeological resources in the immediate vicinity, and the presence of favorable natural conditions (e.g., proximity to Pacific Ocean and other marine, estuarine, and terrestrial habitats) that would have attracted prehistoric inhabitants to the area, there is a high potential to encounter previously unknown archaeological resources during construction of the project. Based on these results, it is recommended that archaeological and Native American monitoring occur during project-related ground disturbing activities. Mitigation measures MM-CULT-1 through MM-CULT-7 for the archaeological and Native American construction monitoring are provided below. With implementation of these mitigations measures (MM-CULT-1 through MM-CULT-7), impacts to previously unknown historical resources, archaeological resources, and human remains would be less than significant under CEQA.[40] **Therefore, impacts to previously unknown historical resources, archaeological resources, and human remains would be less than significant with implementation of mitigation measures**.

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

***Less Than Significant Impact*.** A significant adverse effect may occur if grading or excavation activities associated with a project were to disturb previously interred human remains. No known human remains have been documented within the project site or the immediate vicinity. While the project site is unlikely to contain human remains, should human remains be encountered unexpectedly during grading or construction activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. Pursuant to PCR Section 5097, if human remains of Native American origin are discovered during project construction, compliance with State laws, which fall within the jurisdiction of the Native American Heritage Commission, relating to the disposition of Native American burials would be required (refer to MM-CULT-7, which has been included to further reduce impacts). **Considering the low potential for any human remains to be located on the project site and that compliance with regulatory standards described above would ensure appropriate treatment of any human remains unexpectedly encountered during grading activities, the project's impact on human remains would be less than significant**.

[40] An evaluation of the resource under Criterion 1, 2, and 3 is not included in the Phase I and II nor an evaluation of whether the resource qualifies as a tribal cultural resource under CEQA, the latter of which was determined based on government-to-government consultations between the City and Native American Tribes who have requested consultation and could lead to additional mitigation measures for the project. The inclusion of Assembly Bill (AB) 52 consultation results was required for preparation of this document.

Mitigation Measures

MM-CULT-1 **Retain Qualified Archaeologist**: Prior to the issuance of a demolition or grading permit, the Applicant shall retain a qualified Archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for professional archaeology (Qualified Archaeologist) to carry out and ensure proper implementation of mitigation measures that address archaeological resources. The Applicant shall submit a letter of retention to the City of Laguna Beach (City) no fewer than 60 days before construction activities commence to demonstrate to the City that the Applicant has retained a Qualified Archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards. The letter shall include a resume for the Qualified Archaeologist. The letter shall also demonstrate that a Native American Monitor has been retained.

MM-CULT-2 **Training Session for Construction Personnel**: Prior to the commencement of ground-disturbing activities, a Sensitivity Training shall be given by the Qualified Archaeologist and Native American Monitor for construction personnel. The training session will include a brief review of the cultural sensitivity of the project site and the surrounding area, what resources could potentially be identified during ground-disturbing activities, and the procedures to follow in the event of discovery during construction. A sign in sheet for attendees of this training shall be included in the monitoring technical report as described in MM-CULT-6.

MM-CULT-3 **Archaeological Construction Monitoring**: The Qualified Archaeologist shall oversee an archaeological monitor who has a bachelor's degree in a relevant field of study and either two months of archaeological construction monitoring experience or two months of supervised training with prehistoric archaeological materials in a field or laboratory setting. The archaeological monitor shall be present during construction activities on the project Site deemed by the Qualified Archeologist to have the potential for encountering archeological resources, such as demolition, clearing/grubbing, drilling/auguring, grading, trenching, excavation, or other ground- disturbing activity associated with the project. The activities to be monitored may also include off-site improvements in the vicinity of the project site, such as utilities, sidewalks, or road improvements. The archeological monitor and Native American Monitor (as required under MM-CULT-4) shall have the authority to direct the pace of construction equipment activity in areas of higher sensitivity and to temporarily divert, redirect or halt ground disturbance activities to allow identification, evaluation, and potential recovery of archaeological resources in coordination with the Qualified Archaeologist. Full-time monitoring may be reduced to part-time inspections, or ceased entirely, if determined appropriate by the Qualified Archaeologist.

MM-CULT-4 **Native American Construction Monitoring**: Prior to issuance of a demolition permit or grading permit, the Applicant shall retain a Native American Monitor. The appropriate Native American Monitor shall be selected based on ongoing consultation under AB 52 and shall be identified on the most recent contact list provided by the Native American Heritage Commission. The Native American Monitor shall be present during construction activities on the project site deemed by them to have the potential for encountering archeological resources, such as demolition, clearing/grubbing, drilling/auguring, grading, trenching, excavation, or other ground- disturbing activity associated with the project.

The activities to be monitored may also include off-site improvements in the vicinity of the project site, such as utilities, sidewalks, or road improvements. The Native American Monitor, in coordination with the Qualified Archaeologist and archaeological monitor as identified in Mitigation Measure CULT-3, shall have the authority to direct the pace of construction equipment activity in areas of higher sensitivity and to temporarily divert, redirect or halt ground disturbance activities to allow identification, evaluation, and potential recovery of tribal cultural resources. Full-time monitoring may be reduced to part-time inspections, or ceased entirely, if determined appropriate by the Native American Monitor in the event there appears to be little to no potential for impacting tribal cultural resources

MM-CULT-5 **Inadvertent Discovery of Resources:** In the event that historic (e.g., bottles, foundations, refuse dumps/privies, railroads, etc.) or prehistoric (e.g., hearths, stone tools, shell and faunal bone remains, etc.) resource are encountered, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. An appropriate buffer area shall be established by the Qualified Archaeologist around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. All archaeological resources unearthed by project construction activities shall be evaluated by the Qualified Archaeologist and the Native American tribal monitor. If the resources are prehistoric or Native American in origin, the Native American Monitor shall consult with the City and Qualified Archaeologist regarding the treatment and curation of any prehistoric archaeological resources. If a resource is determined by the Qualified Archaeologist to constitute a "historical resource" pursuant to CEQA Guidelines Section 15064.5(a) or a "unique archaeological resource" pursuant to Public Resources Code Section 21083.2(g), the Qualified Archaeologist shall coordinate with the Applicant and the City to develop a formal treatment plan that would serve to reduce impacts to the resources. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and Public Resources Code Sections 21083.2(b) for unique archaeological resources. The treatment plan shall incorporate the Native American tribal monitor's treatment and curation recommendations. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. The treatment plan shall include measures regarding the curation of the recovered resources. The prehistoric or Native American resources may be placed in the custody of the Native American Tribe who may choose to use them for educational purposes or they may be curated at a public, non-profit institution with a research interest in the materials, such as the Cooper Center. If the Native American Tribe or an institution does not accept the resources, they may be donated to a local school or historical society in the area (such as the Laguna Beach Historical Society) for educational purposes.

MM-CULT-6 **Prepare Memo and Monitoring Technical Report**: Within 14 days of concluding the archaeological monitoring, the Qualified Archaeologist shall prepare a memorandum stating that the archaeological monitoring requirement of the mitigation measure has been fulfilled and summarize the results of any archaeological finds. The memorandum shall be submitted to the Applicant and City. Following submittal of the memorandum,

the Qualified Archaeologist shall prepare a technical report the follows the format and content guidelines provided in California Office of Historic Preservation's Archaeological Resource Management Reports (ARMR). The technical report shall include a description of resources encountered during construction monitoring, if any, treatment of the resources, results of the artifact processing, analysis, and research, and evaluation of the resources with respect to the California Register of Historical Resources and CEQA. Appropriate California Department of Parks and Recreation Site Forms (Site Forms) shall also be prepared and provided in an appendix to the report. The technical report shall be prepared under the supervision of the qualified Archaeologist and submitted to the City within 150 days of completion of the monitoring. The final draft of the report shall be submitted to the South Central Coastal Information Center.

MM-CULT-7 **Inadvertent Discovery of Human Remains**: If human remains are encountered unexpectedly during implementation of the project, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC shall then identify the person(s) thought to be the Most Likely Descendent (MLD). The MLD may, with the permission of the land owner, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The MLD shall complete their inspection and make their recommendation within 48 hours of being granted access by the land owner to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this mitigation measure, with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.

If the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the landowner rejects the recommendation of the MLD and the mediation provided for in subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the facility property in a location not subject to further and future subsurface disturbance.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
6. 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?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

The following analysis of potential energy impacts of the project is based, in part, on the CalEEMod model outputs prepared as part of the AQ/GHG Study and energy consumption worksheets prepared for the project. The CalEEMod outputs are included in **Appendix E.1** of this document.

Regulatory Setting

Regulations exist at federal, state, and regional levels with regard to energy and include:

a) Federal Corporate Average Fuel Economy (CAFE) Standards
b) Federal Energy Independence and Security Act
c) California Building Energy Efficiency Standards (Title 24, Part 6)
d) California Green Building Standards (Title 24, Part 11)
e) California's Renewable Portfolio Standard
f) CEQA Guidelines Appendix F
g) Senate Bill 350
h) Senate Bill 100
i) Assembly Bill 32 (California Global Warming Solutions Act of 2006) and Senate Bill 32
j) Assembly Bill 1493 (Pavley I)
k) Executive Order S-1-07 (California Low Carbon Fuel Standard)
l) California Air Resources Board:
m) Advanced Clean Car Regulation
n) Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
o) Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen, and other Criteria Pollutants from In-Use Heavy-Duty Diesel-Fueled Vehicles
p) Sustainable Communities Strategy (SB 375)
q) Assembly Bill 758
r) Senate Bill 1389
s) California Environmental Quality Act

Environmental Setting

Electricity

Electricity is provided to the southern portion of the City, where the project site is located, by San Diego Gas and Electric (SDG&E). SDG&E provides electric power to more than 3.7 million persons, within a service area encompassing approximately 4,100 square miles.[41] SDG&E derives electricity from varied energy resources including fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SDG&E also purchases power from independent power producers and utilities, including out-of-state suppliers.[42] In 2020, California used 272,576 gigawatt-hours (GWh) of electricity, of which 33 percent was from renewable resources.[43] **Table 9, Electricity Consumption in the SDG&E Service Area for 2020**, shows the electricity consumption by sector and total for SDG&E.

Table 9
Electricity Consumption in the SDG&E Service Area for 2020

Agriculture and Water Pump	Commercial Building	Commercial Other	Industry	Mining and Construction	Residential	Streetlight	Total Usage (GWh)
349	7,150	1,803	1,351	360	6,350	81	17,445
Source: California Energy Commission, Electricity Consumption by Entity, https://ecdms.energy.ca.gov/elecbyutil.aspx. Accessed October 2022.							

Natural Gas

Natural gas is provided to the City by Southern California Gas (SoCalGas). California also consumed approximately 12,332 million U.S. therms (MMthm) of natural gas in 2020.[44] **Table 10, Natural Gas Consumption in the SoCalGas Service Area for 2020**, shows the natural gas consumption by sector and total for SoCalGas.

Table 10
Natural Gas Consumption in the SoCalGas Service Area for 2020

Agriculture and Water Pump	Commercial Building	Commercial Other	Industry	Mining and Construction	Residential	Total Usage (MMthm)
74	802	88	1,616	226	2,426	5,231
Source: California Energy Commission, Natural Gas Consumption by Entity, https://ecdms.energy.ca.gov/gasbyutil.aspx. Accessed October 2022.						

41 San Diego Gas and Electric, Sustainability Strategy Update, October 2021.

42 San Diego Gas and Electric, About Us, https://www.sdge.com/more-information/our-company/about-us. Accessed October 2022.

43 California Energy Commission, 2020 Total System Electric Generation, https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2020-total-system-electric-generation/2020. Accessed October 2022.

44 California Energy Commission, Natural Gas Consumption by Entity, https://ecdms.energy.ca.gov/gasbyutil.aspx. Accessed October 2022.

Transportation Energy

Petroleum fuels are primarily consumed by on-road and off-road equipment in addition to some industrial processes. In 2019, approximately 39 percent of the State's energy consumption was used for transportation activities.[45] Californians presently consume over 19 billion gallons of motor vehicle fuels per year. Though California's population and economy are expected to grow, gasoline demand is projected to decline from roughly 15.6 billion gallons in 2017 to between 12.1 billion and 12.6 billion gallons in 2030, or a reduction of more than 19 percent. This decline comes in response to both increasing vehicle electrification and higher fuel economy for new gasoline vehicles.[46]

California is one of the top producers of petroleum in the nation with drilling operations occurring throughout the State. A network of crude oil pipelines connects production areas to oil refineries in the Los Angeles area, the San Francisco Bay area, and the Central Valley. California oil refineries also process Alaskan and foreign crude oil received at ports in Los Angeles, Long Beach, and the San Francisco Bay area. California requires all motorists use California Reformulated Gasoline, which is sourced almost exclusively from in-state refineries. Gasoline, which is used by light-duty cars, pickup trucks, and sport utility vehicles, is the most used transportation fuel in California with 15.4 billion gallons sold in 2019. Diesel, which is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles, is the second most used fuel in California with 1.8 billion gallons sold in 2019.[47]

Checklist Discussion

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

Less Than Significant Impact. A significant impact may occur if a project were to consume energy resources in a wasteful, inefficient, or unnecessary way during construction or operation. In order to determine if the project would result in a potentially significant environmental impact due to the wasteful, inefficient, or unnecessary consumption of energy resources during the construction or operation of the project, an analysis of the project's energy use for all stages of the project has been provided. Section 15126.2(b) of the CEQA Guidelines refers to Appendix F of the CEQA Guidelines as guidance for the information to be provided in the analysis. Appendix F provides the following factors that a lead agency may consider in the discussion of energy use:

1. The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance, and/or removal (If appropriate, the energy intensiveness of materials may be discussed);

[45] California Energy Commission, Transportation Energy Demand Forecast, 2018-2030. Page 1. Note that due to atypical fuel consumption during 2020 as a result of the Covid-19 pandemic, 2019 data were utilized on for this analysis.

[46] California Energy Commission, Transportation Energy Demand Forecast, 2018-2030. Page 85. Note that due to atypical fuel consumption during 2020 as a result of the Covid-19 pandemic, 2019 data were utilized on for this analysis.

[47] California Energy Commission, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2019. Diesel is adjusted to account for retail (49%) and non-retail (51%) diesel sales. Note that due to atypical fuel consumption during 2020 as a result of the Covid-19 pandemic, 2019 sales data were utilized on for this analysis.

2. The effects of the project on local and regional energy supplies and on requirements for additional capacity;

3. The effects of the project on peak and base period demands for electricity and other forms of energy;

4. The degree to which the project complies with existing energy standards;

5. The effects of the project on energy resources; and

6. The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

In accordance with the considerations above, the following analysis evaluates the potential energy impacts of the project with a particular emphasis on whether the project would result in the inefficient, wasteful, or unnecessary consumption of energy. The energy analysis does not include a full life cycle analysis of energy usage that would occur over the production/transport of materials used during project construction or operation, or the end of life for the materials and processes that would occur as an indirect result of the project (i.e. "the energy intensiveness of materials"). Estimating the energy usage associated with these processes would be too speculative for meaningful consideration, would require analysis beyond the current state-of-the-art in impact assessment, and may lead to a false or misleading level of precision in reporting. Manufacture and transport of materials related to project construction and operation are expected to be regulated under regulatory energy efficiency requirements. Therefore, it is assumed that energy usage related to construction and operational materials would be consistent with current regulatory requirements regarding energy usage.

Construction

Construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. In addition, construction of the project would not require electricity to power most construction equipment as the majority of construction equipment during demolition and grading would be gas- or diesel-powered. Additionally, it is anticipated that most of the electric-powered construction equipment would be hand tools (e.g., power drills, table saws, compressors) and lighting, which would result in minimal electricity usage during construction activities.

However, during project construction, energy would be consumed in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, and vehicles used to deliver materials to the site. As taken from the CalEEMod modeling prepared for the project, diesel-powered construction equipment (such as off-road equipment and hauling and vendor trucks) would result in approximately 480.47 metric tons of carbon dioxide ($MTCO_2$) while gasoline-powered construction equipment (such as worker automobiles) would result in approximately 9.09 $MTCO_2$.[48] According to CO_2 emission factors for transportation fuels published by the U.S. Energy Information Administration, burning one gallon of diesel fuel generates approximately 22.4 pounds of CO_2 and burning one gallon of gasoline produces approximately 19.6 pounds of CO_2.[49] Based on the U.S. Energy Information Administration fuel consumption factors, and the project's

[48] See Construction Transportation Energy Worksheet included as **Appendix E.2** to this document.

[49] U.S. Energy Information Administration, Environment Carbon Dioxide Emissions Coefficients, February 2, 2016.

estimated "total CO_2" emissions presented in the CalEEMod output sheets, it is estimated that the project's construction activities would consume a total of approximately 47,843 gallons of diesel fuel and approximately 1,022 gallons of gasoline. According to fuel sales data from the California Energy Commission, fuel consumption in Orange County was approximately 1.16 billion gallons of gasoline and 91 million gallons of diesel fuel in 2021 (the most recent year of reported data).[50] Accordingly, the project's transportation-energy consumption during construction would represent a negligible portion of annual gasoline and diesel consumption within Orange County.

Energy use during construction would be temporary in nature, and construction equipment used would be typical of similar-sized construction projects in the region. In addition, the project would utilize construction contractors who demonstrate compliance with applicable CARB regulations that restrict the idling of heavy-duty diesel motor vehicles and govern the accelerated retrofitting, repowering, or replacement of heavy-duty diesel on- and off-road equipment. Construction activities would utilize fuel-efficient equipment consistent with state and federal regulations and would comply with state measures to reduce the inefficient, wasteful, or unnecessary consumption of energy. In addition, per applicable regulatory requirements, the project would comply with construction waste management practices to divert construction and demolition debris. These practices would result in efficient use of transportation-energy necessary to construct the project. Furthermore, in the interest of cost efficiency, construction contractors would not utilize fuel in a manner that is wasteful or unnecessary. As such, the project would not involve the inefficient, wasteful, and unnecessary use of energy during construction. **Therefore, impacts during construction would be less than significant and no mitigation measures would be required.**

Operation

Transportation-Energy

Transportation-related energy in the form of gasoline and diesel fuel would also be consumed during project operations related to water usage, solid waste disposal, and vehicle trips to and from the project site by residents and visitors. According to the project's CalEEMod modeling (see **Appendix E.1** of this document), the project would result in 37,489 annual VMT. According to CARB's On-Road Emissions Factor (EMFAC) model, in Orange County, diesel-powered vehicles will account for 4.23 percent of all on-road VMT and will have an average fuel efficiency weighted for percentage of miles traveled of 14 miles per gallon (mpg) in 2025, while gasoline-powered vehicles will account for 89.05 percent of on-road VMT with a fuel efficiency of 27 mpg; electric-powered vehicles, natural-gas-powered vehicles, and plug-in hybrid vehicles will account for the remaining on-road VMT.[51] Accordingly, using the same percentages of VMT and average fuel economy projected by EMFAC, operation of the project would consume approximately

[50] California Energy Commission, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2021. Diesel is adjusted to account for retail (50.3%) and non-retail (49.7%) diesel sales.

[51] California Air Resources Board, EMFAC2021 on-road vehicle emissions factor model, EMFAC2021 (Modeling input: Orange County; Fleet Aggregate; Annual; 2025). The modeling input values are considered generally representative of conditions for the region and representative of the majority of vehicles associated with project-related VMT. See EMFAC Operational Transportation Energy Worksheet in **Appendix E.2** of this document. Energy analysis reflects a March 2023 start date for construction and a March 2025 buildout year. The project construction date has since been revised to March 2024 and will be comprised of the same construction timeframe (25 months).

126 gallons of diesel fuel and 1,236 gallons of gasoline per year.[52] According to CARB's EMFAC model, on-road vehicles in Orange County will consume 136 million gallons of diesel and 1.11 billion gallons of gasoline in 2025.[53] Accordingly, fuel consumption by residents and visitors during operation of the project would represent a negligible portion of fuel consumed in the County.

The project's residents and visitors would utilize vehicles that comply with CAFE fuel economy standards and the Pavley standards, which are designed to result in more efficient use of transportation fuels. Additionally, as detailed in response to Checklist Question II.17(a), the project would not conflict with circulation system plans.

Electricity and Natural Gas

During operation of the project, electricity and natural gas would be consumed for multiple purposes, including, but not limited to, HVAC, refrigeration, water heating, lighting, and the use of electronics, equipment, and appliances. According to the CalEEMod outputs (see **Appendix E.1**), the project would have an electrical demand of 6,895 kilowatt-hours (kWh/yr), or 0.0069 gigawatt-hours (GWh) per year, and a natural gas demand of 39,332 cubic-feet (cf) per year, or 108 cf per day.[54] Electricity would be provided to the project site by SDG&E, which projects that its total sales in 2025-2026 fiscal year (the project's operational year) will be 18,228 gigawatt-hours (GWh).[55] Natural gas would be provided to the project site by Southern California Gas Company (SoCalGas), which projects that natural gas consumption within SoCalGas' planning area will be approximately 2,327 million cf per day in 2024.[56] As such, the project's electrical demand would represent 0.00004 percent of SDG&E's available supplies. The project's natural gas demand would represent 0.005 percent of the natural gas consumption within SoCalGas' area.

The project would be required to comply with all standards set in California Building Code (CBC) Title 24, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources during operation. California's Green Building Standards Code (CALGreen; Title 24, Part 11) requires implementation of energy efficient light fixtures and building materials into the design of new construction projects. Furthermore, the 2019 Building Energy Efficiency Standards of the California Energy Code (CBC Title 24, Part 6) requires newly constructed buildings to meet energy performance standards set by the Energy Commission. These standards are specifically crafted for new buildings to result in energy efficient performance so that the buildings do not result in wasteful, inefficient, or unnecessary consumption of energy. The standards are updated every three years and each iteration is more energy

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52 Calculated as follows for diesel: 4.69 percent of total 37,489 VMT = 1,758 diesel VMT / 14 diesel mpg = 126 gallons of diesel. Calculated as follows for gasoline: 89.05 percent of total 37,489 VMT = 33,384 gasoline VMT / 27 gasoline mpg = 1,236 gallons of gasoline.

53 California Air Resources Board, EMFAC2021 on-road vehicle emissions factor model, EMFAC2021 (Modeling input: Orange County; Fleet Aggregate; Annual; 2025). The modeling input values are considered generally representative of conditions for the region and representative of the majority of vehicles associated with project-related VMT. See EMFAC Operational Transportation Energy Worksheet in **Appendix E.2** of this document. Energy analysis reflects a March 2023 start date for construction and a March 2025 buildout year. The project construction date has since been revised to March 2024 and will be comprised of the same construction timeframe (25 months).

54 Note that the CalEEMod outputs present the project's operational natural gas demand as 38,335 kilo-British thermal units (kBTU) per year. 1 kBTU = 1.026 cubic feet; 38,335 kBTU per year x 1.026 = 39,332 cf per year; 39,332 cf per year / 365 days per year = 108 cf per day.

55 California Energy Commission, California Energy Demand 2019-2030 Baseline Forecast –LSE and BA Tables Mid Demand Case, Form 1.1c: Electricity Deliveries to End Users by Agency (GWh), Corrected February 2020, TN No. 232307, Docketed March 4, 2020.

56 California Gas and Electric Utilities, 2022 California Gas Report, page 185.

efficient than the previous standards. Furthermore, the project would continue to reduce its use of nonrenewable energy resources as the electricity generated by renewable resources provided by SDG&E continues to increase to comply with State requirements through Senate Bill 100 (SB 100), which requires electricity providers to increase procurement from eligible renewable energy resources to 60 percent by 2030 and 100 percent by 2045.

Summary

Based on the above, the project would not involve the inefficient, wasteful, and unnecessary use of energy during operation. **Therefore, impacts would be less than significant**.

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

Less Than Significant Impact. A significant impact may occur if a project were to conflict with a state or local plan for renewable energy or energy efficiency.

The energy conservation policies and plans relevant to the project include the California Title 24 energy standards and CALGreen. As these conservation policies are mandatory, the project would not conflict with applicable plans for renewable energy or energy efficiency. With regard to transportation related energy usage, as discussed in greater detail in Section 8, Greenhouse Gas Emissions, the project would not conflict with the goals of SCAG's 2020-2045 RTP/SCS. Overall, the project would be designed and constructed in accordance with applicable state and local green building standards that would serve to reduce the energy demand of the project. In addition, as discussed above, the demand for electricity during construction and operation of the project would represent a small fraction SDG&E's projected and planned sales. Similarly, petroleum-based fuels during construction would also represent a small fraction of the projected fuel use in Orange County. Therefore, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. **Therefore, impacts would be less than significant**.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
7. 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 fault?	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

The following analysis in this section is based on the following:

- Discussion of Coastal Hazards (Coastal Hazards) for 31451 Coast Highway, City of Laguna Beach, Orange County, California, prepared by GeoSoils, Inc., dated April 23, 2020;
- Coastal Bluff Edge Evaluation (Bluff Evaluation) for the Proposed Single-Family Development, for the 31451 S. Coast Highway, Laguna Beach, Orange County, California 92651, Assessor's Parcel Number (APN) 056-032-26 prepared by GeoSoils, Inc., dated May 15, 2020;

- Preliminary Geotechnical Investigation (Geotechnical Report) that was prepared for Proposed Single-Family Residence 31451 South Coast Highway, Laguna Beach, California prepared by Coastal Geotechnical, dated September 16, 2004.
- Geotechnical Update that was prepared for Proposed Single-Family Residence, 31451 S. Coast Highway, Laguna Beach, California prepared by Coastal Geotechnical, dated April 20, 2021.

The Geotechnical Reports are available in **Appendix D** of this document.

Regulatory Setting

Regulations exist at state and local levels with regard to geology and soils and include:

a) National Pollutant Discharge Elimination System Permit
b) California Alquist-Priolo Earthquake Fault Zoning Act
c) California Building Code
d) California Public Resources Code Section 21083.2
e) California Seismic Hazards Mapping Act
f) Orange County General Plan Resources Element
g) Laguna Beach Open Space Conservation Element
h) Laguna Beach Municipal Code

Environmental Setting

Faulting and Seismicity

There are no major fault zones located within the City of Laguna Beach. However, there are several faults within the region that could have an impact on the City. The nearest fault of significance to the project site is the mapped extension of the Laguna Canyon fault, which passes approximately 2000-feet northeast of the site. Other active faults in the region are the Newport-Inglewood, San Joaquin Hills Blind Thrust, Palos Verdes, and the Elsinore, which are located approximately 2-miles southwest, 3.5 to 4-miles below, 17-miles southwest, and 21.5-miles northeast of the site, respectively. Strong ground motion could also be expected from earthquakes occurring along the San Jacinto and San Andreas fault zones, which lie northeast of the site at distances of approximately 45.5-miles and 55 to 60-miles, respectively. The San Clemente fault, which lies approximately 58-miles southwest of the site, as well as numerous other offshore faults, could also provide strong ground motion. These faults are all close enough or expected to generate strong enough shaking that could affect the City. However, the level of seismicity in the City, both as to maximum credible earthquake intensity and likely earthquake occurrences, is the same as for the rest of Orange County.

The City is not at significant hazard from surface rupture as the nearest fault is the Newport-Inglewood, which is two miles offshore.

Terrain and Soil Conditions

The City is situated along an irregular trending stretch of coastline that is characterized by numerous coves and pocket beaches that are backed by a landward succession of steep to near vertical sea cliffs, typically gently to moderately seaward sloping terrace terrain, and ultimately by moderately to steeply sloping resistant hills that comprise the western flank of the San Joaquin Hills. The Coastal Fringe, where the

project site is located, is characterized by fill, colluvium, regressive marine and continental terrace deposits that were laid down during glacio-eustatic changes in sea level in the Pleistocene, and ultimately marine sedimentary bedrock assigned to the middle Miocene San Onofre Breccia. These soils are not considered susceptible to liquefaction due to a lack of shallow groundwater.

Paleontological Resources

As stated in Orange County's General Plan, Resources Element, the City has the potential and sensitivity for paleontological resources.[57]

Checklist 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 fault? Refer to Division of Mines and Geology Special Publication 42.

Less Than Significant Impact. A significant impact may occur if a project is located within a State-designated Alquist-Priolo Zone or other designated fault zone, and appropriate building practices are not employed. Active earthquake faults are faults where surface rupture has occurred within the last 11,000 years. The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazards of surface faulting and fault rupture to built structures. Surface rupture of a fault generally occurs within 50 feet of an active fault line.

The site is not located within the presently defined boundaries of an Alquist-Priolo Earthquake Fault Zone. According to the California Geological Society, the nearest Alquist-Priolo Earthquake Fault Zone is the Newport-Inglewood Fault Zone, an approximately 47-mile long zone running roughly parallel the coastline until just south of Newport Bay, where it heads offshore, located approximately 2.1 miles to the southwest of the project site. Other nearby active faults are the Elsinore Fault Zone and the Palos Verdes Fault (Offshore Segment) located approximately 23.2-miles northeast and 17-miles southwest of the site, respectively. Strong ground motion could also be expected from earthquakes occurring along the San Jacinto and San Andreas fault zones which lie northeast of the site at distances of approximately 45-miles and 54-miles, respectively.

The San Clemente Fault, which lies approximately 58-miles southwest of the site, as well as numerous other offshore faults, could also provide strong ground motion.

Several buried thrust faults, commonly referred to as blind thrusts, underlie the Los Angeles Basin and the Orange County Coastal Plain at depth. These faults are not exposed at the ground surface and are typically identified at depths greater than 3.0-kilometers. The October 1, 1987, Mw 5.9 Whittier Narrows earthquake and the January 17, 1994, Mw 6.7 Northridge earthquake were a result of movement on the Puente Hills Blind Thrust and the Northridge Thrust, respectively. The San Joaquin Hills Blind Thrust underlies the site at depth. This thrust fault and others in the greater Los Angeles/Orange County are not exposed at the surface and do not present a potential surface fault rupture hazard at the site, however,

[57] Orange County General Plan, Resources Element, Figure VI-9.

these deep thrust faults are considered active features capable of generating future earthquakes that could result in moderate to significant ground shaking at the site. However, the risk of surface rupture due to active faulting is considered low due to the absence potential for fault rupture at the project site.

The project would be required to comply with applicable State and local building and seismic codes and implement all site- and project-specific design recommendations contained in the Geotechnical Report (see **Appendix D.1** to this document) that was prepared for the project. Final design-level soils and geological reports would be submitted to the Laguna Beach Building Division for review and approval as part of the standard building permit submittal package prior to project construction. The project would comply with State of California standards for building design through the California Building Standards Code (California Code of Regulations, Title 24) which requires various measures of all construction in California to account for hazards from seismic shaking. Conformance with current CBC requirements and site-specific design recommendations in the Geotechnical Report would minimize the potential for people on the project site to sustain loss, injury, or death as a result of fault rupture. **Accordingly, less than significant impacts related to fault rupture would occur under the project**.

ii. Strong seismic ground shaking?

Less Than Significant Impact. A significant impact may occur if a project represents an increased risk to public safety or destruction of property by exposing people, property or infrastructure to seismically induced ground shaking hazards that are greater than the average risk associated with locations in the Southern California region.

The project site is located in the seismically active region of Southern California, and therefore, is susceptible to ground shaking during a seismic event. The localized faulting within the bedrock mapped and/or reported in the site vicinity appear confined to the middle Miocene strata and are not considered active or construction limiting features. Localized and unnamed faults lie approximately 1000-feet and 1,900-feet west and east of the site, respectively. Recent activity on these faults have not been established within the last 11,700 years, consequently, they are not considered active. The closest surface trace of an active fault to the site is the Newport-Inglewood Fault Zone located approximately 2.1-miles to the southwest. Other nearby active faults are the Elsinore Fault Zone and the Palos Verdes Fault (Offshore Segment) located approximately 23.2-miles northeast and 17-miles southwest of the site, respectively. Strong ground motion could also be expected from earthquakes occurring along the San Jacinto and San Andreas fault zones which lie northeast of the site at distances of approximately 45-miles and 54-miles, respectively. The San Clemente fault, which lies approximately 58-miles southwest of the site, as well as numerous other offshore faults, could also provide strong ground motion.

The most significant probable earthquake to effect the project site would be a 6.9 magnitude earthquake on the Newport-Inglewood fault. Depiction of probabilistic seismic hazard analysis utilizing a consensus of historical seismic data and the respective regional geologic conditions indicates that peak ground accelerations of about 0.30 to 0.40 g are possible with a 10 percent probability of being exceeded in 50 years. Therefore, the Geotechnical Reports prepared for the project provided site-specific seismic design parameters based on the use proposed and soil conditions at the project site. Further, to reduce geologic and seismic impacts, the City regulates development through the requirements of the CBC. The purpose of the CBC is to establish minimum standards to safeguard the public health, safety, and general welfare through structural strength, means of egress, and general stability by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all building and structures within its jurisdiction. The earthquake design requirements of the CBC consider the

occupancy category of the structure, site class, soil classifications, and various seismic coefficients. The CBC provides standards for various aspects of construction, including but not limited to excavation, grading, earthwork, construction, preparation of the site prior to fill placement, specification of fill materials, fill compaction and field testing, retaining wall design and construction, foundation design and construction, and seismic requirements. It includes provisions to address issues such as (but not limited to) construction on expansive soils and soil strength loss. In accordance with California law, project design and construction would be required to comply with provisions of the CBC. Accordingly, the Geotechnical Report prepared for the project concluded that development of the project is feasible from a geotechnical engineering standpoint, provided that the advice and recommendations contained in the report are included in the project plans and implemented during construction. **Therefore, impacts related to seismic ground shaking would be less than significant**.

iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. A significant impact may occur if a project is located in an area identified as having a high risk of liquefaction and mitigation measures required within such designated areas are not incorporated into the project. Liquefaction describes a phenomenon where cyclic stresses, which are produced by earthquake-induced ground motions, create excess pore pressures in cohesionless soils. As a result, the soils may acquire a high degree of mobility, which can lead to lateral spreading, consolidation and settlement of loose sediments, ground oscillation, flow failure, loss of bearing strength, ground fissuring, and sand boils, and other damaging deformations. This phenomenon occurs only below the water table, but after liquefaction has developed, it can propagate upward into overlying, non-saturated soils as excess pore water escapes. The possibility of liquefaction occurring at a given site is dependent upon the occurrence of a significant earthquake in the vicinity, sufficient groundwater to cause high pore pressures, and on the grain size, relative density, and confining pressures of the soil at the site. Additional various general types of ground failures which might occur as a consequence of severe ground shaking at the site include landslides, ground subsidence, ground lurching and shallow ground rupture.

Based on the Geotechnical Report evaluation of the project site, review of the State of California Seismic Hazard Zones for the San Juan Capistrano quadrangle indicates that the site is not located within an area considered susceptible to liquefaction. The risk of seismically induced liquefaction is considered low due to the dense underlying geologic materials and lack of shallow groundwater. Compliance with the CBC would reduce impacts associated with seismic-related ground failure, including liquefaction. **Impacts would be less than significant**.

iv. Landslides?

Less Than Significant Impact. A significant adverse effect may occur if a project is located in a hillside area with soil conditions that would suggest high potential for sliding.

Review of geologic literature indicates that the project site has no previously mapped deep seated landslide deposits. The State of California Seismic Hazard Zone Map for the San Juan Capistrano Quadrangle indicates that the bluff zone in this area has been identified as a zone of required investigation for earthquake-induced landslides. This zone, established by the State, takes into account the gradient of the slopes, but does not consider the local orientation of the geologic structure. The terrace deposits are considered essentially massive, while bedding attitudes observed or reported in the site vicinity have a northeast strike with dips ranging from 5 to 26-degrees to the southeast. These conditions are considered neutral or favorable with respect to the slope face. Additionally, historical aerials were reviewed for the

site and vicinity and no significant slope failures were observed. While the gross stability of the project site would not be an issue during or after construction, the surficial stability of the bluff top may be impacted if site drainage (during or after construction) is not directed to the city streets and is allowed to flow over the top of the bluff. **Conformance with current CBC requirements and site-specific design recommendations in the Geotechnical Report would minimize the risk of earthquake-induced landslides at the project site and impacts would be less than significant**.

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

Less Than Significant Impact with Mitigation. A significant impact may occur if a project exposes large areas to the erosional effects of wind or water for a protracted period of time.

Construction

During construction, project grading and excavation would expose soil for a limited time, allowing for possible erosion. However, due to the temporary nature of the soil exposure during the grading and excavation processes, substantial erosion is unlikely to occur. Soil erosion caused by strong wind and/or earth-moving operations during construction would be minimized through compliance with SCAQMD Rule 403, which prohibits visible particulate matter from crossing property lines. Standard practices to control fugitive dust emissions include watering of active grading sites, covering soil stockpiles with plastic sheeting, and covering soils in haul trucks with secured tarps.

During construction, the project would be required to prevent the transport of sediments from the site by stormwater runoff and winds through the required compliance of LBMC Section 22.17.010, Construction Project Erosion and Sediment Control Maintenance Requirements, as well as adherence to requirements provided in the National Pollutant Discharge Elimination System (NPDES) permit, and MM-Bio-2, Construction Site Housekeeping. The LBMC requires standard construction Best Management Practices (BMPs) and as discussed further in Section 10, Hydrology and Water Quality, implementation of these erosion control measures would avoid or minimize potential impacts related to soil erosion during project construction. As outlined in Section 3, Biological Resources, MM-BIO-2 incorporates installation of adequate erosion and sedimentation barriers at the project site boundaries to prevent a sediment-laden runoff or debris from reaching the coastal bluffs and Pacific Ocean located to the west of the project site.

Operation

During operation, the project site would only be partially covered with development of a single-family residential use with outdoor deck areas, totaling approximately 0.27 acre of the 0.56 acre site. However, as outlined in the Biological Report, the biological resources/habitats adjacent to permanent developed areas, would be restored in place to predisturbance conditions of equal or greater quality in order to avoid adverse impacts.[58] Therefore, there would be no exposed soil that would be susceptible to erosion on the cliffside. Furthermore, as discussed in the Coastal Hazards Report, it was determined that it would be unlikely that wave runup would reach the bluff top development. The beach fronting the site is relatively

[58] Biological Resources Assessment for 31451 Coast Highway, Laguna Beach, Orange County, California, prepared by LSA, May 21, 2020 (Available in **Appendix C** of this document).

stable and the project is, therefore, reasonably safe from shoreline erosion due to the erosion resistant bedrock material at the beach elevation.

Accordingly, the project would not have the potential to result in substantial soil erosion or the loss of topsoil. **Impacts would be less than significant with implementation of mitigation measures**.

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. A significant impact may occur if a project is built in an unstable area without proper site preparation or design features to provide adequate foundations for project buildings, thus posing a hazard to life and property. Potential impacts with respect to liquefaction and landslide potential are evaluated in Sections 6(a)(iii) and (iv) above.

The property lies within a promontory of the shoreline approximately 700-feet northwest of a prominent headland known as Table Rock, and is fronted by a seasonally variable but typically wide sandy beach. The geology of the project site is characterized by locally deep fills associated with a pre-existing drainage, regressive marine and continental terrace deposits that were laid down during glacio-eustatic changes in sea level in the Pleistocene, and ultimately marine sedimentary bedrock assigned to the middle Miocene San Onofre Breccia. Geological units are as follows:

a. **Fill** – The southern portion of the subject site is mantled by approximately 10 to 15-feet of fill that consists generally of porous, damp to moist, loose, dark brown silty fine sand with minor scattered roots. The fill is not considered suitable for support of the proposed improvements in its existing condition.

b. **Colluvium** – The site has an approximate 3 to 6-feet thick deposit of colluvium. The colluvium consists generally of damp, loose, light brown to orange brown silty fine to medium sand with locally abundant sub-angular gravel to cobble sized fragments of metamorphic rock clasts. The colluvium is not considered suitable for support of the proposed improvements in its existing condition.

c. **Terrace Deposits** – The fill and colluvium are underlain by continental and marine terrace deposits. The terrace deposits consist generally of damp to moist, medium dense to dense, reddish brown to orange brown slightly clayey and silty fine to medium sand with locally abundant sub-angular gravel to cobble metamorphic rock clasts that grade at depth to friable fine to coarse sand with a scattered basal gravel zone along the contact with the underlying bedrock. Moderate to heavy caving was observed within the lower section of the terrace deposits during the drilling operations for CGB-1 through CGB-4 (2004).

d. **San Onofre Breccia** – Sedimentary bedrock deposits assigned to the middle Miocene San Onofre Breccia were encountered beneath the terrace deposits in all exploratory borings and crop-out along the seacliff backing the site and vicinity. The section of bedrock observed consists generally of damp, dense to very dense, olive gray silty fine to coarse sandy breccia and sandstone. Gravel to boulder-size metamorphic rock clasts are typical in the breccia, and general drilling refusal was encountered in the 2004 and 2021 borings in the breccia.

The geology of the project site is characterized by locally deep fills on the south side of the lot associated with a pre-existing drainage, regressive marine and continental terrace deposits that were laid down during glacio-eustatic changes in sea level in the Pleistocene, and ultimately marine sedimentary bedrock assigned to the middle Miocene San Onofre Breccia. Based on the subsurface exploration and review of the available geologic reports it appears that two wave-cut platforms, representing essentially two ancient high sea-level stands, exist within the property. The wave-cut platforms and associated geologic contacts between the terrace deposits and San Onofre Breccia lie approximately 5 to 48-feet below the existing lot grade and at approximate elevations of 55 and 110-feet (msl). Structurally, the terrace deposits are considered essentially massive, while bedding attitudes observed or reported in the underlying San Onofre Breccia within the site and vicinity indicate a general northeast strike with dips ranging from approximately 5 to 26-degrees to the southeast. Fracture sets have generally northerly strikes and dips between 36 to 80-degrees to the northeast, southeast, and southwest. Review of the referenced aerial photographs and the results of the subsurface exploration indicates the subject property appears to have been essentially bound by seaward trending drainages prior to the construction of South Coast Highway in the late 1920's. In particular, it appears that a relatively well-developed northeast/southwest trending drainage extended from east of South Coast Highway and through the general southern portion of the site to the beach (see Geologic Map, Figure 2 in **Appendix D.2** to this document). No evidence of sea caves within the property boundaries was observed during our site observations and mapping.

Topographic evidence of several apparent surficial failures was observed within the fill slope that bounds the general seaward portion of the property along with an apparent block fall within the northwest portion of the seacliff. These failures are shown on the attached Geologic Map, Figure 2 in **Appendix D.2** to this document.

Based on the results of the subsurface exploration, geologic mapping, and review of the referenced geologic and geotechnical documents, the project site appears to be underlain by variable, but locally deep fill soils associated with the infilling of a drainage course and creation of the existing lower-level pad area, variably thick surficial soils consisting of colluvium, and ultimately by a succession of Pleistocene terrace deposits and middle Miocene San Onofre Breccia bedrock. Accordingly, the Geotechnical Report prepared for the project concluded that development of the project is feasible from a geotechnical engineering standpoint, provided that the advice and recommendations contained in the report are included in the project plans and implemented during construction. **Therefore, impacts related to soil instability 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?

Less than Significant Impact. A significant impact may occur if a project is built on expansive soils without proper site preparation or design features to provide adequate foundations for project buildings, thus posing a hazard to life and property. Expansive soils are clay-based soils that tend to expand as they absorb water and shrink as water is drawn away.

Subsurface exploration conduction as part of the Geotechnical Report (see **Appendix D.1** to this document) determined that the soils beneath the project site are artificial fills that were encountered at a maximum depth of 3 to 4-feet below existing ground surface. The project site is underlain by fill soil and older colluvium. The artificial fill generally consists of porous, damp to moist, loose, dark brown silty fine sand with minor scattered roots. The fill is likely associated with the infilling of a drainage course and creation of the existing lower level pad area. The colluvium is undocumented fill material and the natural terrain of the

project site is mantled by a variable but approximate 3 to 6-feet deposit of colluvium. The colluvium consists generally of damp, loose, light brown to orange brown silty fine to medium sand with locally abundant sub-angular gravel to cobble metamorphic rock clasts. The fill/colluvium is not considered suitable for support of the proposed new construction in its existing condition.

The fill and colluvium are underlain by continental and marine terrace deposits. The terrace deposits consist generally of damp to moist, medium dense to dense, reddish brown to orange brown slightly clayey and silty fine to medium sand with locally abundant sub-angular gravel to cobble metamorphic rock clasts that grade at depth to friable fine to coarse sand with a scattered basal gravel zone along the contact with the underlying bedrock. Moderate to heavy caving was observed within the lower section of the terrace deposits during the drilling operation.

Sedimentary bedrock deposits assigned to the middle Miocene San Onofre Breccia were encountered beneath the terrace deposits in both exploratory borings and crop-out along the seacliff backing the site and vicinity. The section of bedrock observed consisted generally of damp, dense to very dense, olive gray silty fine to coarse sandy breccia and sandstone. Gravel to boulder-size metamorphic rock clasts are typical in the breccia, and general drilling refusal was encountered in both borings in the breccia.

The on-site geologic materials are in the low expansion range. The Expansion Index was found to be 18 for bulk samples taken from a depth of one to five feet below ground surface. Furthermore, the CBC provides standards for various aspects of construction, including but not limited to excavation, grading, earthwork, construction, preparation of the site prior to fill placement, specification of fill materials, fill compaction and field testing, retaining wall design and construction, foundation design and construction, and seismic requirements. It includes provisions to address issues such as (but not limited to) construction on expansive soils and soil strength loss. In accordance with California law, project design and construction would be required to comply with provisions of the CBC. Accordingly, the Geotechnical Report prepared for the project concluded that development of the project is feasible from a geotechnical engineering standpoint, provided that the advice and recommendations contained in the report are included in the project plans and implemented during construction. **Therefore, impacts from expansive soil would be less than significant**.

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

No Impact. A significant impact may occur if a project is located in an area not served by an existing sewer system. The project site is located in a developed area of the City, which is served by a wastewater collection, conveyance, and treatment system operated by the South Coast Water District (SCWD). Therefore, no septic tanks or alternative disposal systems would be necessary, nor are they proposed. **Accordingly, no impacts related to inadequate septic tank support would occur**.

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

Less than Significant Impact. A significant impact may occur if a project directly or indirectly destroys a unique paleontological resource or site or unique geologic feature. Paleontological resources are the fossilized remains, imprints, or traces of past life preserved in the geologic record. This can include bones, teeth, soft tissues, shells, plant material, microscopic organisms, footprints, trackways, and burrows. Fossils are the only record of the natural history of life on this planet. Despite the frequency of

sedimentary rock in the geologic record, and the number of organisms that have lived throughout the planet's history, only a very small number of remains have been preserved in the fossil record. Fossils are important scientific resources, allowing the study of:

- The evolutionary history of extinct organisms, including their lifestyle, interrelationships, distribution, speciation, extinction, and relation to modern groups.
- The taphonomic agents responsible for fossil preservation, including biases in the fossil record.
- Ancient environments, in which these organisms lived, and the distribution and change in these environments and their organisms through time.
- The temporal relationships of rock deposits from one area to another, and the timing of geologic events.

A Vertebrate Paleontology Records Check was conducted by the Los Angeles County Natural History Museum for paleontological resources on the project site and vicinity. The research did not find any recorded paleontological resources within the project site boundaries. The research did find that there are localities of resources nearby from the same sedimentary deposits occurring at depth in the project area.[59] **Table 11, Paleontology Records Check,** shows fossil localities identified in the local and regional area.

Table 11
Paleontology Records Check

Locality Number	Location	Formation	Taxa	Depth
LACM VP 4166	Between N. Hampton Rd and Crown Valley Pkwy, north of intersection with Playa Blanca	Capistrano Formation	Requiem shark (*Carcharrhinus*), mackerel shark (*Isurus*), aquatic mammal (*Cetacea*), seals/sea lions (*Otariidae*), porpoise (*Phocoenidae*)	Unknown
LACM VP 1115	Near Salt Creek Trail in Salt Creek Corridor Regional Park; San Joaquin Hills	Pleistocene terrace deposit	Mammoth (*Mammuthus*)	Unknown
LACM IP 10032-10036	Monarch Beach Development, near intersection of Niguel Rd and Camino del Avion	Pleistocene terrace deposits	Decapods indeterminate (*Decapoda*), barnacles (*Sessila*), gastropods (*Borsonella*, Fissurella, Hipponix, (*Lottia*), (*Tellina*), bivalves (*Tivela*, *Tresus*, *Yoldia*)	Unknown collected during trenching
LACM VP 4950	29482 Ana Maria Lane; Laguna Niguel	Capistrano Formation (light yellow sand & gray clay)	Baleen whale (*Mysticeti*)	Unknown (found in a trench being excavated)
LACMP VP 4337	Alicia Parkway, NE of Clipper Cove Park; Laguna Niguel	Capistrano Formation	Whale clade (*Cetacea*)	Unknown
LACMP VP 4979-4983	Shea Homes, housing development along cliff northeast of the	Capistrano Formation	Uncatalogued vertebrates	Unknown

[59] Correspondence from Alyssa Bell, Ph.D., Natural History Museum of Los Angeles County, October 16, 2022. Refer to **Appendix G** to this document.

Table 11
Paleontology Records Check

Locality Number	Location	Formation	Taxa	Depth
	intersection of Golden Lantern and Camino los Padres, San Juan Capistrano			
*Correspondence from Alyssa Bell, Ph.D., Natural History Museum of Los Angeles County, October 16, 2022. Refer to **Appendix G** to this document.*				

Furthermore, according to the Orange County Resources Element, the project site is located in the San Joaquin Hills District, which is considered a sensitive paleontological area.[60] The project would require excavations up to approximately 10 to 12 feet for development of the stepped down residential structure. Deeper excavations could uncover significant fossil vertebrate remains. The project would be required to comply with the City of Laguna Beach Open Space Conservation Element's Site Protection policies regarding designation of a paleontologist and notification, assessment, and removal or protection of paleontological resources that may be encountered during excavation.[61] Found deposits would be treated in accordance with federal, State, and local guidelines, including those set forth in California Public Resources Code Section 21083.2. Therefore, the project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. **Accordingly, impacts would be less than significant.**

Mitigation Measures

Refer to MM-BIO-2.

[60] Orange County, General Plan, Resources Element, Adopted December 17, 1993. Figure VI-9.
[61] City of Laguna Beach, General Plan, Open Space Conservation Element, Adopted December 17, 1993. Page 58a.

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

Regulatory Setting

Regulations exist at federal, state, regional, and local levels with regard to GHGs and include:

- Federal Clean Air Act
- Light Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards
- California Code of Regulations, Title 24, Part 6
- California Green Building Standards Code
- Executive Order S-3-05
- Assembly Bill 32 – Global Warming Solution Act of 2006
- Senate Bill 375
- Senate Bill 743
- Senate Bill 97
- Executive Order B-30-15
- Senate Bill 32 and Assembly Bill 197
- Assembly Bill 1493 – Vehicular Emissions of Greenhouse Gases
- Assembly Bill 341
- Executive Order S-01-07
- Senate Bill 350
- Senate Bill 100
- California Air Resources Board: Scoping Plan

Environmental Setting

Global temperatures are moderated by naturally occurring atmospheric gases. These gases are commonly referred to as greenhouse gases (GHGs) because they function like a greenhouse, allowing solar radiation (sunlight) into the Earth's atmosphere but prevent heat from escaping, thus warming the Earth's atmosphere. GHGs, as defined under California's Assembly Bill (AB) 32, include carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6). GHGs are emitted by natural processes and human (anthropogenic) activities. Anthropogenic GHG emissions are primarily associated with (1) the burning of fossil fuels during motorized transport, electricity generation, natural gas consumption, industrial activity, manufacturing, and other activities; (2) deforestation; (3) agricultural activity; and (4) solid waste decomposition. GHG

emissions from human activities are the most significant driver of observed climate change since the mid-20th century.[62] Global climate change refers to changes in average climatic conditions over the entire Earth, including temperature, wind patterns, precipitation, and storms.

Local Regulations

City of Laguna Beach Climate Protection Action Plan (CPAP)

The City of Laguna Beach adopted the Laguna Beach CPAP in 2009. The goal of the plan was to reduce GHG emissions seven percent below 1990 levels by 2012. The plan provides recommendations for achieving the GHG emissions reduction, including increasing energy efficiency, increasing the use of public transit and active transportation, and providing public outreach and education. The CPAP is geared towards City government action, such as City outreach to local businesses and residents to encourage sustainable practices, the adoption of local guidance and policies to reduce energy and water use, and the adoption of practices to reduce GHG emissions in government operations. The CPAP contains a chapter on reducing GHG emissions from government operations, which includes GHG emissions reduction measures like providing natural and day lighting, increased reliance on natural ventilation, installation of solar panels in government buildings, use of fuel-efficient vehicles, installation of water-efficient appliances, and planting drought-tolerant landscaping.

General Plan

The Land Use Element of the General Plan includes the goal to "Create a community that is sustainable, resilient, and regenerative," which intends to guide the City towards a more sustainable future through a reduction in GHG emissions and conservation of natural resources.[63] To achieve this goal, the Land Use Element includes the following policies and actions related to GHG emissions:

Policy 1.1 Reduce greenhouse gas (GHG) emissions 80% below 1990 levels by 2050.

Action 1.1.1 Protect natural assets and open-space areas to maintain their role as "carbon sinks."

Action 1.1.2 Revise and update the Transportation, Circulation, and Growth Management Element and continue to encourage and promote the use of mass transit and other high-occupancy vehicles, bicycling walking, and telecommuting as a means to reduce the City's greatest local contributor to global warming.

Action 1.1.3 Create a Sustainability/Conservation Element with policies that promote energy and resource efficiency, water efficiency, conservation, recycling, and the protection of ground and surface waters.

[62] United Nations Intergovernmental Panel on Climate Change, Climate Change 2013: The Physical Science Basis, Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, 2013.

[63] General Plan Land Use Element. http://www.lagunabeachcity.net/civicax/filebank/blobdload.aspx?BlobID=8066. Accessed January 2023.

Action 1.1.4 Support technology and business practices that enable people to reduce vehicle miles traveled from home to work. These include the use of home office and technology such as wireless communication and video conferencing.

Action 1.1.5 Support State and/or Federal action to implement vehicle emission standards that would reduce greenhouse gas emissions.

Action 1.1.6 Evaluate and consider eliminating or significantly reducing the cost of parking permits for fuel-efficient or alternative-fuel vehicles.

Action 1.1.7 Make fuel efficiency and clean air important criteria in the acquisition of all city vehicles, including fire engines, buses, trucks, etc., and for non-specialty uses consider instituting a policy of purchasing only highly fuel-efficient or alternative-fuel vehicles.

Action 1.1.8 Continue to offer incentives to businesses that encourage employees to use buses, bikes, and carpools (or vanpools) to commute to work. Facilitate telecommuting and/or allow employees to work extended hours for fewer days per week.

Action 1.1.9 Maintain the existing free trolley/bus service and pursue extension throughout the year.

Action 1.1.10 Coordinate with surrounding cities and governmental agencies to maximize the use of public transportation including buses and metro line.

Action 1.1.11 Work with the Laguna Beach Unified School District and private schools to promote the use of clean bus or trolley transportation and discourage the use of private vehicles for trips to and from school.

Action 1.1.12 Provide public education and information about options for reducing greenhouse gas emissions.

Action 1.1.13 Encourage preservation of historic structures and adaptive reuse of buildings.

Action 1.1.14 Establish a City climate-friendly purchasing procedure.

Action 1.1.15 Evaluate establishing lighting and "dark sky" ordinances.

Policy 1.2 Support design strategies and construction standards that maximize use of alternative energy sources and passive solar architecture in buildings.

Action 1.2.1 Modify building codes and design guidelines to permit, encourage, and/or require integration of passive solar design, green roofs, active solar, and other renewable energy sources and/or provide incentives for development projects that meet or exceed silver LEED certification or better (or equivalent standards, if developed by the State).

Action 1.2.2 Revise or eliminate zoning and development standards that act as a barrier to use of renewable energy systems (except for standards required to assure protection of coastal resources.

Action 1.2.3 Construct and renovate public facilities to demonstrate green building practices and renewable energy systems.

Action 1.2.4 Establish incentives to encourage installation of renewable energy systems by homeowners and businesses including, but not limited to, the installation of energy-rated appliances, programmable thermostats, solar-electric and solar-thermal systems, cool roofs and roofing materials, and sustainable landscaping.

Action 1.2.5 Require, where feasible, all new buildings to be designed and oriented to take maximum advantage of the sun and wind for natural heating and cooling.

Action 1.2.6 Require developers and contractors to take action to minimize greenhouse gas emissions by using low-emission vehicles and equipment.

Action 1.2.7 Ensure that all development projects and major remodels implement sustainable landscaping strategies such as use of low or ultra-low water use plants and non-invasive plants.

Action 1.2.8 Evaluate establishing an air conditioning "carbon offset" fee for all permits.

Policy 1.3 Support planning and design solutions that reduce water consumption and implement water conservation practices.

Action 1.3.1 Continue to equip all city restrooms with low-flow toilets.

Action 1.3.2 Encourage or require the use of xeriscape in new construction and major remodels.

Action 1.3.3 Review existing ordinances to allow/encourage water reuse in public and private construction and remodels.

Significance Thresholds

Appendix G of State CEQA Guidelines

The CEQA Guidelines recommend that a lead agency consider the following when assessing the significance of impacts from GHG emissions on the environment:

- The extent to which the project may increase (or reduce) GHG emissions as compared to the existing environmental setting;
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;
- The extent to which the project complies with regulations or requirements adopted to implement an adopted statewide, regional, or local plan for the reduction or mitigation of GHG emissions.[64]

[64] The Governor's Office of Planning and Research recommendations include a requirement that such a plan must be adopted through a public review process and include specific requirements that reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still

Consistent with recent CEQA analyses published by the City, the most appropriate threshold for the project is the bright line threshold of 3,000 MT of CO2e/year established by SCAQMD.[65] As such, the project would result in a significant impact if project-generated emissions exceed the bright line threshold provided by the SCAQMD's GHG CEQA Significance Threshold Working Group in September 2010.[66]

Checklist Discussion

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

Less Than Significant Impact. A project may have a significant impact if project-related emissions would exceed federal, State, or regional standards or thresholds.

The project is anticipated to generate GHG emissions from area sources, energy usage, mobile sources, waste, water/wastewater, and construction equipment. The following provides the methodology used to calculate the project-related GHG emissions and the project impacts.

CalEEMod Version 2022.1 was used to calculate the GHG emissions from the project. The CalEEMod Annual Output for year 2025 for the project is available in **Appendix E.1** of this document. Each source of GHG emissions is described in greater detail below.

Area Sources

Area sources include emissions from consumer products, landscape equipment and architectural coatings. No changes were made to the default area source emissions.

Energy Usage

Energy usage includes emissions from the generation of electricity and natural gas used on-site. No changes were made to the default energy usage parameters.

Mobile Sources

Mobile sources include emissions from the additional vehicle miles generated from the project. The emissions from the vehicle trips associated with the project have been analyzed in the manner described above in the Air Quality Section.

Emissions of GHGs associated with mobile sources from operation of the project are based on the average daily trip generation rate, trip distance, the GHG emission factors for the mobile sources, and the GWP

cumulatively considerable, notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

65 Laguna Canyon Unified Fuel Modification and Habitat Restoration Project Initial Study and Mitigated Negative Declaration. https://www.lagunabeachcity.net/civicax/filebank/blobdload.aspx?blobid=23242. Accessed January 2023 and Pacific Edge Hotel Remodel Revised Initial Study/Mitigated Negative Declaration. https://www.lagunabeachcity.net/civicax/filebank/blobdload.aspx?blobid=26873. Accessed January 2023.

66 Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15. http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqasignificance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf. Accessed January 2023.

values for the GHGs emitted. The types of vehicles that would visit the project site include all vehicle types including automobiles, light-duty trucks, delivery trucks, and waste haul trucks. Modeling for the project was conducted using the vehicle fleet mix for the Orange County portion of the South Coast Air Basin as provided in EMFAC2021 and CalEEMod.

Waste

Waste includes the GHG emissions generated from the processing of waste from the project as well as the GHG emissions from the waste once it is interred into a landfill. AB 341 required that 75 percent of waste be diverted from landfills by 2020. To be conservative, no changes were made to the default waste parameters and no reductions were taken.

Water/Wastewater

Water includes the water used for the interior of the building as well as for landscaping and is based on the GHG emissions associated with the energy associated with supplying and treating water and wastewater. California Green Building Standards require a 20 percent reduction in indoor water usage. To be conservative, no changes were made to the default water usage parameters and no reductions were taken.

Construction

The construction-related GHG emissions were also included in the analysis and were based on a 30-year amortization rate as recommended in the SCAQMD GHG Working Group meeting on November 19, 2009. The construction-related GHG emissions were calculated by CalEEMod.

The GHG emissions have been calculated based on the parameters as described above. A summary of the results is shown below in **Table 12, Project-Related GHG Emissions,** and the CalEEMod Model runs for the project are provided in **Appendix E.1** of this document. **Table 12, Project-Related GHG Emissions,** shows that the project's emissions would be 33.23 $MTCO_2e$ per year.

Table 12
Project-Related GHG Emissions

Emissions Source	Estimated Project Generated CO_2e Emissions (Metric Tons per Year)
Maximum Annual Operations	16.9
Construction Emissions	16.33
Project Total	**33.23**
*Calculation sheets are provided in **Appendix E.1** of this document.* *Source: CalEEMod Version 2022.1 for Opening Year 2025 for the project.*	

According to the thresholds of significance established above, a cumulative global climate change impact would occur if the GHG emissions created from the on-going operations of the project would exceed the SCAQMD threshold of 3,000 MTCO2e per year for all land uses. Therefore, as emissions do not exceed 3,000 MTCO2e per year, operation of the project would not create a significant cumulative impact to global climate change. **Therefore, impacts would be less than significant**.

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

Less Than Significant Impact.

A significant air quality impact may occur if a project is not consistent with the AB32 Scoping Plan or other applicable plans designed to reduce greenhouse gas emissions such as a Climate Action Plan, or would in some way represent a substantial hindrance to employing the policies or obtaining the goals of such a plan.

The project would not have the potential to conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs. The project's consistency with applicable plans is discussed below.

CARB Scoping Plan Consistency

In November 2017, CARB released the 2017 Scoping Plan. This Scoping Plan incorporates, coordinates, and leverages many existing and ongoing efforts and identifies new policies and actions to accomplish the State's climate goals, and includes a description of a suite of specific actions to meet the State's 2030 GHG limit. In addition, Chapter 4 provides a broader description of the many actions and proposals being explored across the sectors, including the natural resources sector, to achieve the State's mid and long-term climate goals.

Guided by legislative direction, the actions identified in the 2017 Scoping Plan reduce overall GHG emissions in California and deliver policy signals that will continue to drive investment and certainty in a low carbon economy. The 2017 Scoping Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while identifying new, technologically feasible, and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Plan includes policies to require direct GHG reductions at some of the State's largest stationary sources and mobile sources. These policies include the use of lower GHG fuels, efficiency regulations, and the Cap-and Trade Program, which constrains and reduces emissions at covered sources.

As the latest 2017 Scoping Plan builds upon previous versions, project consistency with applicable strategies of both the 2008 and 2017 Plan are assessed in **Table 13, Consistency with CARB 2008 and 2017 Scoping Plan Policies and Measures.** As discussed below, any future development that could occur due to land use and zoning changes proposed by the project is consistent with the applicable strategies of the CARB Scoping Plan.

Table 13
Consistency with CARB 2008 and 2017 Scoping Plan Policies and Measures

2008 Scoping Plan Measures to Reduce Greenhouse Gas Emissions	Project Compliance with Measure
California Light-Duty Vehicle Greenhouse Gas Standards – Implement adopted standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and	**Consistent**. These are CARB enforced standards; vehicles that access the project site (that are required to comply with the standards) would comply with the strategy.

Table 13
Consistency with CARB 2008 and 2017 Scoping Plan Policies and Measures

2008 Scoping Plan Measures to Reduce Greenhouse Gas Emissions	Project Compliance with Measure
vehicle technology programs with long-term climate change goals.	
Energy Efficiency – Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.	**Consistent**. Any future development projects would be required to comply with the current Title 24 standards.
Low Carbon Fuel Standard – Develop and adopt the Low Carbon Fuel Standard.	**Consistent**. These are CARB enforced standards; vehicles that access the project site (that are required to comply with the standards) would comply with the strategy.
Vehicle Efficiency Measures – Implement light-duty vehicle efficiency measures.	**Consistent**. These are CARB enforced standards; vehicles that access the project site (that are required to comply with the standards) would comply with the strategy.
Medium/Heavy-Duty Vehicles – Adopt medium and heavy-duty vehicle efficiency measures.	**Consistent**. These are CARB enforced standards; vehicles that access the project site (that are required to comply with the standards) would comply with the strategy.
Green Building Strategy – Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	**Consistent**. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards, which are mandatory in the 2022 edition of the Code, on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The project is subject to these mandatory standards.
High Global Warming Potential Gases – Adopt measures to reduce high global warming potential gases.	**Consistent**. CARB identified five measures that reduce HFC emissions from vehicular and commercial refrigeration systems vehicles that access the project site (that are required to comply with the standards) would comply with the strategy.
Recycling and Waste – Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero-waste.	**Consistent**. The state is currently developing a regulation to reduce methane emissions from municipal solid waste landfills. The project is required to comply with City programs and regulations related to solid waste, which comply with the 75 percent reduction required by 2020 per AB 341.
Water – Continue efficiency programs and use cleaner energy sources to move and treat water.	**Consistent**. The project is required to comply with all applicable City ordinances and CAL Green requirements.
2017 Scoping Plan Recommended Actions to Reduce Greenhouse Gas Emissions	**Project Compliance with Recommended Action**

Table 13
Consistency with CARB 2008 and 2017 Scoping Plan Policies and Measures

2008 Scoping Plan Measures to Reduce Greenhouse Gas Emissions	Project Compliance with Measure
Implement Mobile Source Strategy: Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean Car regulations.	**Consistent**. These are CARB enforced standards; vehicles that access the project site (that are required to comply with the standards) would comply with the strategy.
Implement Mobile Source Strategy: At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025 and at least 4.2 million zero emission and plug-in hybrid light-duty electric vehicles by 2030.	**Consistent**. These are CARB enforced standards; vehicles that access the project site (that are required to comply with the standards) would comply with the strategy.
Implement Mobile Source Strategy: Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20 percent of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration of zero-emission technology ramped up to 100 percent of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NOX standard.	**Consistent**. These are CARB enforced standards; vehicles that access the project site (that are required to comply with the standards) would comply with the strategy.
Implement Mobile Source Strategy: Last Mile Delivery: New regulation that would result in the use of low NOX or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for class 3-7 last mile delivery trucks in California. This measure assumes ZEVs comprise 2.5 percent of new Class 3–7 truck sales in local fleets starting in 2020, increasing to 10 percent in 2025 and remaining flat through 2030.	**Consistent**. These are CARB enforced standards; vehicles that access the project site (that are required to comply with the standards) would comply with the strategy.
Implement SB 350 by 2030: Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.	**Consistent**. The project is required to comply with the current Title 24 standards.
By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383.	**Consistent**. The project is required to comply with City programs and regulations related to solid waste, which comply with the 75 percent reduction required by 2020 per AB 341.

Notes:
[1] Source: CARB Scoping Plan (2008 and 2017).

Executive Orders S-03-05 and B-30-15

Although the emissions levels of the future development in 2050 cannot be reliably quantified, statewide efforts are underway to facilitate the State's achievement of that goal and it is reasonable to expect the emissions profile of the proposed uses would only decline as the regulatory initiatives identified by CARB in the First Update are implemented, and other technological innovations occur. As such, given the reasonably anticipated decline in emissions once fully constructed and operational, the future development is consistent with the Executive Order's horizon-year goal.

Many of the emission reduction strategies recommended by CARB would serve to reduce the project's emissions level to the extent applicable by law and help lay the foundation "…for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050," as called for in CARB's First Update to the AB 32 Scoping Plan. As such, the project's emissions trajectory is expected to follow a declining trend, consistent with the 2030 and 2050 targets and Executive Order S-3-05 and B-30-15.

SCAG's RTP/SCS

SCAG's Regional Council approved and fully adopted the Connect SoCal (2020–2045 Regional Transportation Plan/Sustainable Communities Strategy) and the addendum to the Connect SoCal Program Environmental Impact Report in September 2020. Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. Connect SoCal is supported by a combination of transportation and land use strategies that help the region achieve state greenhouse gas emission reduction goals and federal Clean Air Act requirements, preserve open space areas, improve public health and roadway safety, support our vital goods movement industry, and utilize resources more efficiently. By integrating the Forecasted Development Pattern with a suite of financially constrained transportation investments, Connect SoCal can reach the regional target of reducing greenhouse gases, or GHGs, from autos and light-duty trucks by 8 percent per capita by 2020, and 19 percent by 2035 (compared to 2005 levels).

The project, which is comprised of a single-family residential use, would be developed within an existing urbanized area that provides an established network of roads and freeways that provide local and regional access to the area. Furthermore, the number of daily vehicle trips generated by the project is well below the threshold required by the City of Laguna Beach to perform a vehicle miles traveled analysis. Therefore, the project would not conflict with the applicable objectives of the 2019-2040 RTP/SCS.

Therefore, the project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. Impacts would be less than significant.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
9. 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?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles or 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?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☒	☐

Regulatory Setting

Regulations exist at federal, state, and local levels with regard to hazards and hazardous materials and include:

- Comprehensive Environmental Response, Compensation, and Liability Act
- Resources Conservation and Recovery Act
- Hazardous Materials Transportation Act
- Federal Aviation Regulations Part 77
- California Code of Regulations
- California Hazardous Material Management Act

- Emergency Response to Hazardous Materials Incidents
- California Government Code Section 65962.5
- County of Orange & Orange County Fire Authority Local Hazard Mitigation Plan
- Laguna Beach General Plan Safety Element
- Laguna Beach Municipal Code
- City of Laguna Beach Wildfire Egress Study

Environmental Setting

Hazardous Materials

Hazardous materials encompass a wide range of substances, some of which are naturally occurring and some of which are man-made. Examples of hazardous materials include pesticides, herbicides, petroleum products, metals (e.g., lead, mercury, arsenic), asbestos, and chemical compounds used in manufacturing. Hazardous materials are used for a variety of purposes, including service industries, various small businesses, medical uses, schools, and households. Many chemicals used in household cleaning, construction, dry cleaning, film processing, landscaping, and automotive maintenance and repair are considered hazardous. Small-quantity hazardous waste generators include facilities such as automotive repair, dry cleaners, and medical offices. Hazardous materials could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed.

The area evaluated for hazards and hazardous materials impacts includes the project site and nearby properties with the potential to affect or be affected by the project. The project site is located approximately 9 miles from the nearest school and 22 miles from John Wayne Airport.

Checklist Discussion

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

Less Than Significant Impact. A significant impact may occur if a project involves use or disposal of hazardous materials as part of its routine operations and would have the potential to generate toxic or otherwise hazardous emissions that could adversely affect sensitive receptors.

Construction of the project would involve the temporary transport, use, and disposal of potentially hazardous materials. These materials include paints, adhesives, surface coatings, cleaning agents, fuels, and oils that are typically associated with development of any residential development project. All of these materials would be used temporarily during construction. Additionally, all potentially hazardous materials associated with construction activities would be used and stored in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations, which further minimizes the potential risk associated with construction-related hazardous materials, including the implementation of standard construction BMPs for the use and handling of such materials. Any use of potentially hazardous materials utilized during construction of the project would comply with all local, State, and federal regulations regarding the handling of potentially hazardous materials and risk of spills would cease after construction is completed. The transport, use, and storage of hazardous materials during the construction of the project would be conducted in accordance with all applicable state and federal laws, such as the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, California Hazardous Material Management Act, and CCR Title 2. Construction activities would be

contained on the project site and, thus, any emissions from the use of such materials would be minimal and localized to the project site. Therefore, construction of the project would not expose persons or the environment to a substantial risk resulting from the release of hazardous materials or exposure to health hazards in excess of regulatory standards.

Operation of the project would not involve the routine use, transport, or disposal of hazardous materials. The project includes the development of a single-family residential use. These typical urban use does not involve the routine use of hazardous materials**.** Instead, the operation of the project has limited hazardous materials that are similar to any other urban development such as cleaning solvents, paints, and pesticides for landscaping. As a result, the project generally would not produce significant amounts of hazardous waste, use or transport hazardous waste beyond those materials typically used in an urban development. Therefore, operation of the project would not expose persons or the environment to a substantial risk resulting from the release of hazardous materials or exposure to health hazards in excess of regulatory standards.

Moreover, the project would adhere to regulatory requirements for source hazardous waste reduction measures (e.g., recycling of used batteries, etc.) that would further minimize the generation of hazardous waste. The project would be required to comply with the applicable City ordinances regarding implementation of hazardous waste reduction efforts on-site (i.e., the City's Green Building Ordinance). The applicable regulatory requirements further ensure that the minimal amount of hazardous materials associated with the project are properly treated and disposed of at licensed resource recovery facilities or hazardous waste landfills. The potential transport of any hazardous materials and wastes, i.e., paints, adhesives, surface coatings, cleaning agents, fuels, and oils, if it occurs, would occur in accordance with federal and state regulations that govern the handling and transport of such materials. In accordance with such regulations, the transport of hazardous materials and wastes would only occur with transporters who have received training and appropriate licensing. **Therefore, impacts related to the transport, use, and disposal of hazardous materials would be less than significant**.

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

Less Than Significant Impact. A significant impact may occur if a project could potentially pose a hazard to nearby sensitive receptors by releasing hazardous materials into the environment through accident or upset conditions.

California Government Code Section 65962.5 requires various State agencies to compile lists of hazardous waste disposal facilities, unauthorized releases from underground storage tanks, contaminated drinking water wells, and solid waste facilities where there is known migration of hazardous waste, and submit such information to the Secretary for Environmental Protection on at least an annual basis. Recognized environmental conditions (RECs) is the presence or likely presence or any hazardous substances or petroleum products in, on, or at the property due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. A controlled REC is an REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, and a historic REC is a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.

Regulatory databases such as those required by California Government Code Section 65962.5 were reviewed for the project site and properties within the standard search radii. The records search included federal, State, and tribal environmental record sources, and supplemental and local sources. The project site was not identified in the regulatory database reports. A review of such databases show that there are no known hazardous sites associated with the project site as according to California Department of Toxic Substances Control's (DTSC) EnviroStor database,[67] SWRCB's GeoTracker database,[68] and DTSC's current "Cortese" list.[69] In conclusion, there are no RECs, controlled RECs, or historical RECs on the project site. Therefore, construction and operation of the project would not pose an environmental hazard to surrounding sensitive uses or the environment as the project would not be located on a known hazardous waste site, and impacts would be less than significant.

Based on the above, compliance with regulatory requirements, the project would not result in a significant hazard to the public or the environment through the reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment. **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 an existing or proposed school?

No Impact. A significant adverse effect may occur if a project site is located within one-quarter mile of an existing or proposed school site and is projected to release toxic emissions which pose a health hazard beyond regulatory thresholds.

There are no existing schools within a quarter-mile of the project site. The nearest school to the project site is approximately 9.0 miles to the north (Canyon Vista Elementary School at 27800 Oak View Drive), and there are no known proposed schools within one-quarter mile. **Therefore, no impact would occur**.

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

No Impact. California Government Code Section 65962.5 requires various State agencies to compile lists of hazardous waste disposal facilities, unauthorized releases from underground storage tanks, contaminated drinking water wells and solid waste facilities where there is known migration of hazardous waste and submit such information to the Secretary for Environmental Protection on at least an annual basis. A significant impact may occur if a project site is included on any of the above lists and poses an environmental hazard to surrounding sensitive uses.

As discussed above, regulatory databases such as those required by California Government Code Section 65962.5 were reviewed for the project site and properties within the standard search radii. The records search included federal, State, and tribal environmental record sources, and supplemental and local sources. The project site was not identified in the regulatory database reports. A recent review of such databases shows that there are no known hazardous sites associated with the project site as according to

[67] California Department of Toxic Substances Control, EnviroStor, http://www.envirostor.dtsc.ca.gov/public/. Accessed: October 2022.

[68] State Water Resources Control Board, GeoTracker, http://geotracker.waterboards.ca.gov. Accessed: October 2022.

[69] California Department of Toxic Substances Control, Hazardous Waste and Substances Site List (Cortese), http://www.envirostor.dtsc.ca.gov/public/mandated_reports.asp. Accessed: October 2022.

California DTSC EnviroStor database,[70] SWRCB's GeoTracker database,[71] and DTSC's current "Cortese" list.[72] In conclusion, there are no RECs, controlled RECs, or historical RECs on the project site. **Therefore, 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. A significant impact may occur if a project is located within a public airport land use plan area, or within two miles of a public airport, and subject to a safety hazard.

The project site is located approximately 22 miles south of the John Wayne Airport (18601 Airport Way). However, the project site is not located within the Planning Boundary/Influence Area of the John Wayne Airport including within the Airport Safety Zone or Airport Land Use Plan Noise Contour, which establishes the area susceptible to noise levels that would exceed the annoyance threshold for noise (defined as >65 CNEL for commercial airports such as the John Wayne Airport).[73] **Accordingly, no impacts associated with safety hazards or excessive noise from proximate airports would occur**.

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

Less Than Significant Impact. A significant impact may occur if a project were to interfere with roadway operations used in conjunction with an emergency response plan or emergency evacuation plan or would generate traffic congestion that would interfere with the execution of such a plan.

As stated in the General Plan's Safety Element, as part of the City's preparedness initiatives, an Evacuation Analysis has been prepared that identifies the routes used for evacuation purposes. As identified in the General Plan's Safety Element the project site is located on a Critical Evacuation Roadway, Coast Highway.[74] Also, as indicated in the Wildfire Egress Study, which was prepared to examine anticipated traffic conditions and evacuation times associated with various rates of evacuation responses and alternative management strategies that could be used in response to them for the Emergency Management Zones (EMZs) within the City of Laguna Beach, Coast Highway is designated as an evacuation route.[75]

The project involves the development of a single-family residential use that would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. However, construction activities have the potential to temporarily impact traffic and vehicle speeds on Coast Highway. These impacts would be temporary and access to Coast Highway would not be blocked by project construction.

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70 California Department of Toxic Substances Control, EnviroStor, http://www.envirostor.dtsc.ca.gov/public/. Accessed: October 2022.

71 State Water Resources Control Board, GeoTracker, website: http://geotracker.waterboards.ca.gov. Accessed: October 2022.

72 California Department of Toxic Substances Control, Hazardous Waste and Substances Site List (Cortese), website: http://www.envirostor.dtsc.ca.gov/public/mandated_reports.asp. Accessed: October 2022.

73 Orange County, Airport Land Use Commission, Land Use Plan for John Wayne Airport, April 17, 2008.

74 Laguna Beach General Plan, Safety Element, October 2021. Figure S-1B.

75 City of Laguna Beach, Wildfire Egress Study, July 2021. Figure 11-1.

Operation of the project would not require the development of additional streets or introduce new features that would interfere with or obstruct an adopted emergency response plan. Additionally, as discussed further in Section 17, Transportation/Traffic, operation of the project would not result in a significant increase in daily trips to the site and the project site fronts Coast Highway, which has sufficient capacity to provide access to and from the project site. **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?

Less Than Significant Impact. A significant impact may occur if a project is located in proximity to wildland areas and poses a potential fire hazard, which could expose persons or structures, either directly or indirectly, in the area in the event of a fire.

As stated in the General Plan's Safety Element and defined by the California Department of Forestry and Fire Protection (Cal FIRE), all the canyon and hillside areas in Laguna Beach and some coastal terrace areas are classified within the VHFHSZ, which is the highest wildfire risk classification designated by Cal FIRE. Nearly 90 percent of the City is classified as VHFHSZ, including the project site.[76] As discussed further in Section 20, Wildfire, the project be developed in conformance with LBMC Chapter 15.01, California Fire Code, which adopts the 2019 California Fire Code and establishes provisions for fire safety related to construction, maintenance and design of buildings and land uses. Furthermore, the project has incorporated additional features that are non-conforming, which would result in the structure having improved survivability from fire and reduce the chance of ignition. With the implementation of MM-PUB-1, prescribed, the project is at least equivalent to, if not better than, what is prescribed in the 2019 California Fire Code in terms of quality, effectiveness, fire resistance, durability, and safety. The landscape plans for the project also provide for a low fuel planting scheme that would avoid fuel loading in future years.[77] In addition, the LBFD conducts strategic planning on a regular basis to ensure fire response capabilities and personnel can adequately address current service needs throughout the City and identifies potential issues to be addressed by the LBFD. **Therefore, the project would not result in increased wildfire risks at the site or lead to risk of loss injury or death involving wildland fires and impacts would be less than significant**.

Mitigation Measures

None required.

[76] Laguna Beach General Plan, Safety Element, October 2021. Page 11.

[77] AM&M Request for Joe Reyna, 718 The Strand, Hermosa Beach, CA 90254, prepared by FIREWISE 2000, LLC, January 27, 2022. Refer to **Appendix B** of this document.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
10. 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?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
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?	☐	☒	☐	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
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?	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

The following analysis in this section is based on the Preliminary Water Quality Management Plan (WQMP), for 31451 South Coast Highway, Laguna Beach, CA 92651, prepared by Toal Engineering, Inc. on December 23, 2020 and revised February 1, 2022**.** The WQMP is available in **Appendix H** of this document.

Regulatory Setting

Regulations exist at federal, state, regional, and local levels with regard to hydrology and water quality and include:

- Clean Water Act/National Pollutant Discharge Elimination System Requirements
- National Flood Insurance Program

- NPDES Construction General Permit
- NPDES Groundwater Permit
- NPDES Municipal Permit
- Porter-Cologne Water Quality Control Act
- 2020 Urban Water Management Plan
- San Diego Regional Water Quality Control Board Water Quality Control Plan
- County of Orange & Orange County Fire Authority Local Hazard Mitigation Plan
- Laguna Beach Jurisdictional Runoff Management Program
- Laguna Beach Municipal Code

Environmental Setting

Groundwater

The City is located within the San Juan Basin. Natural recharge to the San Juan Basin includes streambed infiltration in San Juan Creek, Horno Creek, Oso Creek, and Arroyo Trabuco, subsurface inflows along boundaries at the head of the tributaries upstream and other minor subsurface inflows from other boundaries, precipitation and applied water, and flow from fractures and springs. The California State Water Resources Control Board (SWRCB) has determined that the San Juan Creek watershed is not a groundwater basin but is rather a surface and underground flowing stream. Therefore, it is subject to SWRCB jurisdiction and its processes with respect to the appropriation and use of waters within the watershed.[78]

Surface Water

The Pacific Ocean, a jurisdictional navigable water of the United States, does occur to the west of the City and the project site. Further, there are no direct surface water areas within SCWD, which includes the southern portion of the City.[79] There are no records or maps of any wetlands, potentially jurisdictional waterbodies, riparian resources, or significant drainage courses within or adjoining the project area.[80]

Flooding

The Federal Emergency Management Agency (FEMA) is mandated by the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 to evaluate flood hazards and provide Flood Insurance Rate Maps (FIRMs) for local and regional planners to promote sound land use and floodplain development. Further, the Flood Disaster Protection Act requires owners of all structures in identified Special Flood Hazard Areas to purchase and maintain flood insurance as a condition of receiving Federal or federally related financial assistance, such as mortgage loans from federally insured lending institutions. The National Flood Insurance Reform Act of 1994 further strengthened the National Flood Insurance Program (NFIP) by providing a grant program for State and community flood mitigation projects. The act also established a system (Community Rating System - CRS) for crediting communities that

[78] South Coast Water District 2020 Urban Water Management Plan, June 2021. Page 6-15.
[79] South Coast Water District 2020 Urban Water Management Plan, June 2021. Page 6-17.
[80] Biological Resources Assessment for 31451 Coast Highway, Laguna Beach, Orange County, California, prepared by LSA, May 21, 2020 (Available in **Appendix C** of this document).

implement measures to protect the natural and beneficial functions of their floodplains, as well as managing the erosion hazard.

According to the FEMA Laguna Beach is located within Zone X.[81] Zone X is areas of moderate or minimal hazard from the principal source of flood in the area.

Checklist Discussion

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

Less Than Significant Impact. A significant impact may occur if a project discharges water which does not meet the quality standards of agencies which regulate surface water quality and water discharge into storm water drainage systems. Significant impacts may also occur if a project does not comply with all applicable regulations with regard to surface water quality as governed by the SWRCB. These regulations include compliance with the Standard Urban Storm Water Mitigation Plan (SUSMP) requirements to reduce potential water quality impacts.

Construction

The project site is located in the Dana Point Coastal Streams Watershed – San Diego Region. Runoff discharged from the project site flows north westerly in Coast Highway and is discharged into Aliso Creek near the Pacific Ocean at Aliso Beach Park. Construction activities associated with the project have the potential to degrade surface water quality through the exposure of surface runoff (primarily rainfall) to exposed soils, dust, and other debris, as well as from runoff from construction equipment. As stormwater flows over a construction site, it can pick up sediment, debris, and chemicals, and transport them to receiving water bodies. The nearest receiving water body is the Pacific Ocean located immediately west of the project site; however, construction activities would be limited to the project site and not occur on the beach.

Due to the small size of the project site (approximately 0.56-acre), the project would not be required to obtain a Construction General Permit for stormwater. However, the project would be required to comply with LBMC Chapter 22.17, Construction Project Erosion and Sediment Control Maintenance Requirements. The LBMC requires that all construction projects implement erosion controls and BMPs, monitor and evaluate their performance after each rainstorm event, and revise and repair sediment control systems as needed. In addition, LBMC Chapter 16.01, Water Quality Control, requires project plan and BMP review prior to the issuance of construction permits and may impose additional BMPs or other requirements to ensure that the project would not adversely impact water quality. Accordingly, the construction contractor for the project would be required to implement BMPs that would meet or exceed federal, state, and local mandated guidelines for storm water treatment to control erosion and to protect the quality of surface water runoff during the construction period. BMPs utilized could include, without limitation, disposing of waste in accordance with all applicable laws and regulations; cleaning up leaks, drips, and spills immediately; conducting street sweeping during construction activities; limiting the

[81] Federal Emergency Management Agency, Flood Insurance Rate Map, City of Laguna Beach, California, FEMA Map Number 06059C0438K, effective March 21, 2019.

amount of soil exposed at any given time; covering trucks; keeping construction equipment in good working order; and installing sediment filters during construction activities.

In addition, construction activities would be subject to the requirements of the San Diego Regional Water Quality Control Board (SDRWQCB) Order No. R9-2013-0001, National Pollutant Discharge Elimination System (NPDES) No. CAS0109266, as amended by Order No. R9-2015-0001 and R9-2015-0100, effective November 18, 2015, Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges within the San Diego Region (the "MS4 Permit"), which controls the quality of runoff entering municipal storm drains in the San Diego Region. The MS4 Permit enforces implementation of BMPs, including, but not limited to, approval of an Erosion and Sediment Control Plan (ESCP) for all construction activities within their jurisdiction.[82]

The project site is located within the Coastal Zone. Therefore, through provisions of the California Coastal Act, the California Coastal Commission is empowered to issue a Coastal Development Permit for many projects located within the Coastal Zone. In areas where a local entity has a certified Local Coastal Program (LCP), the local entity (e.g., the City) can issue a Coastal Development Permit only if it is consistent with the LCP. The project may require authorization under the City's LCP. However, there are no significant drainages courses on site or within 100 feet of the project limits. Consequently, the project would be considered consistent with the California Coastal Zone Act.[83]

Operation

The existing site is entirely undeveloped and is surrounded by residential uses in a highly urbanized area. Under existing conditions, surface runoff flows across the site in a southwesterly direction and drains over the bluff edge onto the Pacific Ocean Shoreline. A portion of the surface runoff flows to the adjacent property at northwest side then discharges to the ocean. Currently, 100 percent of the project site is covered in impervious surface. The project would be comprised of the development of a single-family residential use, and would reduce impervious surfaces on the site to 48 percent.

The project would include a biofiltration raised planter box that would receive excess runoff collected by drain inlets and channel drains in site hardscape and landscape areas, which would then be treated and pumped into the Coast Highway via rectangular curb outlet. The storm water lift station would include a detention chamber to limit peak discharge into public street. Further, on-site slopes beyond the project limits would remain untouched in their natural, non-irrigated condition. The bulk of the pervious area within the project limits consist of reconstructed slopes, which would be planted with native, drought-tolerant species and then temporarily irrigated until the vegetation is established; once established, the temporary irrigation would be turned off and disconnected.

In addition, the project would be subject to the provisions of the City's Low Impact Development (LID), which is designed to mitigate the impacts of increases in runoff and stormwater pollution as close to the source as possible. LID comprises a set of site design approaches and BMPs that promote the use of

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[82] California Regional Water Quality Control Board – San Diego Region, National Pollutant Discharge Elimination System Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems Draining the Watersheds within the San Diego Region, Order No. R9-2013-0001, No. CAS0109266, as amended by Order No. R9-2015-0001 and R9-2015-0100, effective November 18, 2015.

[83] Biological Resources Assessment for 31451 Coast Highway, Laguna Beach, Orange County, California, prepared by LSA, May 21, 2020 (Available in **Appendix C** of this document).

natural systems for infiltration, evapotranspiration and use of stormwater. The LID Ordinance would require the project to incorporate LID standards and practices to encourage the beneficial use of rainwater and urban runoff; reduce stormwater runoff, promote rainwater harvesting; and provide increased groundwater recharge. Incorporation of these features would minimize the increase in stormwater runoff from the site.

Furthermore, operational activities that could affect water quality include spills of hazardous materials and leaking underground storage tanks. No underground storage tanks are currently operated at the project site nor would any be operated by the project. While the development of a new single-family residential use would increase the use of on-site hazardous materials, such as cleaning, maintenance, and landscaping supplies, compliance with all applicable existing regulations at the project site regarding the handling, storage, and potentially required cleanup of hazardous materials would prevent the project from affecting or expanding any potential areas of contamination, increasing the level of contamination, or causing regulatory water quality standards at an existing production well to be violated, as defined in the California Code of Regulations, Title 22, Division 4, Chapter 15 and the Safe Drinking Water Act.

With compliance with regulatory requirements, project construction and operation-related water quality 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. A significant impact may occur if a project includes deep excavations resulting in the potential to interfere with groundwater movement or included withdrawal of groundwater or paving of existing permeable surfaces important to groundwater recharge.

According to the 2020 Urban Water Management Plan (UWMP), water supply in the area is provided by SCWD, which sources approximately 73 percent of its water from imported water provided by the Metropolitan Water District of Southern California (MWD), 13.5 percent from groundwater, and 13.5 percent from recycled water.[84] Groundwater seepage was observed at several locations within the promontory headland and seacliff at the general southern and northern portion of the site from what is believed to be the terrace deposit/bedrock contact. Localized perched groundwater conditions have been known to exist within the south Laguna area and site vicinity along the terrace/bedrock contact, with the perched water believed to be the consequence of lateral migration of water from off-site areas through the relatively permeable terrace deposits and along the relatively impermeable bedrock. However, as determined by boring samples taken from the project site, there is a lack of shallow groundwater. No groundwater was encountered at a depth of up to 23.3 feet.[85] Operation of the project would use a municipal water supply and does not propose the use of any wells or other means of extracting groundwater. The City imports the majority of its potable water supply from sources outside the Basin. The project would not extract groundwater or directly use wells. Further, according to the 2020 UWMP, SCWD expects to be able to provide reliable water supplies for an average year, single dry year, and multiple dry years for its existing and planned supplies. As discussed further in Section 19, Utilities and Service Systems, SCWD would have sufficient water supply to provide for the project's water use.

[84] South Coast Water District 2020 Urban Water Management Plan, June 2021. Page 6-1.

[85] Preliminary Geotechnical Investigation for Proposed Single-Family Residence 31451 South Coast Highway, Laguna Beach, California prepared by Coastal Geotechnical, dated September 16, 2004 (Available in **Appendix D.1** of this document).

Therefore, the project would not impede groundwater infiltration at the project site and project water use would not result in significant depletion of groundwater supplies. **Therefore, this impact 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 with Mitigation. A significant impact may occur if a project results in a substantial alteration of drainage patterns that would result in a substantial increase in erosion or siltation during construction or operation of the project.

Construction

Construction associated with the project would be subject to the requirements of SDRWQCB Order No. R9-2013-0001, National Pollutant Discharge Elimination System (NPDES) No. CAS0109266, as amended by Order No. R9-2015-0001 and R9-2015-0100, effective November 18, 2015, San Diego Region MS4 Permit, which controls the quality of runoff entering municipal storm drains in the County. The MS4 Permit enforces implementation of BMPs, including, but not limited to, approval of an ESCP for all construction activities within their jurisdiction.[86] ESCPs are required to include the elements of a SWPPP. Accordingly, the construction contractor for the project would be required to implement BMPs that would meet or exceed local, State, and federal mandated guidelines for stormwater treatment to control erosion and to protect the quality of surface water runoff during the construction period. BMPs utilized could include, without limitation: disposing of waste in accordance with all applicable laws and regulations; cleaning up leaks, drips, and spills immediately; conducting street sweeping during construction activities; limiting the amount of soil exposed at any given time; covering trucks; keeping construction equipment in good working order; and installing sediment filters during construction activities.

Furthermore, the project would not result in direct impacts to any delineated jurisdictional waters on the project site. Indirect temporary effects on water quality could occur during construction. Such effects include a potential increase in erosion and sediment transport into adjacent or downstream aquatic areas. Chemical spills or leaks of fuel, transmission fluid, lubricating oil, or motor oil from construction equipment could also contaminate waters and degrade their quality. These potential indirect effects to hydrology and water quality would be avoided or substantially minimized through the implementation of BMPs, project design features, and a water quality management plan and/or a storm water pollution and prevention plan (if required). With successful implementation of the recommended impact avoidance and minimization measures (MM-Bio-2), adverse indirect impacts on water quality (from erosion, runoff, etc.) would be effectively avoided.[87]

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[86] California Regional Water Quality Control Board – San Diego Region, National Pollutant Discharge Elimination System Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems Draining the Watersheds within the San Diego Region, Order No. R9-2013-0001, No. CAS0109266, as amended by Order No. R9-2015-0001 and R9-2015-0100, effective November 18, 2015.

[87] Biological Resources Assessment for 31451 Coast Highway, Laguna Beach, Orange County, California, prepared by LSA, May 21, 2020 (Available in **Appendix C** of this document).

Operation

During the project's operational phase all stormwater flows would be directed to storm drainage features and would be discharged to Coast Highway. As part of the project, a portion of the project site would be developed with a single-family residential use, including deck areas and landscaping. The proposed structure, pavement, and landscaping, which would include revegetation of the sloped areas with native, drought-tolerant plants, would prevent substantial erosion. Furthermore, the irrigation system would be designed and constructed to facilitate irrigation and avoid over-watering. The use of an automated timer system would control valve run times, and low precipitation heads would minimize the amount of water entering the landscape areas. The system would be equipped with a moisture detection system and/or rain shut-off trigger(s) to avoid unnecessary irrigation, which could lead to erosion. Furthermore, it was determined that it would be unlikely that wave runup would reach the bluff top development. The beach fronting the site is relatively stable and the project is therefore, reasonably safe from shoreline erosion due to the erosion resistant bedrock material at the beach elevation.[88]

Accordingly, impacts related to erosion and siltation would be less than significant with implementation of mitigation.

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

Less Than Significant Impact. A significant impact may occur if a project results in a substantial alteration of drainage patterns that would result in a substantial increase in erosion or siltation during construction or operation of the project.

Construction

As discussed under Section 10(ci), above, during construction of the project, a temporary alteration of the existing on-site drainage pattern may occur from site preparation and grading for construction. However, these changes would not result in a substantial increase in the rate or amount of surface runoff that could result in flooding due to stringent controls imposed under the NPDES MS4 Permit, including preparation of an ESCP and BMPs for the control of runoff.

Operation

Site drainage would be collected by drain inlets and channel drains in site hardscape and landscape areas to collect excess runoff and not allow surface water to accumulate and result in standing water/ponding situation, the collected runoff would then be conveyed to a storm water lift station and pumped into the Coast Highway via rectangular curb outlet. Furthermore, the on-site slopes outside of the project area (but within the property) would remain untouched. Therefore, the project would not substantially alter the existing drainage pattern of the site or area in a manner that would result in flooding on- or offsite. **Impacts related to flooding would be less than significant**.

[88] Discussion of Coastal Hazards (Coastal Hazards) for 31451 Coast Highway, City of Laguna Beach, Orange County, California, prepared by GeoSoils, Inc., dated April 23, 2020 (Available in **Appendix D.3** of this document).

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;

Less Than Significant Impact. A significant impact may occur if a project would increase the volume of storm water runoff to a level which exceeded the capacity of the storm drain system serving a project site. A project-related significant adverse effect may also occur if a project would substantially increase the probability that polluted runoff would reach the storm drain system.

Construction

As previously discussed, the project would prepare an ESCP and include BMPs for the control of runoff and water quality impacts during construction in accordance with the MS4 Permit. Therefore, stormwater runoff from the project site would not exceed the capacity of the existing or planned stormwater drainage systems during construction. However, should the City determine improvements to the stormwater drainage system are necessary during the normal permit review process, the Applicant would be responsible for the improvements, and such improvements would be conducted as part of the project either on-site or off-site within the right-of-way, and as such, any related construction activities would be temporary and of short duration, and would not result in any significant environmental impacts given the disturbed nature of the right-of-way. Furthermore, as the project would manage, capture, and treat runoff during construction, as required by regulatory compliance, implementation of the project would represent an improvement in water quality as compared to the existing condition where runoff sheet flows untreated to the drainage system.

Operation

Under existing conditions, surface runoff flows across the site in a southwesterly direction and drains over the bluff edge onto the Pacific Ocean Shoreline. A portion of the surface runoff flows to the adjacent property at northwest side then discharges to the ocean. Currently, 100 percent of the project site is covered in impervious surface. The project would be comprised of the development of a single-family residential use, and would reduce impervious surfaces on the site to 48 percent.

The post-development drainage plan is designed to treat and partially retain runoff via an enclosed planter box (biofiltration raised planter box) prior to discharge in order to eliminate direct discharge into the Pacific Ocean. Drain inlets would be provided in site hardscape and landscape areas to collect excess runoff and not allow surface water to accumulate and result in standing water/ponding situations. Drain lines would convey the collected runoff into a storm life station for treatment and storage prior to discharge. Drainage from paved areas would be directed to flow away from the building foundation and into turf or landscape areas, where possible prior to collection by the proposed area drain system. The proposed planter boxes would remove sediment and pollutants through volume reduction before the runoff enters the storm water lift station and is pumped to Coast Highway via rectangular curb outlet.

The WQMP notes that Design Capture Volume (DCV) can be met with a combination of infiltration, evapotranspiration, rainwater harvesting and/or biotreatment BMPs. The volume in biofiltration BMPs is at least 0.75 of the DCV (after accounting for retention achieved before using biofiltration BMPs). The calculated DCV is shown as following DCV = 0.75 x 0.51 x 0.355 x 43,560 x 1/12 = 493 cubic feet. The report notes that collected runoff occurs by a series of roof gutters and drain inlets and would be conveyed via underground drainpipes to a detention storage and then discharges to the biofiltration system at the rear yard. Treated runoff is then discharged to the pump system and pumped to the Coast Highway and

ultimately flows north westerly in Coast Highway and is discharged into Aliso Creek near the Pacific Ocean at Aliso Beach Park. The planter box would allow for surface ponding to a depth of 7 inches above the surface. The required ponding depth is 308 square feet and the proposed planter box has an area depth of 310 square feet, with a surface storage volume of 391 cubic feet. No runoff project site discharge directly to the ocean without being treated prior. Therefore, the project would not substantially create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff during construction or operation**. Impacts related to flooding would be less than significant.**

iv. Impede or redirect flood flows?

Less Than Significant Impact. A significant impact may occur if a project results in a substantial alteration of flood flows.

According to the FEMA Flood Insurance Rate Map, the project site is within Zone X, which is a designation for areas determined to have a minimal flood hazard.[89] No streams or rivers that may overflow or breech a levee are located on or near the project site and the project site is not located within any high-risk coastal areas. **Therefore, the potential for the project to impede or redirect flood flows 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. A significant impact may occur if a project site is sufficiently close to the ocean or other water body to be potentially at risk of the effects of seismically-induced tidal phenomena (seiche and tsunami) or if the project site is located adjacent to a hillside area with soil characteristics that would indicate potential susceptibility to mudslides or mudflows.

The project site is located within Zone X, as identified on the FIRM. Zone X is areas of moderate or minimal hazard from the principal source of flood in the area.[90] Therefore, the project site would only be subject to moderate or minimal risk from flooding.

The risk for seismically generated ocean waves to affect the site is considered low due to the elevation of the property above sea level.[91, 92] More specifically, allowing for a six feet rise in sea level over the next 75 years, the mean higher high water level would be at approximately 11.25 feet. The highest observed water elevation was on January 28, 1983 during the severe El Niño winter. This elevation was approximately 7.5 feet. If a sea level rise of six feet is added to this elevation, it is approximately 13.5 feet. This would be considered in excess of a 75-year recurrence interval water level. The existing site improvements are

89 Federal Emergency Management Agency, Flood Insurance Rate Map, City of Laguna Beach, California, FEMA Map Number 06059C0438K, effective March 21, 2019.

90 Federal Emergency Management Agency, Flood Insurance Rate Map, City of Laguna Beach, California, FEMA Map Number 06059C0438K, effective March 21, 2019.

91 Preliminary Geotechnical Investigation for Proposed Single-Family Residence 31451 South Coast Highway, Laguna Beach, California prepared by Coastal Geotechnical, dated September 16, 2004 (Available in **Appendix D.1** of this document).

92 Laguna Beach Safety Element, October 2021. Figures S-6 and S-8.

above approximately 80 feet, which are well above any potential ocean flood elevation. Therefore, the project site is safe from flooding from the ocean over the next 75 years.[93]

Wave runup may reach the back beach and bedrock bluff over the next 75 years. However, due to the elevation of the existing improvements (above approximately 69 feet) the wave runup would not impact the project site. Essentially, the erosion resistant bedrock shoreline is natural shore protection and prevents further movement of the shoreline landward over the next 75 years.[94] **Accordingly, impacts related to the risk from flooding would be less than significant**.

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

Less Than Significant Impact. A significant air quality impact may occur if a project is not consistent with water quality control plans or sustainable groundwater management plans.

Water quality control plans applicable to the project include the SDRWQCB *Water Quality Control Plan, for the San Diego Basin* (Basin Plan) and the City's *Jurisdictional Runoff Management Program* (Management Plan). Adopted by SDRWQCB, the Basin Plan designates beneficial uses for surface and groundwaters, sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the State's anti-degradation policy, and describes implementation programs to protect all waters in the Santa Ana Region. In addition, the Basin Plan incorporates (by reference) all applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations. The Management Plan was developed by the City of Laguna Beach Water Quality Department to help meet water quality regulations. The Management Plan identifies and describes the various watersheds in the City, summarizes the water quality conditions of the City's waters, identifies known sources of pollutants, describes the governing regulations for water quality, describes the BMPs that are being implemented by the City, discusses existing Total Maximum Daily Loads (TMDL).[95]

Implementation Plans and Watershed Management Plans

Construction and operation of the project would involve activities that have the potential to conflict with the water quality goals in the Basin Plan and Management Plan through the spread of contaminants into surface or groundwater supplies. As previously detailed, in Section 10(b), above, as determined by boring samples taken from the project site, there is a lack of shallow groundwater. No groundwater was encountered at a depth of up to 23.3 feet.[96] Furthermore, construction of the project would prevent the spread of contaminants into surface water through adherence to applicable regulations and BMPs for the handling and storing of hazardous materials, and the requirements of the MS4 Permit, including implementation of an ESCP for the prevention of erosion and spread of polluted runoff. These regulations and practices effectively control the potential stormwater pollution to surface water during construction.

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93 Discussion of Coastal Hazards (Coastal Hazards) for 31451 Coast Highway, City of Laguna Beach, Orange County, California, prepared by GeoSoils, Inc., dated April 23, 2020 (Available in **Appendix D.3** of this document).

94 Discussion of Coastal Hazards (Coastal Hazards) for 31451 Coast Highway, City of Laguna Beach, Orange County, California, prepared by GeoSoils, Inc., dated April 23, 2020 (Available in **Appendix D.3** of this document).

95 Total Maximum Daily Load (TMDL) is a regulatory term referring to the maximum amount of a pollutant that a body of water can receive per day while still meeting water quality standards.

96 Preliminary Geotechnical Investigation for Proposed Single-Family Residence 31451 South Coast Highway, Laguna Beach, California prepared by Coastal Geotechnical, dated September 16, 2004 (Available in **Appendix D.3** of this document).

Furthermore, the proposed residential use does not represent the type of use that would have the ability to adversely affect water quality. Anticipated and potential pollutants generated by operation of the project would be addressed through the implementation of approved LID BMPs. While the development of a new use would increase the use of on-site hazardous materials (i.e., those typically used on residentially zoned properties such as cleaning, maintenance, and landscaping supplies), compliance with all applicable existing regulations at the project site regarding the handling, storage, and potentially required cleanup of hazardous materials would prevent the project from affecting or expanding any potential areas of contamination, increasing the level of contamination, or causing regulatory water quality standards at an existing production well to be violated.

With regard to groundwater management plans, on September 16, 2014, the State of California signed into law the Sustainable Groundwater Management Act (SGMA). Comprised of three bills, AB 1739, SB 1168, and SB 1319, the SGMA provides a framework for long-term sustainable groundwater management across California and requires governments and water agencies of high and medium priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under the roadmap laid out by the legislation, local, and regional authorities in medium and high priority groundwater basins have formed Groundwater Sustainability Agencies (GSAs) that will oversee the preparation and implementation of a local Groundwater Sustainability Plan (GSP). Local stakeholders have until 2022 (in critically over drafted basins until 2020) to develop, prepare, and begin implementation of Groundwater Sustainability Plans. GSAs will have until 2042 (2040 in critically over drafted basins) to achieve groundwater sustainability.

The project site overlies the San Juan Basin. The project would receive its water from the SCWD. Both the SCWP and the California Department of Water Resources have programs in place to monitor wells to prevent overdrafting. The San Juan Groundwater Basin manager adopted the concept of "adaptive management" of the Basin to vary pumping from year to year based on actual basin conditions derived from monitoring efforts, with the groundwater management implication that during dry periods groundwater pumping would be lower than in wet periods. SCWD also addresses water supply needs through preparation of an UWMP, which projects future water use demands and identifies water supplies to meet these demands and is updated every five years.

As described in detail in Section 19. Utilities and Service Systems, the project's water demand would be within the projections of the UWMP and the project would be required to implement water saving features to reduce the amount of water used by the project in accordance with water conservation measures, including Title 20 and 24 of the California Administrative Code**.** Additionally, the project would not have the potential to impact the amount of groundwater recharge as the project site does not currently provide recharge for the groundwater basin.

Accordingly, based on the above, the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. **Impacts to water quality control plans and sustainable groundwater management plans would be less than significant**.

Mitigation Measures

Refer to MM-BIO-2.

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

Regulatory Setting

Regulations exist at state and local levels with regard to land use and include:

- California Coast Act
- Southern California Association of Governments Connect SoCal Plan
- Laguna Beach General Plan
- Laguna Beach Design Guidelines – A Guide to Residential Development
- Laguna Beach Municipal Code

Environmental Setting

The City is comprised of a total land area of 5,658 acres, or 8.84 square miles. The City, located in the southern portion of Orange County, is bounded by the Pacific Ocean on the southwest, Crystal Cove State Park and the City of Newport Beach on the northwest, Laguna Woods on the northeast, Aliso Viejo and Laguna Niguel on the east, and Dana Point on the southeast. The Laguna Coast Wilderness Park is a 7,000-acre wilderness area in the hills surrounding the City.

Checklist Discussion

a) Physically divide an established community?

No Impact. A significant impact may occur if a project were sufficiently large enough or otherwise configured in such a way as to create a physical barrier within an established community (a typical example would be a project which involved a continuous right-of-way such as a roadway which would divide a community and impede access between parts of the community).

The project site is located at 31451 Coast Highway, and is bounded by Pacific Ocean shoreline to the west, Coast Highway to the east and single-family residential land uses beyond, and single-family residential land uses to the north and south.

The 24,338 square-foot project site is currently undeveloped. The project site does not include any roadways or access to other streets or properties. The project site is surrounded by other development and there are no existing residences on the site, or a residential use that would be physically separated or otherwise disrupted by the project. Development of the project, which is comprised of the development

of a single-family residential use, would remain within the boundaries of the existing project site and would result in further infill of an already developed community. The project would not disrupt, divide, or isolate an existing neighborhood or community directly or indirectly, as all proposed improvements would occur within the limits of the project site. **Therefore, 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. A significant impact may occur if a project is inconsistent with the General Plan or zoning designations currently applicable to the project site and would cause adverse environmental effects, which the General Plan and zoning ordinance are designed to avoid or mitigate.

Applicable Land Use Policies and Regulations

At the regional level, development within the project site is subject to the following:

- *SCAG's 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy*
- *California Coastal Act*

At the City level, development within the project site is subject to the following:

- Laguna Beach General Plan;
- Laguna Beach Zoning Code (Laguna Beach Municipal Code Titles 16, 21, 22, and 25);
- Laguna Beach Design Guidelines – A Guide to Residential Development; and
- South Laguna Beach Community Design and Landscape Guidelines.

An overview of each of these plans and regulations is provided below. However, not every policy or goal of these plans is intended to mitigate or avoid environmental impacts. Where a policy is not intended to mitigate or avoid an environmental impact, consistency with that policy may not be relevant to an environmental impact analysis.

Consistency with Regional Plans

Southern California Association of Governments/Regional Transportation Plan

On September 3, 2020, the SCAG Regional Council adopted the 2020-2045 RTP/SCS, also known as Connect SoCal. The 2020-2045 RTP/SCS presents a long-term transportation vision through the year 2045 for the six-county region of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. The 2020-2045 RTP/SCS contains baseline socioeconomic projections that are used as the basis for SCAG's transportation planning, and the provision of services by other regional agencies. SCAG's overarching strategy for achieving its goals is integrating land use and transportation. SCAG policies are directed towards the development of regional land use patterns that contribute to reductions in vehicle miles and improvements to the transportation system. Rooted in past RTP/SCS plans, Connect SoCal's "Core Vision" centers on maintaining and better managing the region's transportation network, expanding mobility choices by co-locating housing, jobs, and transit, and increasing investment in transit and complete streets. The plans "Key Connections" augment the "Core Vision" to address challenges related to the intensification of core planning strategies and increasingly aggressive greenhouse gas reduction goals, and include but are not limited to, Housing Supportive Infrastructure, Go Zones, and

Shared Mobility. Connect SoCal intends to create benefits for the SCAG region by achieving regional goals for sustainability, transportation equity, improved public health and safety, and enhancement of the regions' overall quality of life. These benefits include but are not limited to a five percent reduction in vehicle miles traveled (VMT) per capita and vehicle hours traveled by nine percent, increase in work-related transit trips by two percent, create more than 264,500 new jobs, reduce greenfield development by 29 percent, and, building off of the 2019-2040 RTP/SCS, increase the share of new regional household growth occurring in High Quality Transit Area's by six percent and the share of new job growth in High Quality Transit Areas by 15 percent.

The project, which is comprised of a single-family residential use would be developed within an existing urbanized area that provides an established network of roads and freeways that provide local and regional access to the area. Furthermore, the number of daily vehicle trips generated by the project (16 daily vehicle trips)[97] is well below the threshold required by the County of Orange to perform a vehicle miles traveled analysis. Therefore, the project would not conflict with the applicable objectives of the 2019-2040 RTP/SCS.

California Coastal Act

The project site is also within the Coastal Zone, which require that planning and development within the Coastal Zone be consistent and compatible with the unique characteristics of coastal resources. To implement these principals, the California Coastal Act established several basic goals, including the following:

- To protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources;
- To ensure orderly, balanced utilization and conservation of coastal zone resources;
- To maximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resources conservation principles and constitutionally protected rights of private property owners;
- To ensure priority for coastal-dependent and coastal-related development over other development on the coast; and
- To encourage State and local efforts to coordinate planning for mutually beneficial uses.[98]

In order to implement these goals, the California Coastal Act established the California Coastal Commission as a permanent State coastal management and regulatory agency with the duties of assisting coastal communities in the preparation of Local Coastal Plans (LCP) and reviewing and certifying the LCPs once they are adopted by local jurisdictions. Each local government along the coast is responsible for incorporating these polices into its own LCP, consisting of a land use plan, zoning ordinance, and other implementing actions. After certification of the LCP, the Coastal Commission's regulatory authority over most development is delegated to the local government. The City's LCP, certified by the California Coastal Commission on January 13, 1993, is comprised of several components, including, but not limited to the:

- Laguna Beach General Plan Land Use Element;

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97 Based on a trip generation rate of 15.2 trips per day per single-family residence. 1 residence x 15.2 trips per residence = 15.2 rounded up to 16. Source: County of Orange, Guidelines for Evaluating Vehicle Miles Traveled, September 2020. Page 18.

98 California Coastal Act, Chapter 1, Findings and Declarations and General Provisions. Page 4.

- Laguna Beach General Plan Open Space Conservation Element;
- Laguna Beach Coastal Land Use Technical Appendix;[99]
- Laguna Beach Zoning Code (Laguna Beach Municipal Code Titles 16, 21, 22, and 25); and
- Laguna Beach Design Guidelines – A Guide to Residential Development.

The LCP delegates the Coastal Development Permit (CDP) authority from the Coastal Commission to the City. Upon determination of final project plans, the project would undergo a consistency analysis for conformity with the LCP. The project would be required to comply with all provisions of the Coastal Development Permit and would be directly appealable to the Coastal Commission. The analysis below discussed the consistency analysis of the project with the LCP components.

Consistency with Local Plans

Laguna Beach General Plan

The City's General Plan is a document consisting of nine elements, including, Historic Resources Element, Housing Element, Human Needs Element, Land Use Element, Landscape and Scenic Highways Element, Noise Element, Open Space Conservation Element, Safety Element, and Transportation, Circulation, and Growth Management Element.

The project site is within the Village Low Density General Plan land use designation, which primarily provides for residential uses, such as the project. This classification is intended for detached single-family residential uses in areas that are already developed and support existing homes. The district is intended to provide a residential living environment that is adjacent to local services and businesses. Building density ranges from 1 to 10 dwelling units per acre. The project is a single-family residence, located on an infill lot that would be surrounded by existing residential development. The project site is near several local restaurants and small commercial businesses. Therefore, the project would be consistent with the Village Low Density General Plan land use designation.

Other General Plan policies that are applicable to the project include policies related to creating a sustainable and resilient community, preserving and enhancing the City's residential neighborhoods, and preserving coastal views. The project would include sustainability features such as energy efficient lighting, green roof, and HVAC. The project would enhance the character of the project site and its vicinity by constructing a single-family residence consistent with existing uses and design to create a visually cohesive, high quality residential development. The project would be a maximum of 30 feet (three stories) and built in a split-level style, and would maintain a 25-foot buffer from the bluff top setting the building back from direct views from the Pacific Ocean shoreline. The project would incorporate the design and landscaping recommendations of the LSHRD for Zone J of the Coast Highway to the extent feasible.

Additionally, the project would be consistent with General Plan policies related to protecting natural resources and avoiding or creating hazardous conditions. Although the project site is degraded and fragmented coastal bluff scrub, temporarily impacted areas would be restored in place to predisturbance conditions of equal or greater quality in order to avoid adverse impacts to these resources. The project

[99] The Laguna Beach Coastal Land Use Technical Appendix is a technical document serving as an appendix to the City's General Plan. The policy framework for coastal planning is contained in the General Plan. By consolidating the issues of the Land Use Plan into the General Plan, the City is able to achieve an internally consistent long-range planning program while responding to the mandate of the Coastal Act.

would protect water quality and marine resources through use of BMPs during construction and operation to control site runoff. The project would implement measures as outlined in the coastal hazards report prepared for the project site related to on-site coastal conditions and coastal hazard constraints, including coastal erosion, coastal flood or wave runup impacts. The project would conform with LBMC Chapter 15.01, California Fire Code (which adopts the 2019 California Fire Code) and the project design and materials are at least equivalent to, if not better than, what is prescribed in the 2019 California Fire Code in terms of quality, effectiveness, fire resistance, durability, and safety.

Overall, the project would be consistent with applicable policies and actions in the General Plan adopted for the purpose of avoiding or mitigating an environmental effect. For a full analysis of General Plan policies, please see **Appendix I.1**.

Laguna Beach Zoning Code

Land Use

All on-site development activity is subject to the Zoning Code. The Zoning Code includes development standards for the various districts in the City. The project site is currently zoned R-1, Residential Low Density. Land uses allowed in the R-1 zone include single-family dwelling units, such as the project, child care, guest houses (with restrictions), public parks, playgrounds, and beaches, and residential care facilities.[100] Therefore, the project's proposed land use would be allowed by the zoning.

Lot Size

The R-1 zone's requires each lot to have 6,000 square feet of land area.[101] The project site, which totals approximately 0.56-acre (24,338 square feet), therefore, complies with the R-1 zone lot area requirement.

The R-1 zone's required lot dimensions are a minimum lot width of 70 feet and a minimum lot depth of 80 feet.[102] The project site has a lot width of approximately 81 feet and a lot depth of approximately 301 feet, and therefore, complies with the R-1 zone lot dimensions.

Height

R-1 zone permits a maximum height of 30 feet when measured from the finished or natural grade.[103] The project has been designed with a maximum height of 30 feet and, therefore, complies with the R-1 zone height limitations.

Setbacks

The R-1 zone is required to provide front, side, and rear yard setbacks. The project would be constructed with a 20' front yard setback for the house and a 20' front yard setback for the garage, a 16' side yard setback along the northerly edge, a 4' side yard setback along the southerly edge, and a 25' rear yard setback from the blufftop. The provision of these setbacks minimizes the project's massing, along with its

100 LBMC Section 25.10.004.
101 LBMC Section 25.10.008.
102 LBMC Section 25.10.008.
103 LBMC Section 25.10.008.

potential impacts upon adjacent properties, while remaining consistent with the intent of the LBMC's yard requirements.[104]

Parking

Under standard LBMC requirements, the project's single-family residential use would require two covered parking spaces and one uncovered parking space. The project would provide three covered parking spaces for the proposed residence and therefore, would be in compliance with the LBMC.[105]

Open Space

The project's required amount of open space was calculated pursuant to LBMC Section 25.10.008(0), based on the lot size. All new homes, with a lot area over 14,500 square feet, shall provide a minimum of 35 percent ground-to-sky landscaped open space or landscaped area. Thus, a total of 7,414 square feet of open space is required for the project. The project would provide approximately 10,197 square feet (or 48 percent of the lot area) of open space.

Therefore, the project complies with the zoning standards including density, permissible land uses, setbacks, parking, and open space.

Laguna Beach Design Guidelines – A Guide to Residential Development

The City of Laguna Beach Residential Design Guidelines (Design Guidelines) serve to implement the General Plan's urban design principles and are intended to be used by the community, the Design Review Board, the Heritage Committee, the Planning Commission, the City Council and design professionals in evaluating project applications, along with relevant policies from the General Plan. By offering more direction for proceeding with the design of a project, the Design Guidelines illustrate options, solutions, and techniques to achieve the goal of excellence in new design. The Design Guidelines, which were adopted December 7, 2010, are intended as performance goals and not zoning regulations or development standards and, therefore, do not supersede regulations in the LBMC. The guidelines carry out the common design objectives and are implemented by the following design review criteria: access, design articulation, design integrity, environmental context, general plan compliance, historic preservation, landscaping, light and glare, neighborhood compatibility, privacy, public art, sustainability, swimming pools, spas, and water features, and view equity.[106]

The City's Residential Design Guidelines related to access focus on safety for vehicles and pedestrian traffic. The project would include a new sidewalk along the frontage of the project site and a new drive approach per Caltrans standards. Guidelines related to design articulation and integrity recommend following natural topography, maximizing harmony with natural surroundings and honoring environmental context, and additional guidelines related to architectural elements. The project would incorporate the suggested design elements and would be consistent with these guidelines. Other Guidelines related to landscaping, light and glare, neighborhood compatibility, privacy, sustainability, and swimming pools support low-impact landscaping, non-obtrusive lighting, energy-efficient site design, and appropriate setbacks. The project would incorporate native, drought-tolerant plants, the lighting used

[104] LBMC Section 25.10.008.
[105] LBMC Section 25.52.012.
[106] City of Laguna Beach Design Guidelines-A Guide to Residential Development, December 7, 2010.

throughout the project site would prevent light spillover onto adjacent properties, and would comply with all development standards for the R-1 zone and would not physically encroach on surrounding residential areas. Lastly, the project would be consistent with guidelines related to view equity as the project would not exceed the City's building height standards and would be consistent with adjacent development. Therefore, the project conforms to the Design Guidelines. For a full analysis of the project's consistency with the City's Residential Design Guideline policies, please see **Appendix I.2**.

As discussed further under Permits and Approvals, in Section A. Project Description, the project would require approval of the building by the Design Review Board, a Coastal Development Permit, a Building Permit, and a Grading Permit. Based on the analysis above, the project would be substantially consistent with applicable goals, policies, and objectives in local and regional plans that govern development on the project site. Therefore, the project would not conflict with applicable land use plans adopted for the purpose of avoiding or mitigating an environmental effect. **As such, impacts would be less than significant**.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
12. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be a 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?	☐	☐	☐	☒

Regulatory Setting

Regulations and responsible agencies exist at the state level with regard to mineral resources and include:

- Surface Mining and Reclamation Act of 1975
- Division of Oil, Gas, and Geothermal Resources
- Division of Mines and Geology

Environmental Setting

The project site is undeveloped, has not been historically used for mineral extraction, and there are no mineral extraction activities in the area.[107]

Checklist 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?

***No Impact*.** A significant impact may occur if a project is located in an area used or available for extraction of a regionally-important mineral resource and the project converted an existing or potential future regionally-important mineral extraction use to another reuse or if the project affected access to a site used or was potentially available for regionally-important mineral resource extraction.

No portion of the project site is delineated as a mineral resource or mineral resource recovery site. There are no active mines or mineral resource extraction occurring on the site or project vicinity.[108] Additionally, the project site is not located within the boundaries of a major oil drilling area or within a State-designated

[107] California Division of Mine Reclamation, California Department of Conservation. https://maps.conservation.ca.gov/mol/index.html. Accessed October 2022.

[108] California Division of Mine Reclamation, California Department of Conservation. https://maps.conservation.ca.gov/mol/index.html. Accessed October 2022.

oil field.[109] **Due to lack of resources available on the project site and the urban nature of the City, no impact would occur**.

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 significant impact may occur if a project is located in an area used or available for extraction of a locally-important mineral resource extraction and the project converted an existing or potential future locally-important mineral extraction use to another use or if the project affected access to a site used or potentially available for locally-important mineral resource extraction.

As discussed above under responses to Section 12(a), the project site is not within a major drilling area or State-designated oil field. The project would not affect any extraction activities and there would be no impact on existing or future regionally important mineral extraction sites. Therefore, development of the project would not result in the loss of availability of a mineral resource that would be of value to the residents of the State or a locally-important mineral resource, or mineral resource recovery site, as delineated on a local general plan, specific plan, or land use plan. **Therefore, no impact would occur**.

Mitigation Measures

None required.

[109] California Department of Conservation, Division of Oil, Gas & Geothermal Resources, Well Finder, https://maps.conservation.ca.gov/doggr/wellfinder/#openModal/-118.37122/34.06442/19. Accessed October 2022.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
13. 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?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
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 2 miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Regulatory Setting

Various private and public agencies have established noise guidelines and standards to protect citizens from potential hearing damage and other adverse physiological and social effects associated with noise. Federal, State, regional, and local guidelines include the following:

- Federal Transit Administration and Federal Railroad Administration Standards
- Federal Aviation Administration Standards
- California Noise Control Act
- California Code of Regulations
- Laguna Beach General Plan
- Laguna Beach Municipal Code

Noise Fundamentals

Sound is described in terms of amplitude (i.e., loudness) and frequency (i.e., pitch). The standard unit of sound amplitude measurement is the decibel (dB). The dB scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Since the human ear is not equally sensitive to a given sound level at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted dB scale (dBA) provides this compensation by emphasizing frequencies in a manner approximating the sensitivity of the human ear.

Noise, on the other hand, is typically defined as unwanted sound audible at such a level that the sound becomes an undesirable by-product of society's normal day-to-day activities. Sound becomes unwanted when it interferes with normal activities, causes actual physical harm, or results in adverse health effects. The effects of noise on people can be placed into four general categories:

- Subjective effects (e.g., dissatisfaction, annoyance);
- Interference effects (e.g., communication, sleep, and learning interference);
- Physiological effects (e.g., startle response); and
- Physical effects (e.g., hearing loss).

The definition of noise as unwanted sound implies that it has an adverse effect, or causes a substantial annoyance, to people and their environment. However, not every unwanted audible sound interferes with normal activities, causes harm, or has adverse health effects. For unwanted audible sound (i.e., noise) to be considered adverse, it must occur with sufficient frequency and at such a level that these adverse impacts are reasonably likely to occur.

Vibration Fundamentals

Vibration can result from a source (e.g., train operations, motor vehicles, machinery equipment, etc.) causing the adjacent ground to move and creating vibration waves that propagate through the soil to the foundations of nearby buildings. This effect is referred to as groundborne vibration. The peak particle velocity (PPV) or the root mean square (RMS) velocity is usually used to describe vibration levels. PPV is defined as the maximum instantaneous peak of the vibration level, while RMS is defined as the square root of the average of the squared amplitude of the vibration level. PPV is typically used for evaluating potential building damage, while RMS velocity in decibels (VdB) is typically more suitable for evaluating human response.

Environmental Setting

Noise in Laguna Beach comes from transportation sources, including highways, arterials, and roadways and non-transportation sources, such as commercial/industrial activities, construction equipment and various community activities. The noise environment in Laguna Beach is dominated by vehicular traffic including vehicular generated noise along Highway 1 and primary and secondary arterials. In addition, a number of other sources contribute to the total noise environment. These noise sources include construction activities, power tools and gardening equipment, loudspeakers, auto repair, radios, children playing and dogs barking.

Regulatory Setting

State of California

California Code of Regulations (CCR) Title 24 Section 1207.4 requires that within residences the interior noise levels attributable to exterior noise sources not exceed a CNEL of 45 dBA in any habitable room with windows closed. CALGreen, Standard 5.507.4, requires that all non-residential buildings with property lines within sound levels regularly exceeding 65 dBA L_{eq} verify the interior noise levels within occupied nonresidential space do not exceed 50 dBA L_{eq}.

City of Laguna Beach Noise Element

The goals, policies, and implementation actions contained in the Noise Element of the Laguna Beach General Plan (2005) focus on establishing regulations and applying criteria for acceptable noise levels for different land uses in order to minimize the negative impacts of noise, especially at sensitive receiver locations. In support of these goals and policies, the Noise Element contains a land use and noise

compatibility matrix that determines the normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable noise levels for various land uses to guide planning decisions. The 'normally acceptable' noise level for a single-family home is 50-60 dBA CNEL and a 'conditionally acceptable' noise level is 60-70 dBA CNEL.[110]

City of Laguna Beach Standards

Chapter 7.25, Noise, of the LBMC establishes a series of regulations and standards to prevent excessive noise that may jeopardize the health, welfare or safety of the citizens or degrade their quality of life. Specifically, LBMC Section 7.25.040(A), Exterior Noise Standards, establishes exterior noise standards categorized by five noise zones in the City. The noise standards for these zones differ between daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) hours. The daytime exterior noise standard for residential land uses is 60 dBA L_{eq} and the nighttime exterior noise standard is 50 dBA L_{eq}.

According to Section 7.25.040(B), it is unlawful for any person at any location within the City to create noise which causes the noise level when measured on any other property to: 1) exceed the noise standard for the applicable zone for any 15-minute period, or 2) a maximum instantaneous (single instance) noise level equal to the noise standard plus 20 dBA for any period of time.

As listed in LBMC Section 7.25.050(B), Exemptions, any mechanical device, apparatus or equipment uses, related to or connected with emergency machinery, vehicle, work or warning alarm or bell is exempt from noise regulations and standards provided that the sounding of any bell or alarm on any building or motor vehicle is terminated within 15 minutes of its activation.

LBMC Section 7.25.050(E) exempts noise sources associated with construction, repair, remodeling, demolition or grading of any real property from compliance with the noise level limits contained in the LBMC. This section indicates that such noise-generating activities are subject to the provisions of LBMC Section 7.25.080, Construction Activity Noise Regulations.

Furthermore, LBMC Section 7.25.080, Construction Activity Noise Regulations, prohibits the operation of any tool or equipment used for construction activities or any other related building activity between the hours of 6:00 p.m. and 7:30 a.m. on weekdays, whereas such construction activities are prohibited entirely on weekends and federal holidays.

LBMC Section 7.25.130, Heating, venting, pool/spa and air conditioning—Special Provisions, includes specific noise standards for regulating heating, venting and air conditions (HVAC), and pool/spa equipment in or adjacent to residential areas. According to Section 7.25.130(a), permits for HVAC, and pool/spa equipment in or adjacent to residential areas are issued only after the installation contractor signs an acknowledgment that the installation project site meet the noise limits established in LBMC Section 7.25.040.

[110] Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements. Conditionally Acceptable: 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 would normally suffice. Source: General Plan Noise Element. http://www.lagunabeachcity.net/civicax/filebank/blobdload.aspx?BlobID=2686. Accessed January 2023.

Checklist Discussion

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

Less Than Significant Impact.

A significant impact may occur if the project would generate excess noise that would cause the ambient noise environment at the project site to fail to comply with noise level standards set forth in the City of Laguna Beach General Plan Noise Element (Noise Element) and the City of Laguna Beach Noise Ordinance (Chapter 7.25). Implementation of the project would result in an increase in ambient noise levels during both construction and operations, as discussed in detail below.

Construction Noise

Short-term noise impacts could occur during construction activities from either the noise impacts created from the transport of workers and movement of construction materials to and from the project site, or from the noise generated on-site during: ground clearing/excavation, grading, and building activities.

Construction noise levels would vary significantly based upon the size and topographical features of the active construction zone, duration of the work day, and types of equipment employed, as indicated in **Table 14, Typical Construction Equipment Noise Levels**.

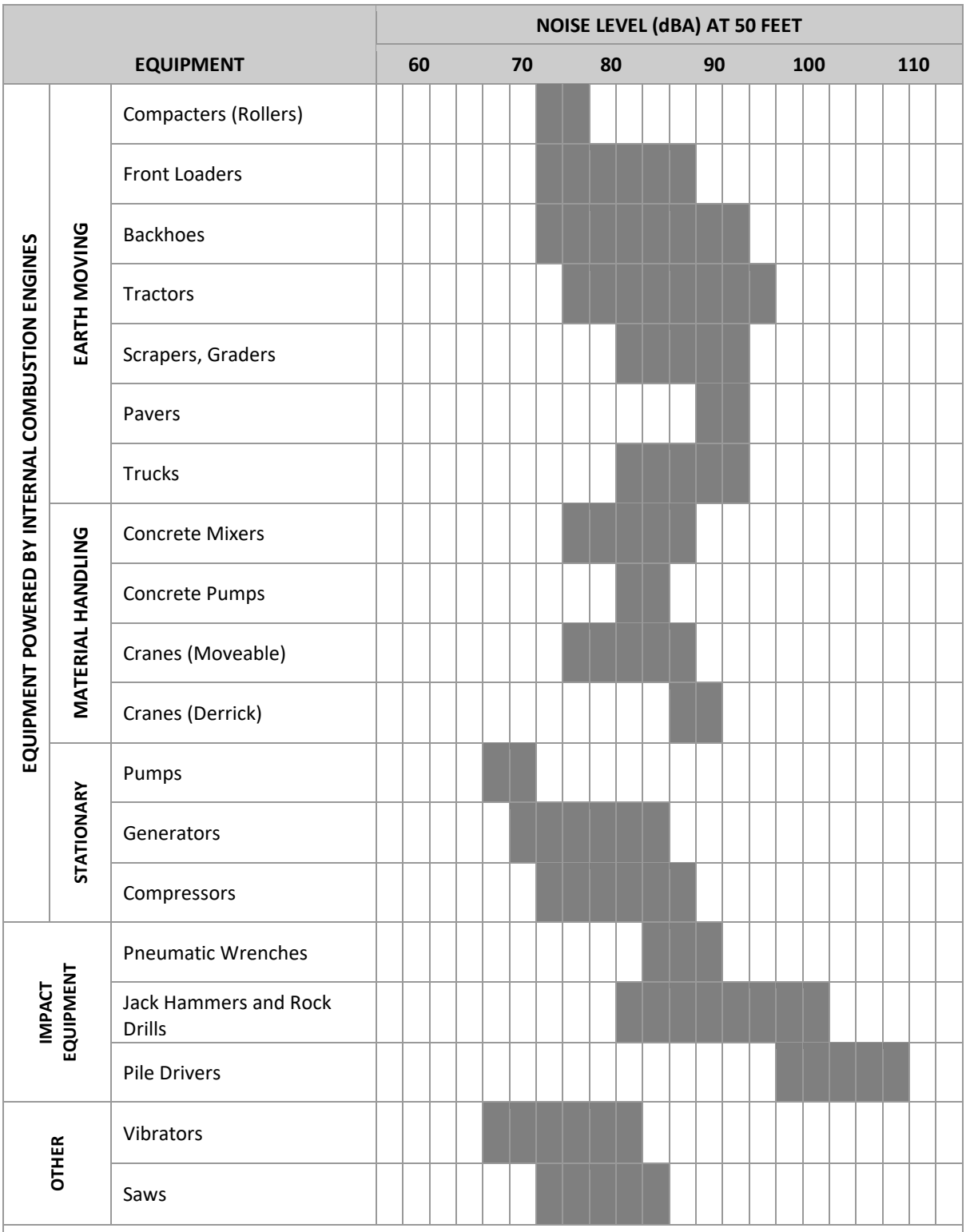
To provide a point of reference, a typical construction day with an eight-hour duration would generate 84 dBA CNEL at a distance of 50 feet[111] from the noise source, on average.

As stated above, LBMC Section 7.25.050(E) exempts noise sources associated with construction, repair, remodeling, demolition or grading of any real property from compliance with the noise level limits contained in the LBMC, as long as the construction does not occur between the hours of 6:00 p.m. and 7:30 a.m. on weekdays, weekends and federal holidays.

As the construction of the project would not occur between the hours of 6:00 p.m. and 7:30 a.m., or on weekdays, weekends and federal holidays, impacts associated with construction noise would not exceed any noise standards and are anticipated to be less than significant. However, to ensure that construction noise levels are reduced to the extent feasible, Best Management practices (BMPS) are recommended. These industry-wide best BMPs for construction in urban or otherwise noise-sensitive areas, would be incorporated to attenuate construction noise levels to the residential receptors located adjacent to the project site, to the north and south:

[111] City of Perris General Plan, Noise Element, Appendix C: Technical Noise Area Definitions, page 69

Table 14
Typical Construction Equipment Noise Levels



Source: United States Environmental Protection Agency, 1971, "Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances," NTID 300-1.

- The project contractor shall use power construction equipment with state-of-the-art noise shielding and muffling devices.
- Construction activities shall be scheduled so as to avoid operating several pieces of equipment simultaneously, which causes high noise levels.
- A temporary noise control barrier/sound curtain shall be installed around the property line of the construction site abutting/facing residential uses located adjacent to the site, to the north and south of the project site. The noise control barrier shall be engineered to block the line-of-sight from the residential uses to the construction activity to reduce construction-related noise levels at the adjacent residential structures. The supporting structure shall be engineered and erected according to applicable codes. The temporary barrier shall remain in place until all windows have been installed and all activities on the project site are complete.

Operational Noise

This impact discussion analyzes the potential for a substantial permanent increase in ambient noise levels in the project vicinity associated with operation of the proposed project, including impacts related to offsite vehicular noise and exposure of neighboring land uses to onsite noise.

On-Site Noise

Analysis of on-site operational noise is typically not conducted for residential projects as they usually do not include stationary noise sources that could result in substantial increases in ambient noise levels resulting in violation of established standards. Furthermore, the typical noise sources associated with residential uses (heating, venting, pool/spa, and air conditioning) are regulated by LBMC Section 7.25.130. Therefore, with compliance with LBMC 7.25.130, the on-site operational noise from the proposed single-family dwelling unit is considered to be less than significant.

Traffic Noise

In order for a new noise source to be audible, there would need to be a 3 dBA or greater CNEL noise increase. The traffic volume on any given roadway would need to double in order for a 3 dBA increase in ambient noise to occur.[112] As the project is a single-family dwelling unit and did not meet the threshold requirement to do any kind of traffic analysis for the City of Laguna Beach, the project is not anticipated to generate a doubling of traffic volumes on any roadways within the project vicinity. The noise impact from project-related traffic is considered to be less than significant.

Therefore, the project would not cause the 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. **Impacts would be less than significant.**

[112] Highway Traffic Noise: Assessment and Abatement. Website: https://www.codot.gov/programs/research/assets/Brochures/NoiseBrochureFinal.pdf. Accessed January 2023.

Mitigation Measures.

None required.

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

Less Than Significant Impact. A significant impact may occur if a project were to generate excessive vibration during construction or operation.

Construction activities can produce vibration that may be felt by adjacent uses. The construction of the project would not require the use of equipment such as pile drivers, which are known to generate substantial construction vibration levels. The highest degree of groundborne vibration would be generated during the foundation and building construction phase due to the operation of large bulldozer. Based on the Federal Transit Administration (FTA) data, vibration velocities from large bulldozer operations are estimated to be approximately 0.156 inch-per-second PPV at 15 feet from the source of activity.[113] As such, structures located greater than 15 feet from bulldozer operations would not experience groundborne vibration above the Caltrans significance thresholds (i.e. 0.2 inch-per-second PPV for structures and 0.2 inch-per-second PPV for human annoyance). As the nearest existing structures are at least 16 feet from any location within the project boundary where a bulldozer may be used, the Caltrans significance thresholds would not be exceeded. Therefore, impacts would be less than significant in this regard. Such compliance would reduce noise groundborne vibration and noise levels associated with construction activities. **Therefore, impacts would be less than significant.**

As the project is a residential use, it is not considered to be a significant source of operational vibration. No additional analysis is warranted or required. Therefore, the project would not cause excessive groundborne vibration or groundborne noise levels. **Impacts would be less than significant.**

Mitigation Measures.

None required.

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. A significant impact would occur if the project were located in the vicinity of a private airstrip or an airport land use plan and would expose people residing or working in the project area to excessive noise levels.

John Wayne Airport is located approximately 13 miles northwest of the project site. According to the Orange County ALUC Land Use Plan for the John Wayne Airport, the site is not located within the airport's noise contours.[114] Although the project site would potentially be subject to occasional aircraft overflight noise, such occurrences would be intermittent and temporary. In addition, there are no private airstrips

[113] Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018.

[114] Orange County Airport Land Use Commission. 2008. Land Use Plan for the John Wayne Airport. https://files.ocair.com/media/2021-02/JWA_AELUP-April-17-2008.pdf?VersionId=cB0byJjdad9OuY5im7Oaj5aWaT1FS.vD. Accessed January 2023.

in the vicinity of the project site. Therefore, the project would not expose people working in the project area to excessive noise levels associated with airports or airstrips and the project would not exacerbate existing noise conditions related to airports or airstrips. **There would be no impact related to exposure to excessive noise from air traffic-related sources**. **No impact would occur.**

Mitigation Measures.

None required.

	Potentially Significant Impact	Less Than Significant Impact with the Incorporated Mitigation	Less Than Significant Impact	No Impact
14. 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)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Regulatory Setting

Regulations and plans exist at state, regional, and local levels related to populations and housing and include:

- Southern California Association of Governments Connect SoCal

Environmental Setting

Laguna Beach was founded on June 29, 1927. The City occupies 8.84 square miles and has an estimated population of 22,795.[115] The City has 13,007 housing units.[116]

Checklist 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)?

No Impact. A significant impact may occur if a project were to locate new development such as homes, businesses or infrastructure, with the effect of substantially inducing growth that would otherwise not have occurred as rapidly or in as great a magnitude.

The project is comprised of the construction of a single-family residential use on a residential zoned property. **Therefore, the project is not anticipated to induce substantial growth and no impacts are anticipated**.

[115] United State Census. Quick Facts, Laguna Beach, California, https://www.census.gov/quickfacts/fact/table/lagunabeachcitycalifornia/PST045221. Accessed October 2022.

[116] SCAG. 2019 Local Profiles, https://scag.ca.gov/sites/main/files/file-attachments/lagunabeach_localprofile.pdf?1606012709. Accessed October 2022.

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

No Impact. A significant impact may occur if a project would result in displacement of existing people or housing units, necessitating construction of replacement housing elsewhere. Because no existing housing is located on the project site, the project would not displace existing housing or people and would not necessitate the construction of replacement housing elsewhere. **No impact would occur**.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
15. PUBLIC SERVICES. 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:				
a) Fire protection?	☐	☒	☐	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☒	☐
d) Parks?	☐	☐	☒	☐
e) Other public facilities?	☐	☐	☒	☐

Regulatory Setting

Regulations and policies exist the state and local level with regard to public services and include:

- California Mutual Aid Plan
- Senate Bill 50
- Wildfire Mitigation and Fire Safety Report
- Laguna Beach Local Hazard Mitigation Plan
- Laguna Beach Municipal Code
- Laguna Beach General Plan Open Space Conservation Element
- Laguna Beach General Plan Safety Element

Environmental Setting

Fire Protection

The LBFD provides fire protection to the City and is comprised of four (4) stations. The LBFD provides for the public's safety by deploying and staffing a variety of emergency response vehicles and covers emergency medical services, rescue, forestry, and health hazardous material and emergency operations.[117]

Police Protection

The Laguna Beach Police Department (LBPD) provides law enforcement services to residents and businesses in the City. The LBPD is located at 505 Forest Avenue and provides field services and patrol. The services provided include the following: crime prevention; traffic and congestion control; safety management; and emergency response.[118]

[117] City of Laguna Beach, Fire Department, https://www.lagunabeachcity.net/government/departments/fire. Accessed October 2022.

[118] City of Laguna Beach, Police Department, https://www.lagunabeachcity.net/government/departments/police. Accessed October 2022.

Schools

Schools in the City are under the Laguna Beach Unified School District (LBUSD). The City has two (2) elementary schools, one (1) middle school, and one (1) high school.[119] The Leroy F. Greene School Facilities Act of 1998 (Senate Bill 50) sets a maximum level of fees a developer may be required to pay to mitigate a project's impacts on school facilities authorized school districts to assess all new development a fee to offset impacts proposed projects might have on the school facilities. Whenever possible, school districts have requested that developers provide full impact mitigation on development. The establishment of special tax districts, full cost recovery agreements or the provision of relocatable classrooms in lieu of fees are just a few examples of such mitigation measures.

Parks

The City has ten (10) parks and a variety of recreation opportunities. Parks include the Alta Laguna Park, Bluebird Park, Crescent Bay Park, Heisler Park, Laguna Beach Dog Park, Lang Park, Main Beach Park, Moulton Meadows Park (and Dog Plan Area), Riddle Field Park, and Village Green Park. The City has a senior center, the Laguna Beach Community & Susi Q Senior Center[120] and direct access to the Laguna Greenbelt, which is approximately 10,000 acre open space area within Orange County.[121]

Other Public Facilities

The City has one public library located 363 Glenneyre Street that is operated by Orange County. The library has space for children and teens, including homework help. Additionally, the library includes materials in both English and Spanish, public computers for online research, eBooks, audiobooks, magazines, newspapers, and music. [122]

Checklist Discussion

a) Fire Protection?

Less Than Significant Impact with Mitigation. A significant impact may occur if a project creates the need for new or physically altered fire facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable response times or other performance objective.

The nearest fire station to the project site is Fire Station No. 4, located at 31646 2nd Avenue, approximately 0.3 mile south of the project site. The project would be comprised of a single-family residence use. As identified in Chapter 15.01 of the LBMC, the City has adopted the 2019 California Fire Code, which contains regulations related to construction, maintenance and design of buildings and land uses. The project would be required to adhere to all Fire Code requirements. Specifically, the project would provide:

- fire sprinklers inside the single-family home;
- a minimum 3-foot-wide firefighter access around the perimeter of the structure,
- all vegetation would be pruned to reduce fuel loads,
- an automatic irrigation system would maintain healthy vegetation,

[119] Laguna Beach Unified School District, https://www.lbusd.org/. Accessed October 2022.

[120] City of Laguna Beach, Recreation Division, https://www.lagunabeachcity.net/government/departments/parks-recreation/parks-and-open-space. Accessed October 2022.

[121] City of Laguna Beach, General Plan, Open Space Conservation Element, Adopted December 17, 1993. Page 8.

[122] Orange County Public Libraries, https://www.ocpl.org/libraries/laguna-beach. Accessed October 2022.

- no trees or tree-form shrubs would extend beyond the property line: and
- vertical access in excess of 13 feet 6 inches would be provided.

The project has incorporated additional features that are non-conforming, which would result in the structure having improved survivability from fire and reduce the chance of ignition. With the implementation of MM-PUB-1, prescribed, the project is at least equivalent to, if not better than, what is prescribed in the 2019 California Fire Code in terms of quality, effectiveness, fire resistance, durability, and safety. In addition, the landscape plans for the project provide for a low fuel planting scheme that would avoid fuel loading in future years.[123] In addition, as discussed in Section 14, Population and Housing, the project would not significantly increase population in the City. **Therefore, impacts to fire protection services would be less than significant with implementation of mitigation measures**.

b) Police Protection?

Less Than Significant Impact. A significant impact may occur if a project creates the need for new or physically altered police facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objective.

The project site would be served by the LBPD. The station is located at 505 Forest Avenue, approximately 3.6 miles north of the project site. The Field Services Division patrols the City in three geographic areas; the project site is within Patrol Beat Three.[124] The project would be comprised of a single-family residence use. As discussed in Section 14, Population and Housing, the project would not significantly increase population in the City and therefore would not cause substantially delayed response times, degraded service ratios or necessitate construction of new police facilities. **Therefore, impacts to police protection services would be less than significant.**

c) Schools?

Less Than Significant Impact. A significant impact may occur if a proposed project includes substantial employment or population growth, which could generate demand for school facilities that exceeds the capacity of the school district(s) responsible for serving the project site.

The project site is served by LBUSD, which operates two (2) elementary schools, one (1) middle school, and one (1) high school.[125] The project would be comprised of a single-family residence use. As discussed in Section 14, Population and Housing, the project would not significantly increase population, including student population in the City and therefore would not cause substantially impact to LBUSD schools. Furthermore, in accordance with state law pursuant to Government Code Section 65996 and SB 50, California legislation holds that an acceptable method of offsetting a project's effect on the adequacy of school facilities is payment of a school impact fee prior to issuance of a building permit. Once paid, the school impact fees would serve as mitigation for any project-related impacts to school facilities. As such, the City is legally prohibited from imposing any additional mitigation related to school facilities, as payment of the school impact fees constitutes full and complete mitigation. Therefore, the project would not result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities. **Impacts related to schools would be less than significant**.

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123 AM&M Request for Joe Reyna, 718 The Strand, Hermosa Beach, CA 90254, prepared by FIREWISE 2000, LLC, January 27, 2022.

124 City of Laguna Beach, Laguna Beach Police Department, 2017-2018 Biennial Report. Page 11.

125 Laguna Beach Unified School District, https://www.lbusd.org/. Accessed October 2022.

d) Parks?

Less Than Significant Impact. A significant impact to parks may occur if implementation of a project includes a new or physically altered park or creates the need for a new or physically altered park, the construction of which could cause substantial adverse physical impacts.

The nearest park, operated by the Laguna Beach Recreation Division, to the project site is Lang Park, located at 21540 Wesley Drive, approximately 0.8 mile north of the project site.[126] Lang Park is comprised of one (1) tennis and pickle ball court, a half basketball court, playground, restrooms, and a soccer field. The project would be comprised of a single-family residence use. As discussed in Section 14, Population and Housing, the project would not significantly increase population in the City and therefore would not substantially impact parks. **Therefore, impacts would be less than significant.**

e) Other public facilities?

Less Than Significant Impact. A significant impact may occur if a project generates a demand for other public facilities (such as libraries) that exceeds the capacity available.

The project site would be served by the Laguna Beach Library, located at 363 Glenneyre Street, approximately 3.3 miles north of the project site. The project would be comprised of a single-family residence use. As discussed in Section 14, Population and Housing, the project would not significantly increase population in the City and therefore would not substantially impact the Laguna Beach Library. **Impacts from potential future development on the library would be less than significant**.

Mitigation Measures

MM-PUB-1 The Fire Department Site Access Plan prepared for the project[127] shows that with the fire apparatus parked on the Coast Highway, the 150' hose pull requirement (CFC 503.1.1) cannot be met. The following alternative materials and methods to mitigate for the inability to meet the hose pull requirement or provide for the Guidelines fuel treatment measures are proposed:

- The automatic fire sprinkler system shall be upgraded to a 4-head sprinkler design to be applied to all rooms including garages, storage areas, closets and bathrooms regardless of size.

  The design and projected flow demand of the system shall be deigned and calculated by a qualified Fire Protection Contractor. The four head calculation system must have a minimum .05 density design, QR and intermediate temperature heads; the heads may be of a small orifice type such as 3/8" or 7/16". Copper piping is required in the attics; CPVC project site only be permitted in the attic if listed heads are used in accordance with their listing.

[126] City of Laguna Beach, Recreation Division, https://www.lagunabeachcity.net/government/departments/parks-recreation/parks-and-open-space. Accessed October 2022.

[127] AM&M Request for Joe Reyna, 718 The Strand, Hermosa Beach, CA 90254, prepared by FIREWISE 2000, LLC, January 27, 2022.

A Fire Sprinkler subcontractor shall submit plans to the architect and LBFD, showing sprinkler head layout prior to installation. The Fire Sprinkler System shall be inspected annually by a qualified Fire Protection Contractor and the report submitted to LBFD.

- To meet the required hose pull distances, install two (2) wet manual Class 1 Standpipe System with 2-2 ½ outlets at the hose connection, with 2-2½ snoots at the FDC. Location is noted on the FDSAP Appendix A. System shall be designed to meet the requirements of 2019 CFC, NFPA 13, NFPA 14 & LBMC. Submitted under a separate deferred submittal by a qualified Fire Protection System Contractor. Plans shall be submitted to the LBFD for review and approval, a permit issued, and final inspection required. Appropriate signage shall be provided for standpipe hose connection and FDC at the time of installation. All underground piping shall be 3-inch, wet standpipe must connect to fire sprinklers system above sprinkler flow switch. Standpipe hose connection to be accessible from firefighter access pathway. Two (2) standpipe locations on project site, one in the northwest corner of travel pathway and the second on southeast side at 150 feet hose pull distance. FDC located northeast of garage entry point, from Coast Highway. FDC must be accessible from street and cannot be blocked by vehicles, wall, gates or vegetation.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
16. RECREATION. Would the project:				
a) 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?	☐	☐	☒	☐
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☒	☐

Environmental Setting

The City has ten (10) parks and a variety of recreation opportunities. Parks include the Alta Laguna Park, Bluebird Park, Crescent Bay Park, Heisler Park, Laguna Beach Dog Park, Lang Park, Main Beach Park, Moulton Meadows Park (and Dog Plan Area), Riddle Field Park, and Village Green Park. The City has a senior center, the Laguna Beach Community & Susi Q Senior Center[128] and direct access to the Laguna Greenbelt, which is approximately 10,000 acre open space area within Orange County.[129]

Checklist 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 facilities would occur or be accelerated?

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

Less Than Significant Impact. A significant impact may occur if a project would include substantial employment or population growth which could generate an increased demand for park or recreational facilities that would exceed the capacity of existing parks and causes premature deterioration of the park facilities.

As previously discussed in Section 15, Public Services, the nearest park, operated by the Laguna Beach Recreation Division, to the project site is Lang Park, located at 21540 Wesley Drive, approximately 0.8 mile north of the project site.[130] Lang Park is comprised of one (1) tennis and pickle ball court, a half basketball court, playground, restrooms, and a soccer field. The project would be comprised of a single-family

[128] City of Laguna Beach, Recreation Division, https://www.lagunabeachcity.net/government/departments/parks-recreation/parks-and-open-space. Accessed October 2022.

[129] City of Laguna Beach, General Plan, Open Space Conservation Element, Adopted December 17, 1993. Page 8.

[130] City of Laguna Beach, Recreation Division, https://www.lagunabeachcity.net/government/departments/parks-recreation/parks-and-open-space. Accessed October 2022.

residence use. As discussed in Section 14, Population and Housing, the project would not significantly increase population in the City. Furthermore, future residents can easily access open space and recreational opportunities within the region and because the project does not substantially increase the number of residents, the project would not create unanticipated demand on City parks or cause substantial deterioration of existing parks such that new park facilities would be needed. **Therefore, impacts would be less than significant**.

Mitigation Measures

None required.

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

Regulatory Setting

Regulations and policies exist at the state, regional, and local levels as follows:

- Senate Bill 743
- Southern California Association of Governments Connect SoCal Plan
- CEQA Guidelines Section 15064.3
- County of Orange 2020 Updated Transportation Implementation Manual
- County of Orange Guidelines for Evaluating Vehicle Miles Traveled Under CEQA
- Laguna Beach General Plan Transportation, Circulation, and Growth Management Element

Environmental Setting

The City has an established system of streets and roadways, which is currently served by major arterials, primary arterials, hillside collector streets, collector streets, and local streets. The major arterial roadways and primary arterial roadways through the City extend beyond the city boundaries into neighboring cities. Circulation issues and travel patterns, likewise, extend beyond the City limits. The land use decisions and traffic patterns in these other jurisdictions have the potential to affect the quality of traffic flow and mobility in the City, and conversely, traffic conditions and decisions made by the City can affect its neighbors.

The project site is located in South Laguna Beach at 31541 Coast Highway, Laguna Beach, California. The site is regionally accessible by Coast Highway, I-405, I-5, and SR-73. Site access would be provided by a driveway off of Coast Highway.

The City is served for transit by Orange County Transit Authority (OCTA), with a bus line, Route 1, on Coast Highway, and the Laguna Beach Trolley, a free trolley service on Coast Highway between North Laguna/ Heisler Park, downtown, South Laguna/ Mission Hospital and Ritz Carlton in Dana Point. The City also has

other transit, including an on-demand shared-ride transit service, Age Well Senior Services, and Sally's Fund, providing transportation to and from the Laguna Beach Community and Susi Q Center.[131]

Checklist Discussion

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

Less Than Significant Impact. A significant impact may occur if a project would conflict with a program plan, ordinance, or policy designed to maintain adequate effectiveness of an overall circulation system, including transit, roadway, bicycle, and pedestrian facilities.

The County of Orange has updated the County of Orange 2020 Updated Transportation Implementation Manual, to conform to the requirements of Senate Bill 743. The updated Transportation Implementation Manual shifted the performance metric for evaluating transportation impacts under CEQA from level of service (LOS) to VMT. Attachment B of the County of Orange 2020 Updated Transportation Implementation Manual, which is comprised of the Guidelines for Evaluating Vehicle Miles Traveled discusses how citywide plans, policies, and programs that could create an impact. In accordance with the 2020 Updated Transportation Implementation Manual, a project that generally conforms with and does not obstruct a City's development policies and standards would generally be considered to be consistent. The project's consistency with applicable plans and their policies is provided in response to Section 9, Land Use. As detailed there, the project would be consistent with the applicable land use plans.

Furthermore, construction of the project would generate traffic for deliveries of equipment and materials to the project site and create construction worker traffic via Coast Highway. Construction vehicles and equipment would be staged on the site. Construction worker trips were estimated based on default values provided by CalEEMod (see **Appendix E.1**). The project would generate a maximum of 10 construction worker trips per day. The latest traffic counts on Coast Highway indicate that the annual average daily traffic on Coast Highway in the vicinity of the project site is between 37,900 and 38,900.[132] As the increase in average daily traffic would be less than one percent of the annual average daily traffic on Coast Highway, traffic generated during project construction is not anticipated to affect the performance of the circulation system. In addition, construction traffic would be temporary, and the movement of construction equipment would be limited to the project site. Construction of the project would not involve any vehicle or equipment staging on Coast Highway and would not require any long-term lane closures on Coast Highway. Construction also would not require any temporary closures or alterations to the OCTA bus route located along Coast Highway, and OCTA bus route 1 would be able to continue operating. Therefore, construction activities would not substantially interfere with the City's circulation system. Furthermore, the City is responsible for traffic control plan reviews. As part of the construction coordination for the project, the City would determine the need for Traffic Control Measures to avoid traffic congestion impacts, potential safety conflicts with bicycles and pedestrians.

131 City of Laguna Beach, Parking and Transportation, https://www.lagunabeachcity.net/live-here/parking-and-transportation. Accessed October 2022.

132 California Department of Transportation (Caltrans), Traffic Census Program, Traffic Volumes: Annual Average Daily Traffic (AADT), 2020, https://dot.ca.gov/programs/traffic-operations/census. Accessed October 2022.

The operation of the project, which is comprised of a single-family residential use would generate minimal long-term traffic trips. Therefore, no long-term adverse traffic impacts would occur that would conflict with programs, ordinances or policies evaluating circulation systems within the City.

Based on the above as well as the analysis presented in Section 9, Land Use, the 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. CEQA Guidelines Section 15064.3(b) identifies appropriate criteria for evaluating transportation impacts. It states that land use projects with VMT exceeding an applicable threshold of significance may indicate a significant impact, and that projects that decrease VMT compared to existing conditions should be presumed to have a less than significant transportation impact. Section 15064.3(c) states that the requirement to use these criteria only applies on and after July 1, 2020. A deadline of July 1, 2020 was established for jurisdictions to adopt thresholds for evaluation of transportation impacts according to VMT. The City did not prepare revised traffic impact guidelines or separate VMT analysis guidelines by the July 1, 2020, deadline. However, CEQA Guidelines Section 15064.7(c) states the following:

> *When adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency is supported by substantial evidence*.

While the City has not adopted specific VMT thresholds, the County of Orange has updated the County of Orange 2020 Updated Transportation Implementation Manual and Attachment B is comprised of the Guidelines for Evaluating Vehicle Miles Traveled.[133] The County Guidelines establish screening criteria for land use projects that would not exceed an applicable threshold of significance. One of the screening criteria is for small projects, which is defined as a project that generates 500 or fewer average daily trips (ADT). The project would develop a single-family residential use on the project site. The number of daily vehicle trips generated by the project (16 daily vehicle trips)[134] is well below the threshold required by the County of Orange to perform a vehicle miles traveled analysis. As such, the project would not conflict with and would not be inconsistent with CEQA Guidelines Section 15064.3, and any impacts are less than significant. **Therefore, impacts 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)?

No Impact. A significant impact may occur if a project includes new roadway design or introduced a new land use or project features into an area with specific transportation requirements, characteristics, or project access or other features designed in such a way as to create hazardous conditions.

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[133] County of Orange, 2020 Updated Transportation Implementation Manual, Amended November 17, 2020.

[134] Based on a trip generation rate of 15.2 trips per day per single-family residence. 1 residence x 15.2 trips per residence = 15.2 rounded up to 16. Source: County of Orange, Guidelines for Evaluating Vehicle Miles Traveled, September 2020. Page 18.

Impacts regarding the potential increase of hazards due to a geometric design feature generally relate to the design of access points to and from the project site, and may include safety, operational, or capacity impacts. Impacts can be related to vehicle conflicts as well as to operational delays caused by vehicles slowing and/or queuing to access a project site. A review of the project site plans was conducted to identify any hazardous geometric design features. A new vehicle access point to the single-family residential use would be provided via Coast Highway at the northern end of the project site. The driveway placement and location has been designed in accordance with Caltrans standards. **Accordingly, the project would not substantially increase hazards due to a geometric design feature or incompatible uses and there would be no impact**.

d) Result in inadequate emergency access?

No Impact. A significant impact may occur if a project design does not provide emergency access meeting the requirements of the Fire Department or in any other way threatens the ability of emergency vehicles to access and serve the project site or adjacent uses.

The project would not result in inadequate emergency access because it would be subject to Building Safety Division and LBFD review for acceptance of site plans prior to occupancy to confirm that required safety features, including adequate emergency access, are implemented. The project site would be accessible by the driveway off of Coast Highway and include a walkable emergency access area along the northern boundary of the project site. Access would be maintained throughout the construction and operation of the project. **Therefore, no impact would occur**.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
18. TRIBAL CULTURAL RESOURCES. Consultation with a California Native American tribe that has requested such consultation may assist a lead agency in determining whether the project may adversely affect tribal cultural resources, and if so, how such effects may be avoided or mitigated. Whether or not consultation has been requested, would the project cause a substantial adverse change in a site, feature, place, cultural landscape, sacred place, or object, with cultural value to a California Native American tribe, which is any of the following:				
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 section 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Regulatory Setting

The regulation that guides the consideration and treatment of tribal cultural resources is:

- Assembly Bill 52
- Senate Bill 18

Environmental Setting

Assembly Bill 52 (AB 52), Gatto. Native Americans: California Environmental Quality Act) and CEQA Public Resources Code Section 21080.31, subdivisions (b), (d)), requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a project.

California Government Code Section 65352.3 (adopted pursuant to the requirements of Senate Bill (SB) 18) requires local governments to contact, refer plans to, and consult with tribal organizations prior to adopting or amending a general or specific plan, or to designate open space that includes Native American Cultural Places. The tribal organizations eligible to consult have traditional lands in a local government's jurisdiction, and are identified, upon request, by the NAHC. As noted in the California Office of Planning and Research's Tribal Consultation Guidelines (2005), "the intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to cultural places."

Checklist Discussion

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

b) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant Impact With Mitigation. AB 52, signed into law on September 25, 2014, requires lead agencies to evaluate a project's potential to impact Tribal Cultural Resources (TCR) and establishes a formal notification and, if requested, consultation process for California Native American Tribes as part of CEQA. TCR may include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are eligible for inclusion in the California Register or included in a local register of historical resources. AB 52 also gives lead agencies the discretion to determine, supported by substantial evidence, whether a resource qualifies as a TCR. Consultation is required upon request by a California Native American tribe that has previously requested that the City provide it with notice of such projects, and that is traditionally and culturally affiliated with the geographic area of a project.

The City initiated AB 52 consultation through emails with the Gabrielino Tongva Indians of California on October 22, 2022 (see **Appendix F.2**, of this document). The Gabrielino Tongva Indians of California completed a review of the project based on the documents provided by the City of Laguna Beach and Gabrielino Tongva Indians of California records to gather information on the Tribal Cultural sensitivity of the project's vicinity.

The tribe expressed concern as they had made unrecorded discoveries in this area in June 2022. There are significant areas of concern within this APE. Upon reviewing the Cultural Resources Report, the Gabrielino Tongva Indians of California responded stating that they agree, this is a culturally sensitive area for their tribes. The Gabrielino Tongva Indians of California requested additional mitigation to address these concerns, among which includes the allowance for a representative to be part of the monitoring of all ground disturbances.

As previously discussed in response to Section V. Cultural Resources (a), the project site is located within a developed urban setting and is a vacant lot. The project site has not been determined to be eligible for listing in the National Register of Historic Places, or California Register of Historic Resources. However, the project lies in a significant cultural area surrounded by known TCRs. The results of the Phase I and II has revealed that resource CA-ORA-842 (West Locus) is composed of a multi-component prehistoric archaeological site that consists of a well-developed prehistoric shell midden deposit. Therefore, it is

recommended that CA-ORA-842 (West Locus) is eligible for listing in the California Register under Criterion 4 because it contains sufficient data important in prehistory. As a result, CA-ORA-842 (West Locus) qualifies as a historical resource under CEQA. Eligibility of the resource is limited to a discrete area around TEU 1 and 2 where shell midden deposits were deep and largely intact. All other areas of the resource are recommended as non-contributing elements given their lack of intact shell midden deposits or their heavily disturbed condition. However, the Applicant has revised the site plans to avoid the significant contributing components of resource and; therefore, the project would not cause a substantial adverse change to the significance of a historical resource under CEQA and mitigation measures related to the resource are not warranted.

Nonetheless, given the presence of CA-ORA-842 (West Locus) within the project site, the identification of several prehistoric archaeological resources in the immediate vicinity, and the presence of favorable natural conditions (e.g., proximity to Pacific Ocean and other marine, estuarine, and terrestrial habitats) that would have attracted prehistoric inhabitants to the area, there is a high potential to encounter previously unknown archaeological resources during construction of the project. Based on these results, it is recommended that archaeological and Native American monitoring occur during project-related ground disturbing activities. Mitigation measures MM-CULT-1 through MM-CULT-7 for the archaeological and Native American construction monitoring are provided below. With implementation of these mitigations measures (MM-CULT-1 through MM-CULT-7), impacts to previously unknown historical resources, archaeological resources, and human remains would be less than significant under CEQA.[135] **Therefore, impacts to previously unknown historical resources, archaeological resources, and human remains would be less than significant with implementation of mitigation measure.**

Mitigation Measures

Refer to MM-CULT-1 through MM-CULT-7.

[135] An evaluation of the resource under Criterion 1, 2, and 3 is not included in the Phase I and II nor an evaluation of whether the resource qualifies as a tribal cultural resource under CEQA, the latter of which was determined based on government-to-government consultations between the City and Native American Tribes who have requested consultation and could lead to additional mitigation measures for the project. The inclusion of Assembly Bill (AB) 52 consultation results was required for preparation of this document.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
19. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

Regulatory Setting

- 2020 Urban Water Management Plan
- Assembly Bill 939
- California Code of Regulations Title 20
- California Code of Regulations Title 24
- South Coast Water District Sewer System Management Plan
- County of Orange Waste & Recycling Strategic Plan
- Laguna Beach Municipal Code

Environmental Setting

Water

The South Laguna portion of the City is served by the SCWD for water supply. Water delivered to customers in the SCWD is a blend of groundwater pumped from the San Juan Groundwater Basin, purchased and imported water from MWD, and recycled water from the South Orange County

Wastewater Agency (SOCWA).[136] SCWD is responsible for ensuring that water demand within the City is met and that State and federal water quality standards are achieved. The SCWD ensures the reliability and quality of its water supply through an extensive distribution system that includes more than 158 miles of pipes, and more than 13 storage reservoirs.[137] The water enters the City after going through the Robert B. Diemer Treatment Plant (RDTP) in Yorba Linda, which is owned and operated by the Metropolitan Water District of Southern California. Water entering the RDTP undergoes treatment and disinfection before being distributed throughout the SCWD's Water Service Area. The RDTP currently treats approximately 520 million gallons per day.[138] SCWD's 2020 UWMP reports total districtwide potable water demand in 2020 at 5,375 acre-feet (AF).[139] According to the UWMP, SCWD expects to meet projected demands and anticipates having an annual supply surplus through to 2045.[140]

Wastewater

Under contract with the City, SCWD provides the South Laguna portion of the City with the conveyance, treatment, and disposal of wastewater. The SCWD sewer system is composed of three sanitary sewer collection service areas; Capistrano Beach, Dana Point, and South Coast. The wastewater collection system collects and conveys four (4) million gallons per day (mgd) of wastewater from residences and businesses to two treatment plants via a 140-mile system of pipelines, which includes 13 lift stations, approximately 3 miles of force mains, and 3,749 manholes (MHs).[141] SCWD is a part of the SOCWA, which operates the Coastal Treatment Plant (CTP) located in the City. The CTP has a permitted capacity of 6.70 mgd, with an average daily capacity of 2.9 mgd.[142]

Solid Waste

The City's Public Works Department supplies residents, businesses, and institutions with waste carts for recyclables and green waste through their contract with the private waste hauler, Waste Management. Waste Management services include trash pickup, recycling, bulky item pickup, organic waste recycling, green waste collection, and holiday tree recycling.[143] The California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939), as amended, was enacted to reduce, recycle, and reuse solid waste generated in the State. AB 939 requires city and county jurisdictions to divert 50 percent of the total waste stream from landfill disposal. AB 939 also requires each city and county to promote source reduction, recycling, and safe disposal or transformation. Furthermore, California cities and counties are required to submit annual reports to the California Department of Resources Recycling and Recovery (CalRecycle) to update their progress toward the AB 939 goals.

136 South Coast Water District 2020 Urban Water Management Plan, June 2021. Page 6-4.

137 South Coast Water District, Water Operations, https://www.scwd.org/your_water/drinking_water/water_operations/index.php. Accessed October 2022.

138 Metropolitan Water District of Southern California, https://www.mwdh2o.com/your-water/water-quality-and-treatment?keywords=diemerp. Accessed October 2022.

139 South Coast Water District 2020 Urban Water Management Plan, June 2021. Page 4-2.

140 South Coast Water District 2020 Urban Water Management Plan, June 2021. Page ES-3.

141 South Coast Water District Sewer System Management Plan, July 2009, Revised September 2019. Page iv.

142 South Orange County Wastewater Agency, Coastal Treatment Plant, https://www.socwa.com/infrastructure/coastal-treatment-plant/. Accessed October 2022.

143 City of Laguna Beach, Public Works, https://www.lagunabeachcity.net/government/departments/public-works/recycling-waste-and-compost. Accessed October 2022.

Electric Power Facilities

Electricity is provided to the southern portion of the City, where the project site is located, by SDG&E. SDG&E provides electric power to more than 3.7 million persons, within a service area encompassing approximately 4,100 square miles.[144] SDG&E derives electricity from varied energy resources including fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SDG&E also purchases power from independent power producers and utilities, including out-of-state suppliers.[145] In 2020, California used 272,576 gigawatt-hours (GWh) of electricity, of which 33 percent was from renewable resources.[146] **Table 15**, **Electricity Consumption in the SDG&E Service Area for 2020**, shows the electricity consumption by sector and total for SDG&E.

Table 15
Electricity Consumption in the SDG&E Service Area for 2020

Agriculture and Water Pump	Commercial Building	Commercial Other	Industry	Mining and Construction	Residential	Streetlight	Total Usage (GWh)
349	7,150	1,803	1,351	360	6,350	81	17,445
Source: California Energy Commission, Electricity Consumption by Entity, https://ecdms.energy.ca.gov/elecbyutil.aspx. Accessed October 2022.							

Natural Gas Facilities

Natural gas is provided to the City by SoCalGas. California also consumed approximately 12,332 MMthm of natural gas in 2020.[147] **Table 16, Natural Gas Consumption in the SoCalGas Service Area for 2020,** shows the natural gas consumption by sector and total for SoCalGas.

Table 16
Natural Gas Consumption in the SoCalGas Service Area for 2020

Agriculture and Water Pump	Commercial Building	Commercial Other	Industry	Mining and Construction	Residential	Total Usage (MMthm)
74	802	88	1,616	226	2,426	5,231
Source: California Energy Commission, Natural Gas Consumption by Entity, https://ecdms.energy.ca.gov/gasbyutil.aspx. Accessed October 2022.						

144 San Diego Gas and Electric, Sustainability Strategy Update, October 2021.

145 San Diego Gas and Electric, About Us, https://www.sdge.com/more-information/our-company/about-us. Accessed October 2022.

146 California Energy Commission, 2020 Total System Electric Generation, https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2020-total-system-electric-generation/2020. Accessed October 2022.

147 California Energy Commission, Natural Gas Consumption by Entity, https://ecdms.energy.ca.gov/gasbyutil.aspx. Accessed October 2022.

Checklist Discussion

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

Less Than Significant Impact.

Water Facilities

As detailed below in response to Section 19(b), sufficient water supplies would be available to serve the project. Furthermore, the demand and installation of new water supply lines and fire hydrants are evaluated and managed by SCWD and LBFD, respectively, under their own independent environmental analysis. The project site, which is currently undeveloped, would require construction of new, on-site water distribution lines to serve the new development. Impacts associated with the installation of water distribution lines would primarily involve trenching in order to place the water distribution lines below surface and would be limited to on-site water distribution, and minor off-site work associated with connections to the public main. Prior to ground disturbance, project contractors would coordinate with the SCWD to identify the locations and depth of all lines. Furthermore, SCWD would be notified in advance of proposed ground disturbance activities to avoid water lines and disruption of water service and including offsite connection to existing water lines. Therefore, the construction of new water facilities would not result in significant environmental effects. Accordingly, impacts related to the construction of new water facilities would be less than significant.

Wastewater Facilities

As detailed below in response to Section 19(c), the project's wastewater would be treated by the CTP, which has adequate capacity to serve the project. Accordingly, it is not anticipated that the project, which is comprised of a single-family residential use, would require the construction of new wastewater treatment facilities. During construction of the project, workers would utilize portable restrooms, which would not contribute to wastewater flows to the wastewater system. Therefore, wastewater generation from project construction activities is not anticipated to cause any increase in wastewater flows. The project would require construction of new on-site wastewater infrastructure to serve the new development. Impacts associated with wastewater infrastructure would primarily be confined to trenching for miscellaneous utility lines and connections to public infrastructure. Installation of wastewater infrastructure would be limited to on-site wastewater distribution, and minor off-site work associated with connections to the public main. Although no upgrades to the public main are anticipated, minor off-site work along the project frontage would be required in order to connect to the public main. All off-site work would be performed in consultation and under the approval of SCWD. Therefore, the construction of new wastewater facilities would not result in significant environmental effects. Accordingly, impacts related to the construction of new wastewater facilities would be less than significant.

Stormwater Drainage Facilities

Refer to Section 10c(iii), Hydrology and Water Quality, above for a discussion of stormwater drainage facilities. As discussed there, BMPs would be required to control stormwater runoff and runoff would drain to the stormwater system on Coast Highway. Stormwater runoff from the project site would not

exceed the capacity of the existing or planned stormwater drainage systems and would not be expected to require the construction of new facilities. Therefore, the construction of new stormwater drainage facilities would not result in significant environmental effects. Accordingly, impacts related to the construction of new stormwater facilities would be less than significant.

Electric Power Facilities

The SDG&E would supply the project from the existing electrical system. However, the project would require the installation of new on-site electrical distribution facilities and connection to the off-site electrical system. All electrical facility installation and connection to the existing system would be done in coordination and under the approval of the SDG&E. Electricity demand during construction would vary throughout the construction period based on the construction activities being performed, and would cease upon completion of construction. When not in use, electric equipment would be powered off so as to avoid unnecessary energy consumption. Accordingly, it is not expected that the temporary demand for electricity during construction would require new electric power facilities.

The project, which is comprised of a single-family residential uses, during operation would represent an insignificant percentage of the SDG&E 's projected annual sales. Furthermore, as discussed in response to Section 6(a), Energy, the incorporation of the Title 24 energy conservation standards into the project would ensure that the project would not result in the inefficient, unnecessary, or wasteful consumption of energy, including electricity. As such, it is anticipated that SDG&E's existing and planned electricity capacity and electricity supplies would be sufficient to support the project's electricity demand. Based on the above, the construction of new on-site electric power distribution facilities would not result in significant environmental effects and the expansion of off-site electric power sources would not be required. Accordingly, impacts would be less than significant.

Natural Gas Facilities

SoCalGas would supply the project from the existing natural gas facilities. However, the project would require construction of new on-site gas distribution lines to serve the new development and connection to the existing off-site natural gas facilities. The project would connect to existing natural gas facilities in coordination with and under the supervision of SoCalGas. Construction activities typically do not involve the consumption of natural gas. Accordingly, there would be no demand generated by construction and no new natural gas facilities would be required.

During operation, natural gas service would be provided in accordance with the SoCalGas's policies and extension rules on file with the California Public Utilities Commission (CPUC) at the time contractual agreements are made. The project would be responsible for paying connection costs to connect its on-site service meters to existing infrastructure. SoCalGas undertakes expansion and/or modification of the natural gas infrastructure to serve future growth within its service area as part of the normal process of providing service. There would be no disruption of service to other consumers during the installation of these improvements. As detailed in response to Section 6(a), Energy, the estimated natural gas demand of the project during operation would represent an insignificant percentage of the forecasted consumption of natural gas in SoCalGas' planning area. Furthermore, as discussed in response to Section 6(a), Energy, the incorporation of the Title 24 energy conservation standards into the project would ensure that the project would not result in the inefficient, unnecessary, or wasteful consumption of energy, including natural gas. As such, it is expected that SoCalGas' existing and planned natural gas capacity and supplies project site be sufficient to serve the project's demand. Based on the above, the construction of

new on-site electric power facilities would not result in significant environmental effects and the expansion of off-site natural gas sources would not be required. Accordingly, impacts would be less than significant.

Telecommunication Facilities

Construction-related activities, including grading and excavation, could encroach on telecommunication facilities. However, before construction begins, the project applicant would be required to coordinate with applicable regulatory agencies and telecommunication providers to locate telecommunication facilities. Therefore, the location of new telecommunication facilities would not result in significant environmental effects. Furthermore, telecommunication services are provided by private companies, the selection of which is at the discretion of the Applicant and/or the successor on an ongoing basis. Accordingly, project impacts to telecommunication facilities would be less than significant.

Therefore, the project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects. **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 significant impact may occur if a project were to increase water consumption to such a degree that new water sources would need to be identified, or that existing resources would be consumed at a pace greater than planned for by purveyors, distributors, and service providers.

The Metropolitan Water District of Southern California and Municipal Water District of Orange County's 2020 UWMPs conclude that they can meet full-service demands of their member agencies starting 2025 through 2045 during normal years, a single-dry year, and multiple-dry years. Consequently, the SCWD is projected to meet full-service demands through 2045 for the same scenarios.[148] The SCWD's 2020 UWMP total gross water demand projection for 2045 is approximately 7,070 af/y.[149] CalEEMod is a statewide emissions computer model and comprehensive tool for quantifying emissions associated with both construction and operations from a variety of land use projects, including project water demand. According to CalEEMod results, the project would demand an estimated 0.42 af/y (see **Appendix E.1**). This increase is within the forecasted increase in water demand for SCWD.[150]

The project would comply with the California's Green Building Standards Code, which would require implementation of water saving features to reduce the amount of water used by the project, including, high efficiency toilet and urinals and low flow faucets. All fixtures would be required to meet applicable flush volumes and flow rates. In addition, the project would be prohibited from using single-pass cooling systems. Compliance with these requirements and water conservation measures, including Title 20 and 24 of the California Administrative Code, would further reduce the above projected water demand.

148 South Coast Water District 2020 Urban Water Management Plan, June 2021. Page 7-1.
149 South Coast Water District 2020 Urban Water Management Plan, June 2021. Page 4-7.
150 See Construction Transportation Energy Worksheet included as **Appendix E.2** to this document.

Consideration of existing sources of supply is expected to assure adequate water supplies for the service area through at least 2045. Any shortfall in SCWD controlled supplies (e.g., groundwater, recycled, conservation, or aqueduct) is offset with MWD purchases to rise to the level of demand.[151] Therefore, the amount of new annual demand from the project would be insignificant relative to available supplies through 2045, projected growth in SCWD. Moreover, the addition of a single-family residential use would be consistent with Citywide growth, and thereby accounted for in the 2020 UWMP. As such, the project's estimated water demand would be within overall SCWD projections and would not require new water supply entitlements and/or require the expansion of existing or construction of new water facilities beyond those already considered in the 2020 UWMP.

Therefore, based on the above, sufficient water supplies would be available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. **Accordingly, impacts related to water supply 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. A significant impact may occur if a project would increase wastewater generation to such a degree that the capacity of facilities currently serving the project site would be exceeded.

Under contract with the City, SCWD provides the South Laguna portion of the City with the conveyance, treatment, and disposal of wastewater. The project would require construction of new on-site wastewater infrastructure to serve the new development. The project site's wastewater would be conveyed to the CTP. Recent data on the CTP website indicates that on average 2.9 mgd of wastewater enters the CTP on a daily basis. The plant was designed to accommodate both dry and wet weather days with a maximum daily flow of 6.7 mgd.[152] Accordingly, there is a capacity of 3.8 mgd, or 57 percent of the total.

The type and amount of wastewater that would be generated by the project would be typical for the single-family residential use proposed for the site. Conservatively assuming that wastewater generation would be approximately 100 percent of water demand, the project would generate approximately 137,023 gallons per year (375 gallons per day or 0.38 mgd) based on the CalEEMod modeling results (see **Appendix E.1** of this document). This amount would represent approximately 5.7 percent of the remaining daily capacity at the CTP. Therefore, the CTP has adequate capacity to serve the project's demand in addition to its existing commitments and the project would not require the construction of new or expanded wastewater treatment facilities. Furthermore, as with the projections of water demand detailed above, the estimated wastewater generation is a conservative estimate as the rates do not account for water conservation features that would reduce the amount of the project's water usage and, therefore, resulting conveyance into the wastewater distribution and treatment system**. Accordingly, impacts related to wastewater treatment capacity would be less than significant**.

[151] South Coast Water District 2020 Urban Water Management Plan, June 2021.

[152] South Orange County Wastewater Agency, Coastal Treatment Plant, https://www.socwa.com/infrastructure/coastal-treatment-plant/. Accessed October 2022.

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

Less Than Significant Impact. A significant impact may occur if a project were to increase solid waste generation to a degree that existing and projected landfill capacity would be insufficient to accommodate the additional solid waste.

Waste disposal sites (i.e., landfills) are operated by the City and County as well as by private companies. In addition, transfer stations temporarily store debris until larger haul trucks are available to transport the materials directly to the landfills. Landfill availability is limited by several factors, including: (1) restrictions to accepting waste generated only within a particular landfill's jurisdiction and/or watershed boundary, (2) tonnage permit limitations, (3) types of waste, and (4) operational constraints. Planning to serve long-term disposal needs is constantly being conducted at the regional level (e.g., siting new landfills within the County and transporting waste outside the region). Waste generated from the project site would be taken to Sunset Environmental Transfer Station, where recyclables are separated from the solid waste. Materials leaving transfer stations could be transported to three active landfills within Orange County: Olinda Alpha Landfill, Frank R. Bowerman Landfill, and Prima Deshecha Landfill.[153] These landfills accept residential, commercial, and construction waste. Olinda Alpha Landfill is permitted to receive 8,000 tons of waste per day and has a remaining capacity of 17,500,000 cubic yards.[154] Frank R. Bowerman Landfill is permitted to receive 11,500 tons of waste per day and has a remaining capacity of 205,000,000 cubic yards.[155] Prima Deshecha Landfill is permitted to receive 4,000 tons of waste per day and has a remaining capacity of 134,300,000 cubic yards.[156]

Construction of the project would generate construction waste. Construction of the project building is estimated to generate a total of approximately 17 tons of solid waste.[157] This forecasted solid waste generation is a conservative estimate as it assumes no reductions in solid waste generation would occur due to recycling. As required by LBMC 7.19, projects shall reuse, recycle, or divert a minimum of fifty percent of construction and demolition debris. Moreover, the *County of Orange Waste & Recycling Strategic Plan* concludes that there is capacity of 212 million tons available throughout the County for the disposal of waste and by 2031 the disposal system is projected to have 156 million tons of remaining capacity.[158] Therefore, the project-generated construction waste of 17 tons would represent a very small percentage of the inert waste disposal capacity in the region.

During operation, the project would generate solid waste that is typical of a single-family residential use and would be consistent with all federal, State, and local statutes and regulations regarding proper disposal. According to CalEEMod, the project would generate about 0.27 tons of solid waste per year

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153 Orange County Waste & Recycling, Active Landfills, https://www.oclandfills.com/landfills/active-landfills. Accessed October 2022.

154 California Department of Resources Recycling and Recovery, SWIS Facility, Olinda Alpha Landfill, https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2757?siteID=2093. Accessed October 2022.

155 California Department of Resources Recycling and Recovery, SWIS Facility, Frank R. Bowerman Sanitary Landfill, https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2767?siteID=2103. Accessed October 2022.

156 California Department of Resources Recycling and Recovery, SWIS Facility, Prima Deshecha Landfill, https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2750?siteID=2085. Accessed October 2022.

157 A construction waste generation rate of 4.38 pounds per square foot was used. 7,584 square feet of residential construction multiplied by 4.38 pounds is 33,218 pounds (17 tons). Source: USEPA Report No. EPA A530-98-010, Characterization of Building Related Construction and Debris in the United States, Table 3, July 1998.

158 County of Orange Waste & Recycling Strategic Plan, November 22, 2016, page 9.

(0.0007 tons per day) (see **Appendix E.1** of this document). As discussed below in response to Section 19(e), AB 939 was enacted to reduce, recycle, and reuse solid waste generated in the State to the maximum extent feasible. Specifically, AB 939 required cities and counties to identify an implementation schedule to divert 50 percent of the total waste stream from landfill disposal. AB 939 also required each city and county to promote source reduction, recycling, and safe disposal or transformation. All solid waste-generating activities within the City, including the project, would continue to be subject to the requirements set forth in AB 939. Therefore, it is assumed that the project would divert 50 percent of its solid waste generated, thereby diverting this waste from landfills and have adequate areas for collection and removal of recyclable materials. Nonetheless, it is conservatively assumed that all 0.0007 pounds per day of the project's solid waste would be disposed of at regional landfills. The Olinda Alpha, Frank R. Bowerman, and Prima Deshecha Landfills' combined permitted daily intake of 23,500 tons per day would have capacity to accept the daily operational waste generated by the project under the existing permitted amount. Therefore, the project would not generate solid waste in excess of State and local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. **Accordingly, impacts related to solid waste and solid waste reduction goals would be less than significant**.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact. A significant impact may occur if a project would generate solid waste that was not disposed of in accordance with applicable regulations. Solid waste generated onsite by the project would be disposed of in accordance with all applicable federal, state, and local regulations, related to solid waste, such as AB 939.

The project would comply with federal, State, and local statues and regulations related to solid waste, such as AB 939 and the City's recycling programs for residences. The AB 939 requirement to reduce the solid waste stream in landfills by 50 percent means that half of the project's total solid waste generated must be recycled rather than disposed of in a landfill. The project would be required to comply with AB 939 requirements and approximately 50 percent of the project's waste would be diverted for reuse or recycling; the remaining solid waste generated during operation would be disposed of in landfills. Therefore, the project would not substantially increase solid waste generation in the City or the amount disposed into the landfills. **Impacts would be less than significant**.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
20. 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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

Regulatory Setting

- Laguna Beach Safety Element
- Laguna Beach Local Hazard Mitigation Plan
- Laguna Beach Wildfire Mitigation and Fire Safety Report
- Laguna Beach Municipal Code

Environmental Setting

The City is surrounded by natural, undeveloped hillsides and all the canyon and hillside areas in the City and some coastal terrace areas are classified within the VHFHSZ, which is the highest wildfire risk classification designated by Cal FIRE. Nearly 90 percent of the City is classified VHFHSZ. The Laguna Beach Local Hazard Mitigation Plan (LHMP) identifies these hazard zones in relation to developed areas of the City and the location of critical facilities and infrastructure. In addition, the LBFD conducts strategic planning on a regular basis to ensure fire response capabilities and personnel can adequately address current service needs throughout the City and identifies potential issues to be addressed by the LBFD.[159]

[159] Laguna Beach General Plan, Safety Element, October 19, 2021. Page 11.

Checklist Discussion

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. A significant impact may occur if a project were to interfere with roadway operations used in conjunction with an emergency response plan or emergency evacuation plan or would generate traffic congestion that would interfere with the execution of such a plan.

Many of the major roadways within the City are susceptible to natural hazards and could become blocked in the event of an emergency. Therefore, evacuation routes would depend on the area affected and the type of hazard. As described in the Laguna Beach Wildfire Egress Study, City officials have divided the City into Emergency Management Zones (EMZs), which helps the City communicate evacuation orders to the public. The project site is located in the South Coast zone[160] and according to Cal FIRE, the project site is located in a VHFHSZ.[161] However, all new development in the city is required to comply with existing fire codes and ordinances regarding emergency access, such as widths, surfaces, vertical clearance, brush clearance, and allowable grades.

The project, comprised of a single-family residential use, would not involve the development of structures that could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The project would include an access driveway from Coast Highway, which would provide adequate emergency access to the site. The project does not propose any new roads or infrastructure that have the potential to interfere with or obstruct an adopted emergency response plan or impede fire or police access to the site. Construction staging and activities would be temporary in nature and are not anticipated to substantially impede traffic on Coast Highway. Project operation and maintenance would not introduce new activities that could impede or interfere with emergency plans, as operation and maintenance would not involve work along nearby roadways. Furthermore, the project would not result in such an increase in population on the site that traffic would impede evacuation routes. **Therefore, the project would not impede or conflict with any adopted emergency response or evacuation plans and the project would have a less than significant impact on emergency response or evacuation plans**.

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?

Less Than Significant Impact. A significant impact may occur if a project were to expose people to pollutant concentrations from a wildfire or in the path of an uncontrolled spread of a wildfire.

Topography influences the movement of air and the direction of a fire course. Additionally, wind events magnify the risks of wildfire and would have the potential to expose inhabitants to elevated pollutant concentrations. According to Cal FIRE, the project site is located in a VHFHSZ.[162] However, the project site

[160] City of Laguna Beach, Wildfire Egress Study, July 2021. Page ES-1.

[161] City of Laguna Beach, GIS Map, https://lagunabeach.maps.arcgis.com/apps/webappviewer/index.html?id=75a3aa3236c7475bb5e81925d130a763. Accessed October 2022.

[162] City of Laguna Beach, GIS Map, https://lagunabeach.maps.arcgis.com/apps/webappviewer/index.html?id=75a3aa3236c7475bb5e81925d130a763. Accessed October 2022.

is not adjacent to wildland slope areas that could act as a conduit for wildland fire. Additionally, the project would have Coast Highway and the driveway which would also act as fire breaks. The project does not propose uses that could exacerbate wildfire risks and risks to project occupants would be mitigated through conformance with LBMC Chapter 15.01, which adopts the 2019 California Fire Code and establishes provisions for fire safety related to construction, maintenance and design of buildings and land uses. Specifically, the project would provide:

- fire sprinklers inside the single-family home;
- a minimum 3-foot-wide firefighter access around the perimeter of the structure,
- all vegetation would be pruned to reduce fuel loads,
- an automatic irrigation system would maintain healthy vegetation,
- no trees or tree-form shrubs would extend beyond the property line: and
- vertical access in excess of 13 feet 6 inches would be provided.

Furthermore, the project has incorporated additional features that are non-conforming, which would result in the structure having improved survivability from fire and reduce the chance of ignition. With the implementation of MM-PUB-1, prescribed, the project is at least equivalent to, if not better than, what is prescribed in the 2019 California Fire Code in terms of quality, effectiveness, fire resistance, durability, and safety.[163] Therefore, the project would not exacerbate wildfire risks, and risks to people or structures due to runoff, post-fire slope instability, or drainage changes. **Impacts would be less than significant**.

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?

Less Than Significant Impact. A significant impact may occur if a project would require the installation or maintenance of associated infrastructure that may exacerbate fire risks or that may result in temporary or ongoing impacts to the environment.

The project would involve the construction of a single-family residential use in an urbanized area in the City. No roads, fuel breaks, or emergency water sources would be installed or maintained. Installation of any required power lines or other utilities would be done in a manner consistent with other construction projects typical of urban development requiring connection to the existing utility grid and infrastructure and in accordance with applicable City building codes and utility provider policies and would not exacerbate fire risk. **Compliance with all building code, developmental regulations, and utility providers requirements and policies would ensure that the project would not exacerbate fire risks and impacts would be less than significant**.

[163] AM&M Request for Joe Reyna, 718 The Strand, Hermosa Beach, CA 90254, prepared by FIREWISE 2000, LLC, January 27, 2022. See **Appendix B** of this document.

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?

Less Than Significant Impact. A significant impact may occur if a project were to expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope stability, or drainage changes.

The project site is relatively flat; however there is a slope (coastal bluff) on the western end of the project site. Nevertheless, according to the FEMA Flood Insurance Rate Map, the project site is within Zone X, which is a designation for areas determined to have a minimal flood hazard.[164] **Therefore, downslope flooding as a result of runoff, post-fire slope instability, or drainage changes are unlikely to occur at the site. Impacts would be less than significant.**

Mitigation Measures

None required.

[164] Federal Emergency Management Agency, Flood Insurance Rate Map, City of Laguna Beach, California, FEMA Map Number 06059C0438K, effective March 21, 2019.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
21. MANDATORY FINDINGS OF SIGNIFICANCE. Would the project:				
a) 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?	☐	☒	☐	☐
b) 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.)	☐	☒	☐	☐
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Checklist 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 Impact with Mitigation. A significant impact may occur if a project, in conjunction with other related projects in the area of the project site, would result in impacts that are less than significant when viewed separately, but would be significant when viewed together.

A biological evaluation prepared for the project site and one special-status species—i.e., cliff spurge—was observed during the field surveys. The project would result in the permanent loss of 21 cliff spurge individuals out of a total of 45 individuals within the project area limits, and replanting is proposed. There is the potential that nesting birds could occur on-site or near the project site and construction activities for the project could impact vegetation that could be used for nesting. Because of the potential for on-site bird nesting, project construction could result in impacts to nesting birds that would be in violation of the Federal Migratory Bird Treaty Act and the California Fish and Game Code Sections 3500–3516. To avoid direct and indirect construction impacts to nesting birds, the project would implement MM-BIO-3, which limits construction activities to outside of the nesting season or required pre-construction bird

surveys to confirm the absence of nesting birds if construction activities occur during the nesting season. With implementation of MM-BIO-3, potential impacts to nesting birds would be less than significant. With implementation of MM-BIO-4, potential impacts to native species would be less than significant. Additionally, the project site does not contain or would impact any wetlands or other jurisdictional waters. To avoid indirect construction impacts to coastal resources, such as the Pacific Ocean, located directly west of the site, the project would implement MM-BIO-2, which requires Best Management Practices be incorporated into the construction operations. With implementation of MM-BIO-2, potential indirect impacts to coastal resources would be less than significant. Furthermore, the project site does not contain any trees on-site. **With implementation of MM-BOI-1 through MM-BIO-4, implementation of the project would not 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, nor substantially reduce the number or restrict the range of a rare or endangered plant or animal species**.

A cultural resource record search prepared for the project identified that no recorded cultural resources were recorded on the project site. However, the record search did identify that known cultural resources have occurred in the vicinity of the project site. There could be the potential that unknown cultural resources could be encountered during excavation activities. To avoid impacts to unknown cultural resources that could be present on the project site, the proposed project would be required to comply with MM-CUL-1 through MM-CUL-7, which requires a halt condition be incorporated into the project which would temporarily suspend excavation activities if unknown cultural resources are encountered. With implementation of MM-CUL-1 through MM-CUL-7, potential impacts to unknown cultural resources would be less than significant. Additionally, a paleontological record search was prepared for the project which identified that no recorded paleontological resources were recorded on the project site. However, the research did find that there are localities of resources nearby from the same sedimentary deposits occurring at depth in the project area. Found deposits would be treated in accordance with federal, State, and local guidelines, including those set forth in California Public Resources Code Section 21083.2. **Furthermore, implementation of Mitigation Measures CUL-1 to CUL-7 would ensure that important examples of the major periods of California history or prehistory are not eliminated**.

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

Less Than Significant Impact with Mitigation. A cumulative impact may be significant if a project's incremental effect, though individually limited, is cumulatively considerable. Cumulatively considerable means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects and the effects of probable future projects. Cumulative impacts can occur as a result of the interactions of environmental change from multiple projects that could affect the environment, such as traffic, noise, and air quality. The City has ongoing development projects and capital improvement projects that could be occurring concurrently in the vicinity of the project when the project is under construction. The following analysis evaluates the potential for the project to contribute considerably to significant cumulative impacts.

Implementation of the project would have no impact or a less than significant impact on aesthetic resources, agriculture and forestry resources, air quality, energy, greenhouse gas emissions, hazards and hazardous materials, land use/planning, mineral resources, housing and population, public services,

recreation, transportation, utility/service systems, and wildfire. **Because either no potential impacts would occur or less than significant impacts would occur, the project contribution to cumulative impacts to these issue areas would not be considered considerable and potential cumulative impacts would be less than significant**.

Biological Resources

Construction activities for the project would have the potential to adversely impact coastal resources and to impact nesting birds directly and indirectly. The project would implement MM-BIO-1 through MM-BIO-4, which would reduce construction impacts to coastal resources and nesting birds to a less than significant level. Cumulative development projects in the City would be required to comply with state and federal laws that provide for the protection of biological resources and where needed, would need to implement measures to minimize impacts to biological resources. Compliance with local, state, and federal laws would reduce the potential impacts to less than significant. **Therefore, the project, considered with the related projects, would not contribute considerably to cumulative impacts and potential cumulative impacts to biological resources would be less than significant**.

Cultural Resources

The context for assessing cumulative impacts to local archaeological and paleontological resources is to determine whether the project would result in a loss of these resources that could diminish or eliminate important information relevant to the history of the project area. The project would be required to comply with MM-CUL-1 through MM-CUL-7, which would eliminate any potential loss of important archaeological or paleontological information that may be buried under the project site. With regard to the potential discovery of human remains during construction, the project would be required to comply with Mitigation Measure CUL-7, which requires grading and construction activities to cease pursuant to State Health and Safety Code Section 7050.5 until the County Coroner has made the necessary findings as to the origin and disposition pursuant to Section 5097.98 of the California Public Resources Code. Therefore, the project would not contribute considerably to a cumulative loss of important archaeological or paleontological resources, and/or disturbed human remains. Related cumulative projects in the City would be evaluated for potential impacts to cultural resources and would be required to implement measures to reduce impacts to cultural resources. **Therefore, the project, considered with the related cumulative projects, would not result in significant cumulative impacts to cultural resources**.

Geology/Soils

The project would be required to implement the geotechnical design measures recommended in the project geotechnical report to ensure the stability of the project. Additionally, the project would be required to comply with the California Building Code and implement erosion control measures. With compliance of the geotechnical report design measures, California Building Code requirements and erosion control measures, potential geologic impacts would be less than significant. Therefore, the project would not contribute considerably to geologic impacts. Related cumulative projects in the City would be required to comply with the California Building Code requirements to minimize potential geologic impacts and would be required to implement erosion control plans to minimize potential erosion and sedimentation impacts. **Therefore, the project, considered with the related projects, would not result in significant cumulative geologic impacts**.

Hydrology and Water Quality

The project site and the surrounding areas are served by the existing City storm drain system. Runoff from the project site and adjacent urban uses is typically directed into the adjacent streets, where it flows to the nearest drainage improvements. It is likely that most, if not all, of the related cumulative projects would also drain to the surrounding street system. However, little if any additional cumulative runoff is expected from the project site and the related projects, since this area of the City, along Coast Highway, is mostly developed. Under the requirements of the Low Impact Development Ordinance, each related project would be required to implement stormwater BMPs to retain or treat the runoff from a storm event. The project, with successful implementation of the recommended impact avoidance and minimization measures (MM-Bio-2), would effectively avoid adverse indirect impacts on water quality (from erosion, runoff, etc.). Mandatory structural BMPs for all projects in accordance with the NPDES water quality program would therefore result in a cumulative reduction to surface water runoff, as the development in the surrounding area is limited to infill developments and redevelopment of existing urbanized areas. Therefore, the project would not make a cumulatively considerable contribution to impacting the volume or quality of surface water runoff, and cumulative impacts to the existing or planned stormwater drainage systems would be less than significant. **Therefore, the project would not make a cumulatively considerable contribution to any potential cumulative impacts, and cumulative water quality impacts would be less than significant**.

Noise

The project's long-term operational noise impacts were determined to be less than significant. The project would result in a temporary increase in noise levels during construction activities. The construction noise impacts would be below the FTA threshold of 90 dBA and would be less than significant. Additionally, groundborne vibration generated at the site during construction would not be in exceedance of the FTA threshold of 0.12 inch/second PPV, and the long-term vibration impacts from operations at the site would be less than significant. Therefore, the project would not contribute considerably to cumulative noise and vibration impacts and potential cumulative impacts would be less than significant. Related cumulative projects would be required to comply with applicable noise and vibration standards, and regulations to minimize noise and vibration impacts where needed, would be required to incorporate mitigation measures to minimize noise and vibration impacts. **Therefore, the project, considered with the related cumulative projects, would not result in significant cumulative noise impacts**.

Tribal Cultural Resources

The project and related projects would comply with AB 52 in which the lead agency for each project would be required to notice tribes that are traditionally and culturally affiliated with the geographic area of the related project sites if the tribe has submitted a written request to be notified. Due to being locally specific, each related project would need to conduct a Sacred Lands File search and be evaluated within its own site specific context. The project would not adversely affect known Tribal Cultural Resources. **Therefore, the project would not make a cumulatively considerable contribution to any potential cumulative impacts, and cumulative impacts on cultural resources project site be less than significant**.

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

Less Than Significant Impact. A significant impact may occur if a project has the potential to result in significant impacts, as discussed in the preceding sections. Based on the preceding environmental analysis, the project would not have significant environmental effects on human beings, either directly or indirectly. **Thus, impacts to humans would be less than significant**.

Mitigation Measures

Refer to MM-BIO-1 through MM-BIO-4.

Refer to MM-CULT-1 through MM-CULT-7.