



Shen Residence

Initial Study/Mitigated Negative Declaration

Draft

prepared for

City of Rolling Hills

2 Portuguese Bend Road

Rolling Hills, California 90274

Contact: John F. Signo

prepared by

Rincon Consultants, Inc.

250 East 1st Street, Suite 1400

Los Angeles, California 90012

December 2022

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RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers

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Table of Contents

Initial Study	1
1. Project Title	1
2. Lead Agency Name and Address.....	1
3. Contact Person and Phone Number	1
4. Project Sponsor's Name and Address.....	1
5. Project Location	1
6. General Plan Designation.....	4
7. Zoning.....	4
8. Description of Project	4
9. Required Approvals and Mitigation Measures	19
10. Surrounding Land Uses and Setting	19
11. Other Public Agencies Whose Approval is Required	19
12. Tribal Consultation.....	19
Environmental Factors Potentially Affected.....	23
Determination	23
Environmental Checklist.....	25
1 Aesthetics.....	25
2 Agriculture and Forestry Resources.....	29
3 Air Quality	31
4 Biological Resources.....	37
5 Cultural Resources	48
6 Energy	51
7 Geology and Soils.....	55
8 Greenhouse Gas Emissions	63
9 Hazards and Hazardous Materials	71
10 Hydrology and Water Quality	77
11 Land Use and Planning.....	83
12 Mineral Resources	87
13 Noise	89
14 Population and Housing.....	95
15 Public Services.....	97
16 Recreation	101
17 Transportation/Traffic	103
18 Tribal Cultural Resources	105
19 Utilities and Service Systems	109
20 Wildfire.....	115

21	Mandatory Findings of Significance	119
References		123
Bibliography		123
List of Preparers		128

Tables

Table 1	Project Summary	6
Table 2	Estimated Construction Maximum Daily Emissions	33
Table 3	Estimated Operational Maximum Daily Emissions	34
Table 4	Project-Related Energy Usage Compared to State-Wide Energy Usage	52
Table 5	Estimated Construction GHG Emissions	66
Table 6	Combined Annual Emissions of Greenhouse Gases	67
Table 7	Consistency with 2017 Scoping Plan	68
Table 8	Project Consistency with Applicable CAP Goals and Measures	70
Table 9	Construction Noise Levels by Phase	90
Table 10	Project Groundborne Vibration	92
Table 11	Normal Dry Year Water Supply and Demand for Project Service Area (AFY)	112
Table 12	Single Dry Year Water Supply and Demand for Project Service Area (AFY)	112
Table 13	Multiple Dry Year Water Supply and Demand for Project Service Area (AFY)	112
Table 14	Solid Waste Disposal Facilities	113

Figures

Figure 1	Regional Location	2
Figure 2	Property Boundary and Project Footprint	3
Figure 3	Project Site Plan	7
Figure 4	Single-Family Residence Floor Plan	8
Figure 5	Guesthouse Floor Plan	9
Figure 6	Single-Family Residence - North and South Elevations	10
Figure 7	Single-Family Residence - East and West Elevations	11
Figure 8	Proposed Guesthouse Elevations	12
Figure 9	On-Site Section	13
Figure 10	Access Drive Plan	14
Figure 11	Access Drive On-Site Section – Single Family Residence	15
Figure 12	Access Drive On-Site Section – Guesthouse	16
Figure 13	Typical Roadway Sections	17
Figure 14	Project Site Photographs	21

Appendices

Appendix A-1	Air Quality Background
Appendix A-2	Air Quality/Greenhouse Gas Emissions Data
Appendix B	Biological Resources Assessment
Appendix C-1	Cultural Resources Analysis
Appendix C-2	Paleontological Analysis
Appendix D	Geotechnical Assessments
Appendix E	Hydrology Study/Water Quality Plan
Appendix F-1	Noise Background
Appendix F-2	Noise Assessment
Appendix G	Will Serve Letters
Appendix H	Project Plan Set
Appendix I	Native American Consultation Letters

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Initial Study

1. Project Title

Shen Residence Project

2. Lead Agency Name and Address

City of Rolling Hills
2 Portuguese Bend Road
Rolling Hills, California 90274

3. Contact Person and Phone Number

John F. Signo, Director
City of Rolling Hills, Planning and Community Services
(310) 377-1521

4. Project Sponsor's Name and Address

Drs. Wei-Min Shen & Ying Sai
Fond Du Lac Road
Rancho Palos Verdes, California 90275

5. Project Location

The Shen Residence Project (hereafter referred to as the “project” or “proposed project”) is located at 77 Portuguese Bend Road in the City of Rolling Hills, California in Los Angeles County. The Assessor’s Parcel Number (APN) for the property is 7567-013-005. The property consists of 21.14 acres of undeveloped land with flat areas and steep slopes. The project site is located at the southern terminus of Portuguese Bend Road, which is accessed by an unpaved road. The private off-site access drive is an easement located between the residences at 73 and 74 Portuguese Bend Road and extends approximately 850 feet southwest from the paved end of Portuguese Bend Road to meet the project site at 77 Portuguese Bend Road. Figure 1 shows the regional location of the site, and Figure 2 shows an aerial view of the entire property and proposed project footprint, which is comprised of 2.90 acres.¹ The private off-site access drive continues through the southern area of the property and connects to Burma Road, as shown in Figure 2.

¹ The project footprint is defined as the area within the grading limits of the single-family residence and proposed improvements to the access road (proposed improvements are described in detail in Subsection 8, *Description of Project*).

Figure 1 Regional Location

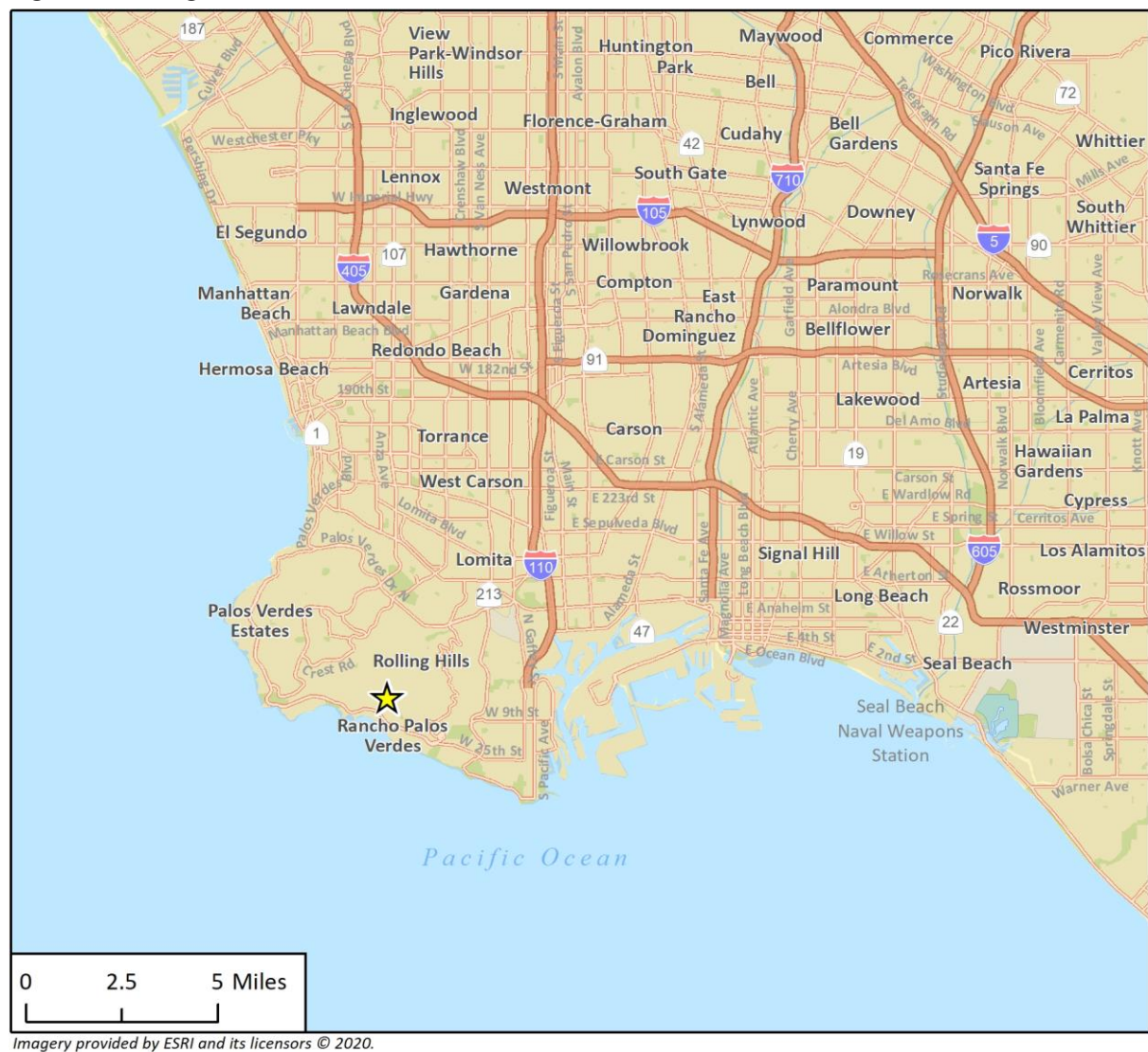
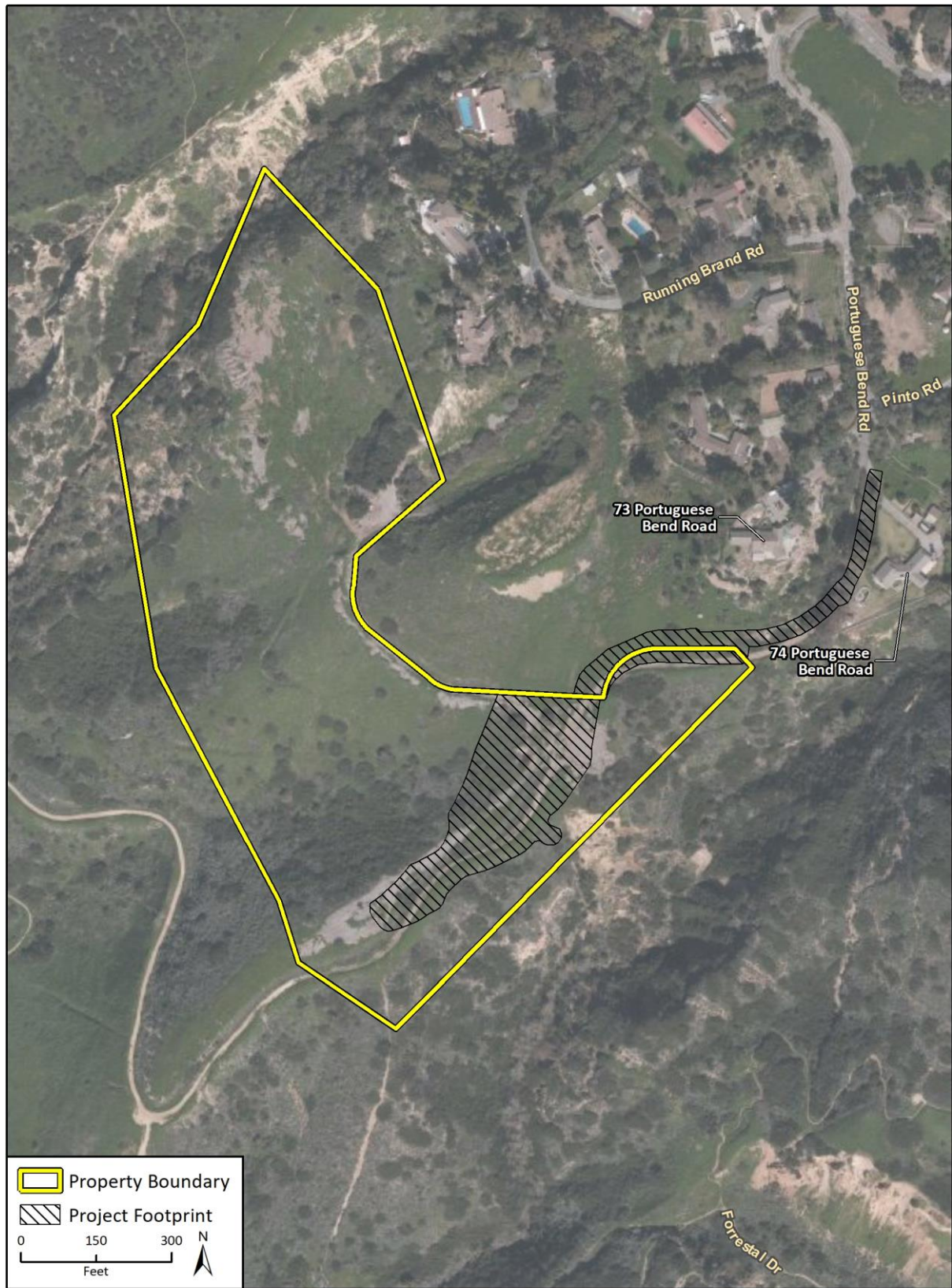


Figure 2 Property Boundary and Project Footprint



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Fig. 2 Project Boundary

6. General Plan Designation

Very Low Density Residential

7. Zoning

Residential Agricultural Suburban Zone 2 (RAS-2)

8. Description of Project

The project site consists of an undeveloped 21.14-acre parcel located at 77 Portuguese Bend Road and existing private off-site access drive. The proposed project involves four components: 1) construction of an 8,847-square-foot single-family residence (hereafter referred to as “proposed home”); 2) construction of a 2,427-square-foot guesthouse (hereafter referred to as “proposed guesthouse”); 3) construction of a 2,766-square-foot pool area (hereafter referred to as “proposed pool area”); and 4) the re-alignment and potential modification of an existing road and driveway (hereafter referred to as “access drive”) into the easement area located between residences at 73 and 74 Portuguese Bend Road. The proposed home would include two, two-car garages; four bedrooms, one of which would extend onto a deck; a living room that would extend onto a deck; a dining room that would extend onto a deck; gym/workshop space; a kitchen; attic space; four bathrooms and two half-bathrooms; and an entry porch. Amenities associated with the proposed home would include an open central courtyard, a gym/workshop, a breakfast nook, a laundry room, and a pantry. The proposed guesthouse would include an open pond courtyard, one bedroom that would extend onto a deck, a living room that would extend onto a deck, a study room that would extend onto a deck, one bathroom and one half-bathroom, and an entry porch. The proposed pool area would include a swimming pool with a pool gate, jacuzzi, walkway, and pool deck. The walkway comes off the south end of the pool leading to the proposed guesthouse near the southern edge of the project site. The walkway would curve and cross over sections of two ponds with pedestrian bridges linking both sides of the ponds. As required by Section 17.18.020 of the Rolling Hills Municipal Code (RHMC), the proposed project would also include a 450-square-foot stable, a 550-square-foot corral, and a trash enclosure near the northern boundary of the project footprint.

Site Access and Lighting

For access to the project site, the project would involve re-alignment and potential modification of an existing road into the easement area located between residences at 73 and 74 Portuguese Bend Road. A portion of the road is a part of 74 Portuguese Bend Road. Therefore, the project would cut into the hill southeast of the 73 Portuguese Bend Road property to shift the road west and into the easement area. Development of the proposed driveway would also include implementation of a paved private off-site access drive with a fire lane and fire truck turning pad along the southeastern boundary of the project footprint area. The access drive would also include the addition of crib and vertical retaining walls, which would gradually increase from the existing grade level to 15 feet in height. The total area of the paved access drive would consist of 12,953 square feet on-site and 17,291 square feet off-site. For lighting at the site, the project would include wall mounted and recessed decorative lighting fixtures on the outside of the proposed home and guesthouse.

The project site would also have secondary access in the event of an emergency from Burma Road located south of the site. Burma Road is a dirt road in the preserve area owned by the Palos Verdes

Peninsula Land Conservancy that connects to Crenshaw Boulevard approximately one mile northwest of the site. According to the Los Angeles County Fire Department (LACoFD), a Type 3 vehicle, which is characterized as a four-wheel vehicle or low patrol vehicle (heavy duty truck), can travel through Burma Road to respond to an emergency.²

Construction

Construction of the proposed project would occur over approximately 14 months. The proposed project would require 172 cubic yards (cy) of cut soil that would be distributed throughout the 21.14-acre parcel in disturbed areas to a depth of approximately two to three inches, or as required by the City, instead of being exported from the site.

Utilities

The project would include installation of new gas, water, stormwater, and irrigation lines, within the proposed grading limits of the project. Above ground water and natural gas lines are proposed. Five biofiltration planter areas would be installed throughout the project site. The runoff from the impervious surfaces would be collected and drained directly to the biofiltration areas. All biofiltration best management practices (BMPs) would be designed to ensure that all water would be drained within 96 hours or less. All biofiltration BMPs would be sized according to the latest Los Angeles County LID manual. Once filtered through the media within the biofiltration BMPs the treated water would be collected via underdrain and conveyed to another area of the project site where it would be disposed of in a non-erosive drainage device. In addition, runoff would be captured by concrete gutters upstream of the access driveway and conveyed via a 12-inch trapezoidal Smartditch system near the project site's entrance.³

The project would include the installation of an underground septic leach system. The proposed 1,500-gallon septic tank and leach trenches would be located southwest of the proposed guesthouse.

Architectural Materials and Landscaping

The proposed home and guesthouse would be constructed with standard building materials, including, but not limited to stucco wall materials, wood facias, clad wood windows, and simulate shake roofing materials. The project includes the planting of an assortment of trees, including but not limited to: Chinese fringe trees (*Chionanthus retusus*), Italian cypress (*Cupressus sempervirens*), Valencia orange, coast live oak (*Quercus agrifolia*), and California pepper trees (*Schinus mole*), as well as various shrubs, grape vines, and succulents throughout the site. The project's landscaping/planting plan can be found in Appendix H of this IS/MND.

Table 1 includes a summary of the proposed project. Figure 3 shows the project site plan and configuration of the proposed home, guesthouse, and pool area. Figure 4 and Figure 5 show the floor plan of the proposed home and guesthouse, respectively. Figure 6 and Figure 7 depict the building elevations of the proposed home and Figure 8 depicts the building elevations of the proposed guesthouse. Figure 9 depicts an on-site section of the proposed home and guesthouse. Figure 10 shows the access drive plan while Figure 11 and Figure 12 show the on-site sections of the access drive with respect to the proposed home and guesthouse. Figure 13 shows other roadway

² Captain Chris Benoit, Los Angeles County Fire Department Station 56, conversation with the City of Rolling Hills on October 31, 2022.

³ A Smartditch system is a flexible high-density polyethylene (HDPE) ditch lining system that controls the flow of water.

sections associated with the project. The proposed project's architectural and civil plan sets, from which these figures were derived, can be found in Appendix H of this IS/MND.

Fuel Modification

The LACoFD Fuel Modification Unit is responsible for the approval of a landscape plan for structures located in the Fire Hazard Severity Zones. The process of approval consists of reviewing aspects of the project, such as structure location and type of construction, topography, slope, amount and arrangement of vegetation, and overall site settings. Fuel modification areas would comply with the requirements included in the Los Angeles County Fire Code Section 4908. The objective through this approval plan process is to create defensible space necessary for effective fire protection of homes in the Fire Hazard Severity Zones. Routine maintenance shall be regularly performed in all zones. Requirements include, but are not limited to, those items in the Fuel Modification Guidelines (Los Angeles County 2021).

Table 1 Project Summary

Address	77 Portuguese Bend Road			
Assessor Parcel Number	7567-013-005			
Lot Area	21.14 acres			
Land Use Summary	<u>Single-Family Residence</u> (total 8,847 sf)	<u>Guesthouse</u> (total 2,427sf)	<u>Pool Area</u> (total 2,766 sf)	<u>Access Drive</u> (total paved area: 12,953 sf on-site and 17,291 sf off-site) (total length and width: 1,300 feet long and 20 feet wide)
	Two-car garages (2)	Bedrooms (1)	Swimming pool	Crib walls
	Master bedrooms (2)	Pond courtyard	Jacuzzi	Vertical walls
	Bedrooms (2)	Bedroom and deck	Walkway	
	Bathrooms (4)	Bathroom (1)	Pool deck	
	Half-bathrooms (2)	Half-bathroom (1)		
	Open courtyard	Living room and deck		
	Gym/workshop	Study room and deck		
	Living room and deck			
	Dining room and deck			
	Stable and Corral (1,000 sf)			
Earthwork Summary	<u>Single-Family Residence</u> Cut: 813 cy Fill: 310 cy	<u>Guesthouse</u> Cut: 95 cy Fill: 11 cy	<u>Pool Area</u> Cut: 226 cy Fill: 530 cy	<u>Access Drive (on-site)</u> Cut: 692 cy Fill: 187 cy <u>Access Drive (off-site)</u> Cut: 1233 cy Fill: 172 cy
Total Project Earthwork ¹	Cut: 4,104 cy ² Fill: 3,932 cy			
Height	<u>Single-Family Residence</u> : 15 feet, 8 inches <u>Guesthouse</u> : 13 feet			

sf = square feet; cy = cubic yards

¹ Total Project Earthwork also includes the amounts from the limits of grading and the front yard.

² The proposed project would require 172 cy of cut soil that would be distributed throughout the 21.14-acre parcel in disturbed areas to a depth of approximately two to three inches, or as required by the City, instead of being exported from the site.

Figure 3 Project Site Plan



Figure 4 Single-Family Residence Floor Plan

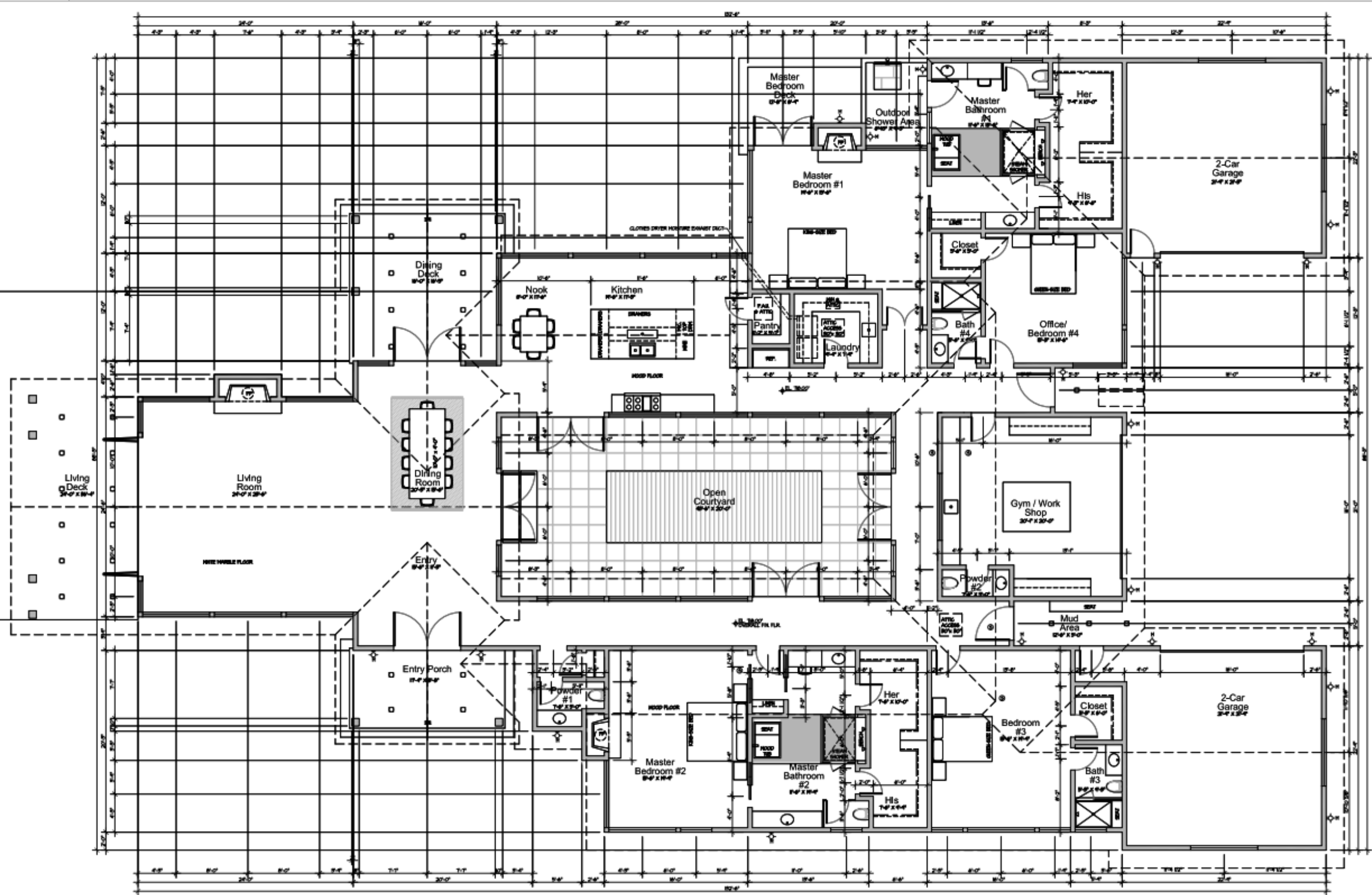


Figure 5 Guesthouse Floor Plan

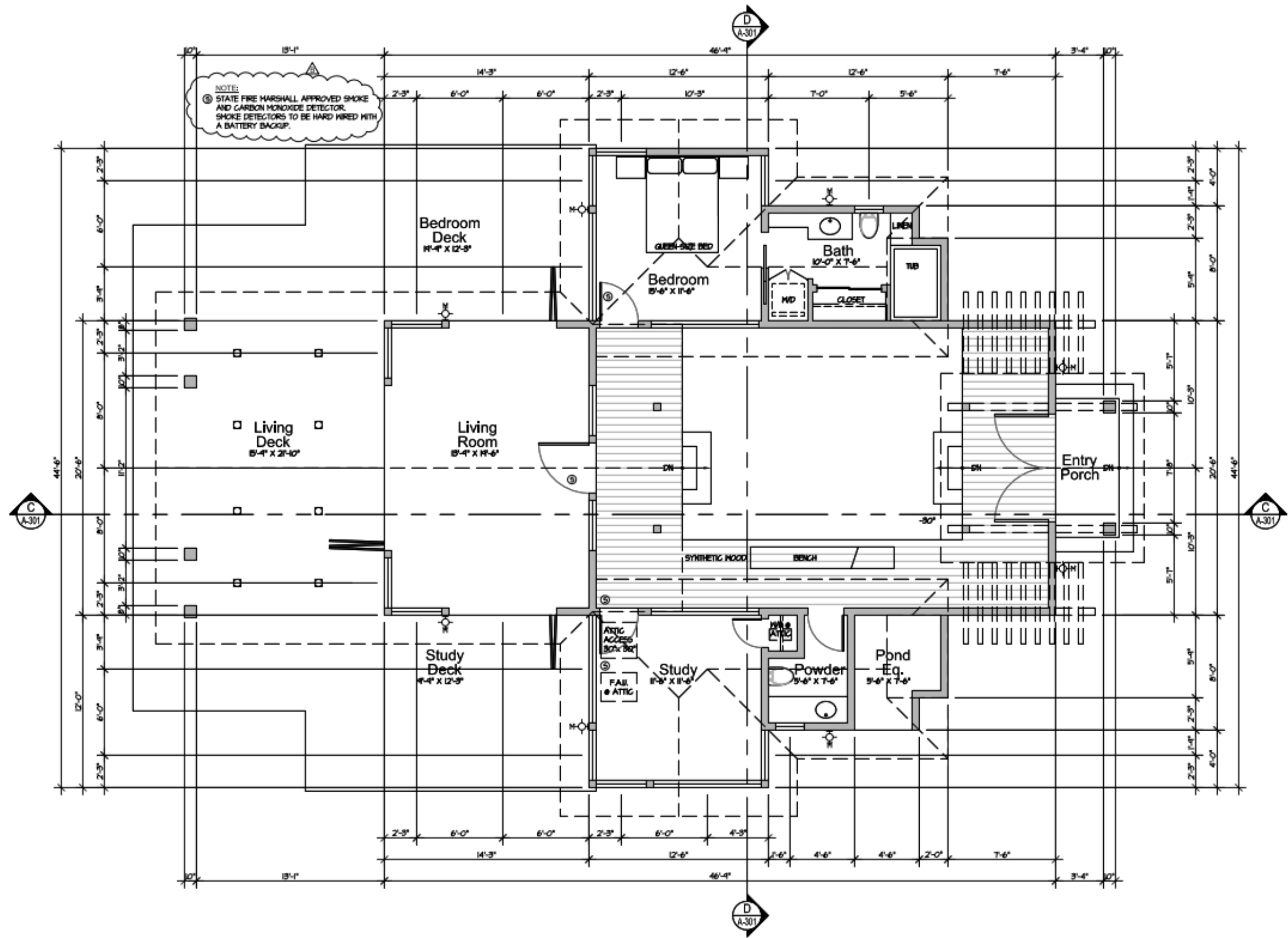


Figure 6 Single-Family Residence - North and South Elevations

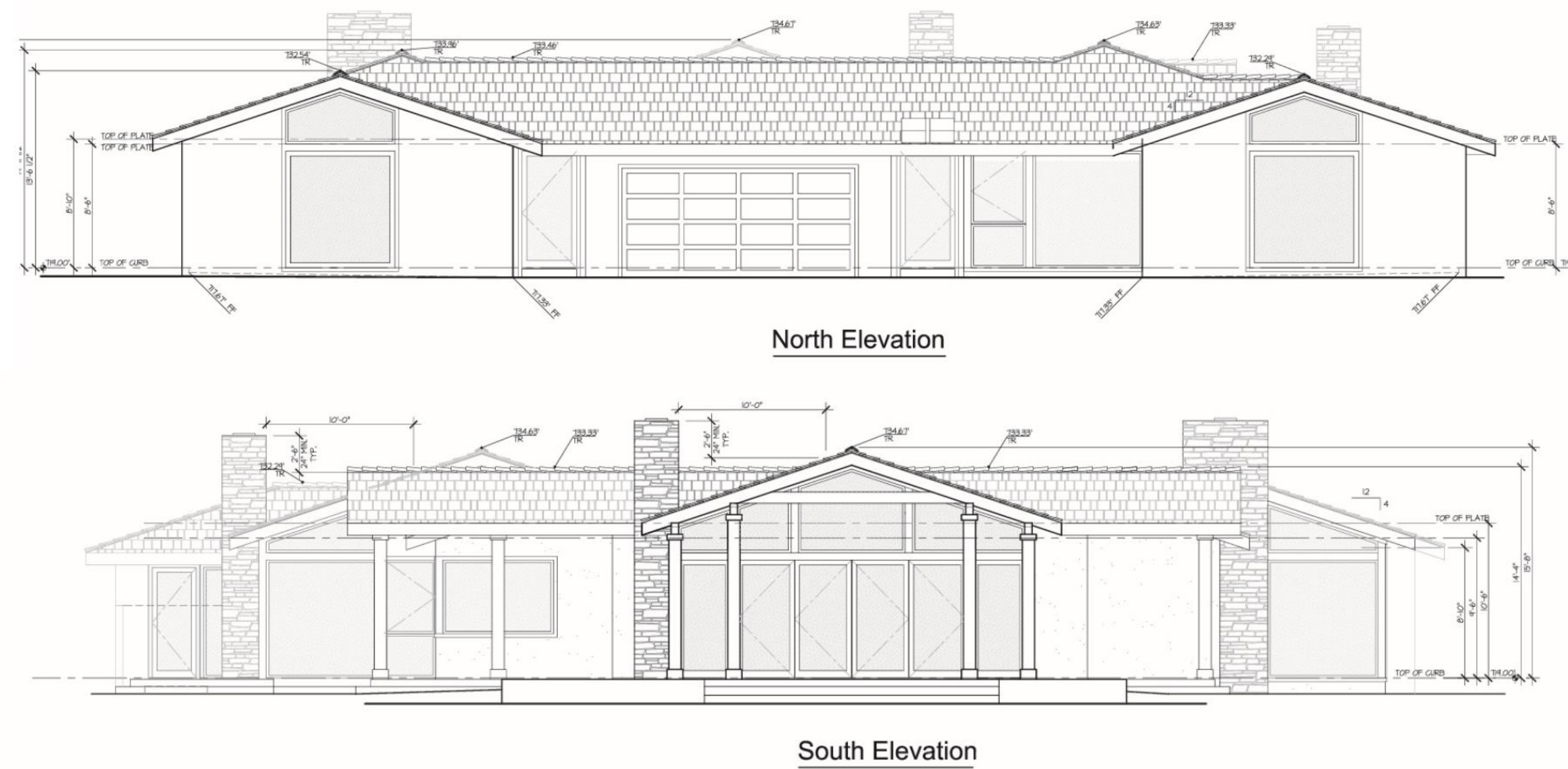


Figure 7 Single-Family Residence - East and West Elevations



Figure 8 Proposed Guesthouse Elevations

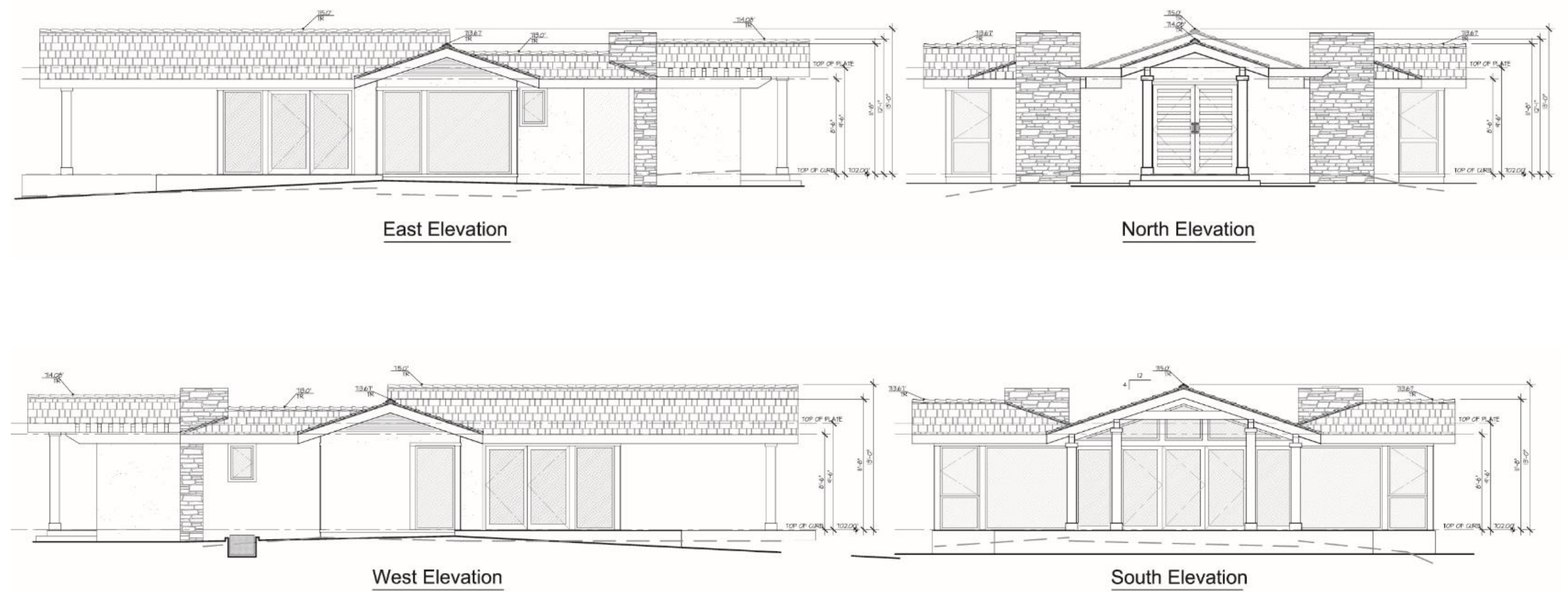
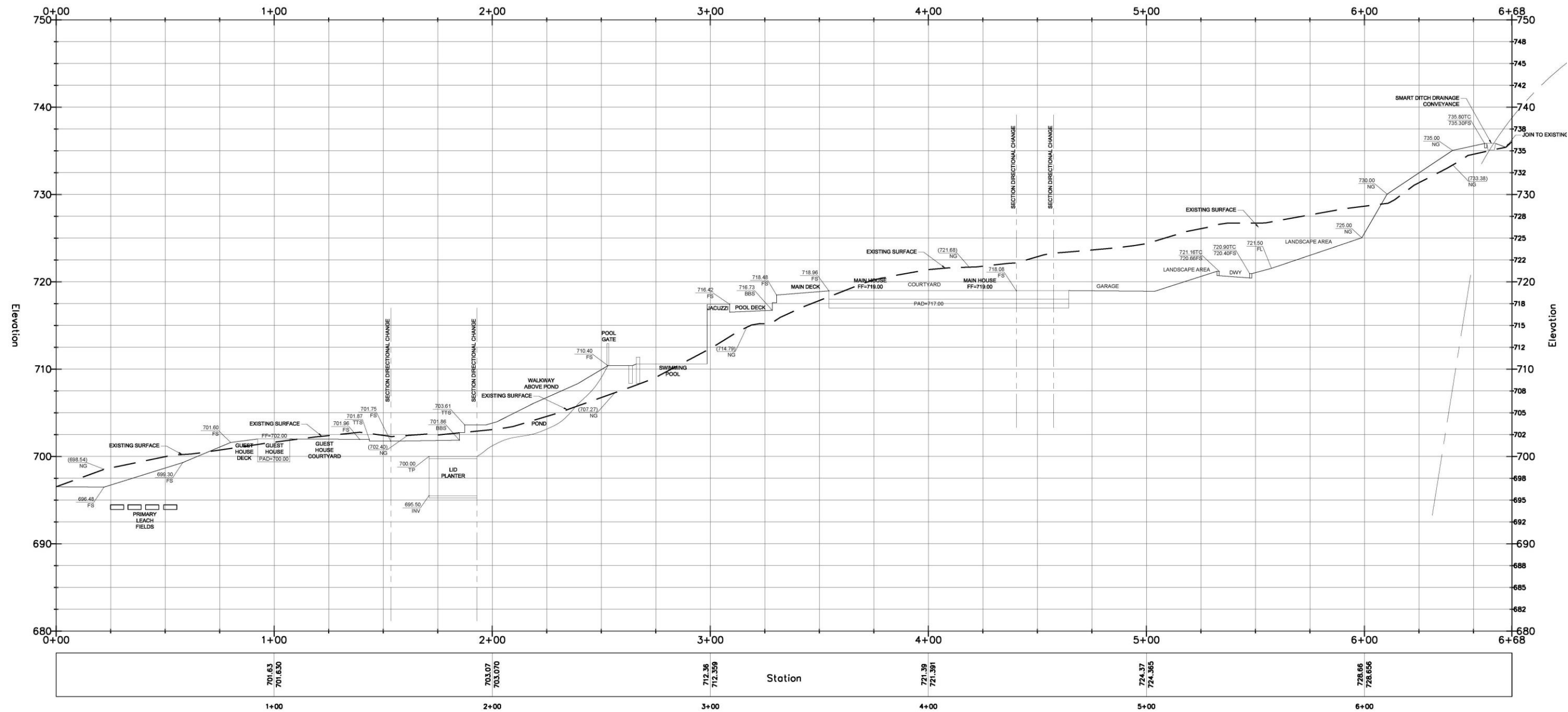
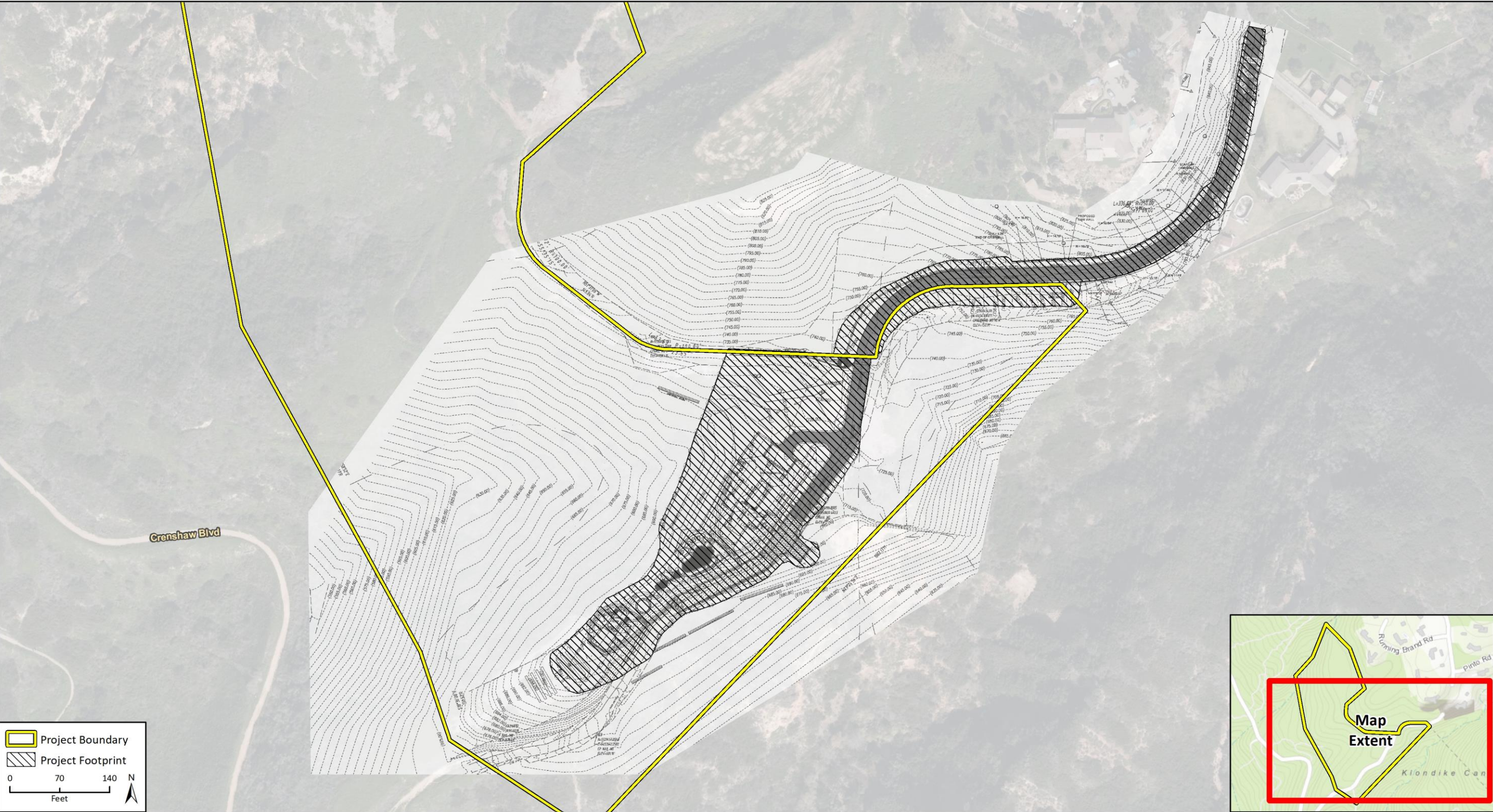


Figure 9 On-Site Section



Source: P.A. Arca Engineering, 2020

Figure 10 Access Drive Plan

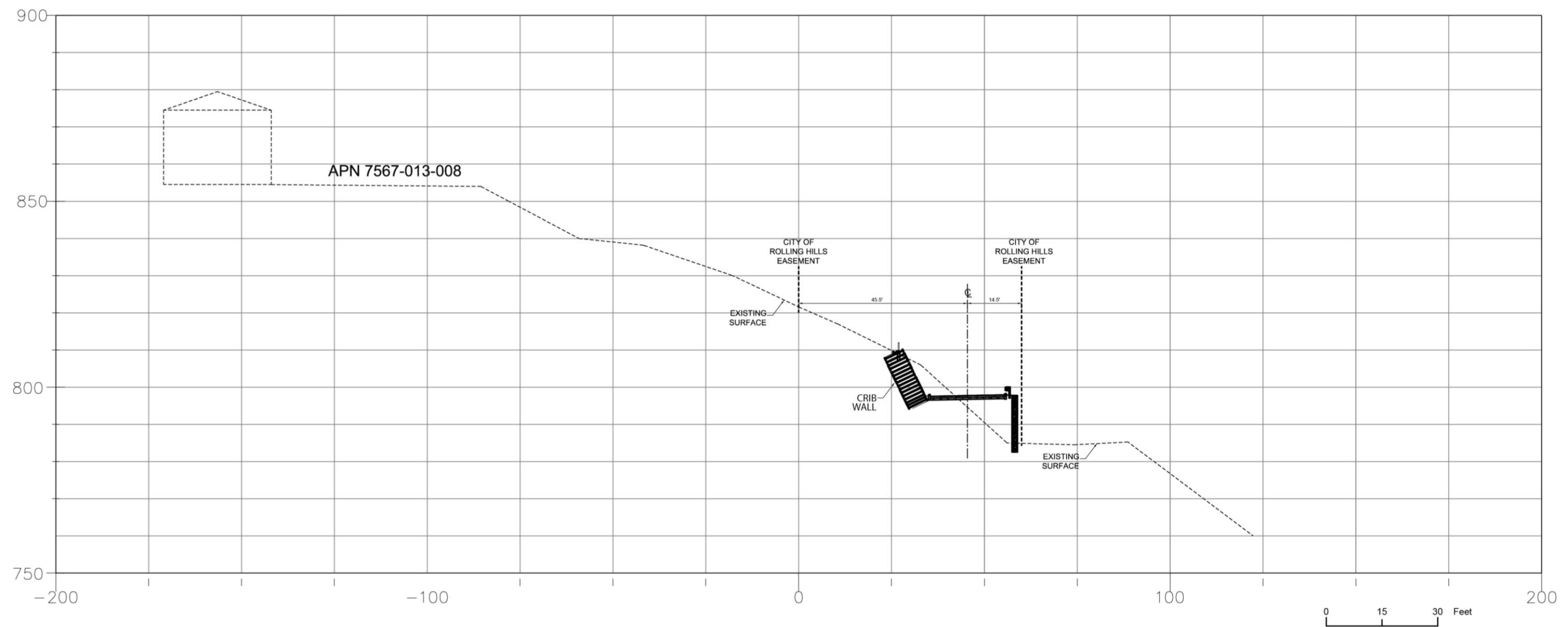


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Additional data provided by P.A.A.R.C.A. Engineering, 2020.

Fig 10 Access Drive Plan

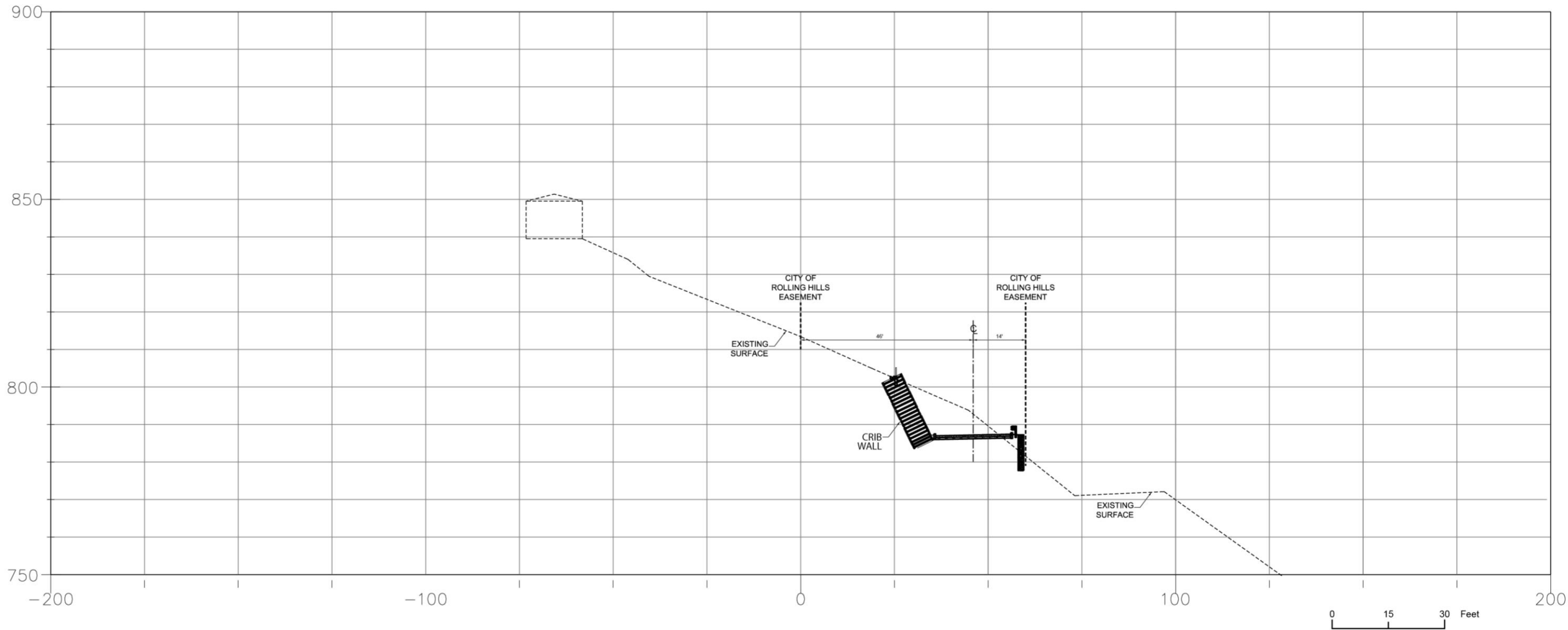
Source: P.A. Arca Engineering, 2020

Figure 11 Access Drive On-Site Section – Single Family Residence



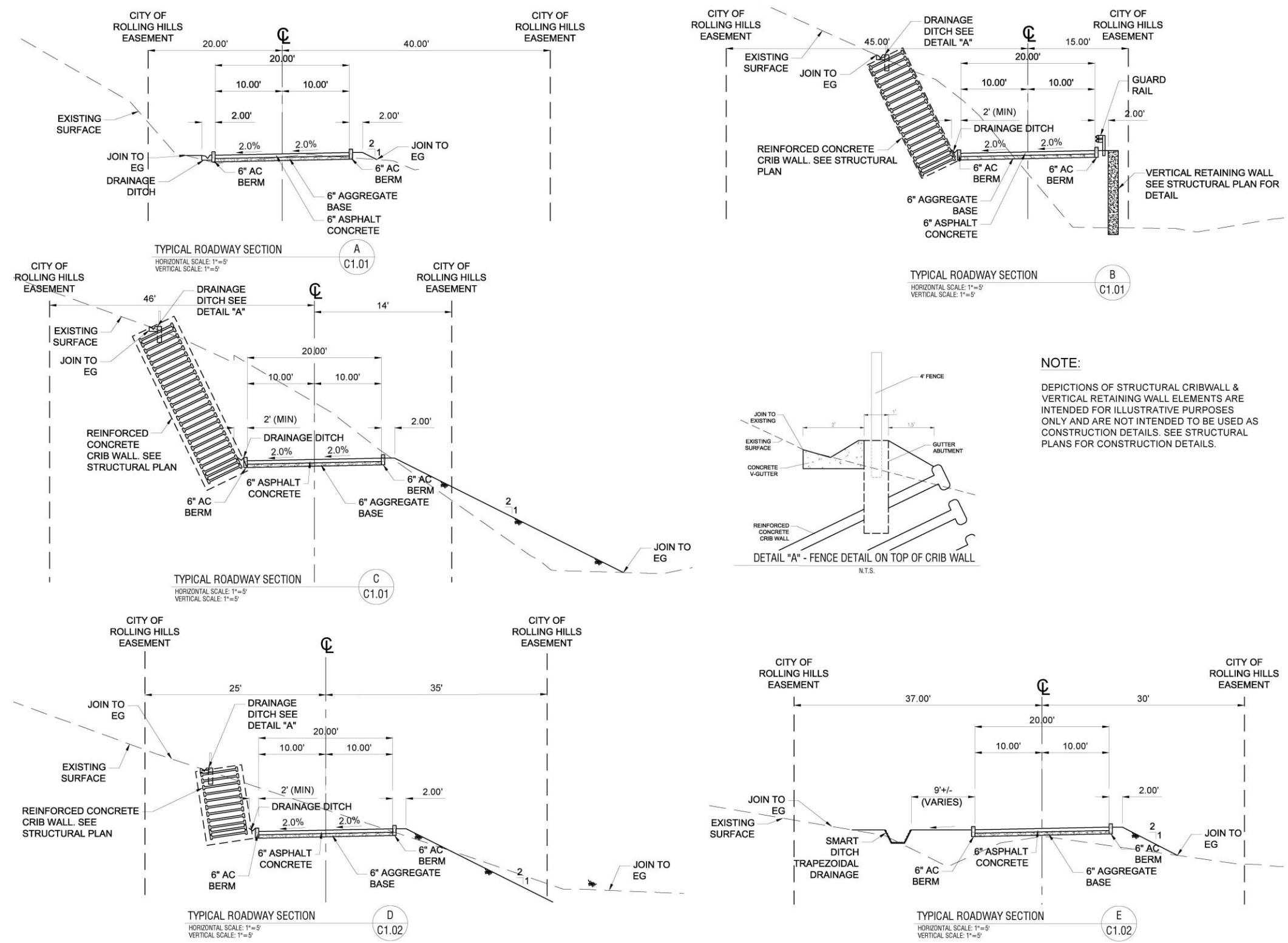
Source: P.A. Arca Engineering, 2020

Figure 12 Access Drive On-Site Section – Guesthouse



Source: P.A. Arca Engineering, 2020

Figure 13 Typical Roadway Sections



Source: P.A. Arca Engineering, 2020

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9. Required Approvals and Mitigation Measures

Approvals requested from the City of Rolling Hills include a Conditional Use Permit (CUP) for the guesthouse and a Site Plan Review for the entire project.

The environmental analysis includes mitigation measures for potentially significant impacts associated with Biological Resources, Cultural Resources, Geology and Soils, and Tribal Cultural Resources. The mitigation measures stated in this document would be implemented upon approval of the proposed project.

10. Surrounding Land Uses and Setting

The site is located on the southern portion of the Palos Verdes Peninsula between open space reserves and residential development. The parcel is bordered on three sides by reserves: the Portuguese Bend Reserve, which extends from the north border of the property around its western and southern sides, and the Forrester Nature Reserve, which is immediately southeast of the property. Additionally, Klondike Canyon Creek is approximately 200 feet southeast of the property and Paintbrush Canyon Creek is immediately northwest of the property. Currently, the owners of the project site allow members of the Rolling Hills community with appropriate permission to cross the site on private trails connecting to the Portuguese Bend Reserve. The Burma Road trail in the Portuguese Bend Reserve terminates near the south property corner. An informal unpaved access route extends from that point through the property to Portuguese Bend Road. The property is bordered to the northeast by existing residential development along Running Brand Road. The project site generally slopes downward with moderate to gentle gradients to the west and localized steepened slopes along adjacent canyon walls to the south. Figure 14 shows site photos of existing conditions.

11. Other Public Agencies Whose Approval is Required

The City of Rolling Hills is the lead agency with responsibility for approving the proposed project. Approval from other agencies through the permitting process, such as the LACoFD and the California Department of Fish and Wildlife (CDFW) may be required.

12. Tribal Consultation

The Native American Heritage Commission (NAHC) provided a list of eight Native American contacts from the following tribes who may have knowledge regarding cultural resources of Native American origin within the project site:

- Gabrielino-Tongva Tribe
- Gabrielino Tongva Indians of California Tribal Council (Bellflower)
- Gabrielino Tongva Indians of California Tribal Council (Simi Valley)
- Gabrielino/Tongva Nation
- Gabrielino/Tongva San Gabriel Band of Mission Indians
- Soboba Band of Luiseño Indians

- Santa Rosa Band of Cahuilla Indians
- Gabrieleño Band of Mission Indians – Kizh Nation (Kizh Nation)

Pursuant to Public Resources Code (PRC) Section 21080.3.1, the City mailed consultation letters to these tribes on March 15, 2022. As a result, a consultation meeting between the Gabrielino Tongva Indians of California Tribal Council and City staff was held on April 6, 2022, and consultation between Kizh Nation representatives and City staff was held on April 21, 2022. For further discussion of tribal cultural resources in this IS/MND, please refer to Section 18, *Tribal Cultural Resources*, and Section 5, *Cultural Resources*. The City of Rolling Hills will continue to comply with all applicable tribal consultation requirements of PRC Section 21080.3.1 and all other applicable regulations as the proposed project moves through the required review and approval process.

Figure 14 Project Site Photographs

Photograph A. View of the existing gated entrance to the project site near the southern terminus of Portuguese Bend Road. Photo taken looking to the southeast.



Photograph B. View of the unpaved access road looking to northeast (approximately where the access road would meet the proposed driveway). Single-family residences (71 and 73 Portuguese Bend Road) are shown in the background.

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Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Potentially Significant Unless Mitigation Incorporated” as indicated by the checklist on the following pages.

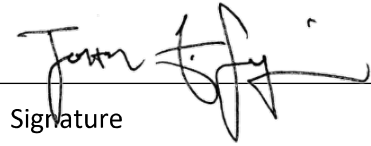
- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/>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

Determination

Based on 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 revisions to 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 potential 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

John F. Signo, AICP

Printed Name

12/15/22

Date

Director of Planning & Comm. Serv.

Title

Environmental Checklist

1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. In non-urban areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urban area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

The Rolling Hills General Plan describes the City as “a beautiful wooded area with deep canyons and hills terrain located on the Palos Verdes Peninsula” (Rolling Hills 1990a). According to Section 17.26.010 of the RHMC, views of the Pacific Ocean, Catalina Island, city lights, and Los Angeles Harbor are special qualities of property ownership for many residential lots in the City. The regulations in the City’s General Plan and RHMC require that visual resources are maintained through strict limitations on the range of allowed land uses, density controls, preservation of open space, restrictions on the size and location of structures, and prohibitions of actions and uses that would obstruct or diminish the quality of aesthetic values or views. Scenic views of the Pacific Ocean and Catalina Island are visible facing south from the project site. Private views are those that can be seen from vantage points located on private property. Although impacts to private views are not analyzed under CEQA, for information purposes, the following discussion regarding the project’s impacts to private views has been provided.

The nearest single-family residences, located approximately 430 feet northeast of the project site, are located at a higher elevation when compared to the project site. As shown in Figure 9, above,

the proposed home and guesthouse would be located at approximately 719 feet and 702 feet above sea level, respectively, while the nearest single-family residences are currently located between approximately 790 and 855 feet above sea level. Due to the 430-foot horizontal distance and vertical difference in property elevations when compared to the proposed home and guesthouse, scenic views from off-site residences would not be affected by implementation of the proposed home and guesthouse. The proposed driveway would range in elevation from approximately 725 feet above sea level at the entrance to the proposed home to approximately 818 feet above sea level at the connection to the existing roadway northeast of the project site (access drive shown in Figure 10). Views looking west from the existing residence located at 74 Portuguese Bend Road (APN 7567-013-012) are currently blocked by existing topography. As such, the modification of the roadway alignment would not impact existing views. In addition, the proposed crib wall on the north side of the access drive would be designed to back against and hug the hillside, which would include vegetative screening to blend into the landscape, and the vertical retaining wall on the south side of the access drive would also include green landscaping and screening. According to Southern California Gas Company's (SoCalGas) "will serve" letter (see Appendix G), due to the possibility of land movement in the area, the project would include above-ground gas piping. However, any above ground gas piping would be located along the ground surface and infrastructure would not be easily visible. In addition, all electrical utility lines would be required to be installed underground in accordance with RPMC Section 15.04.070. Lastly, the project site is zoned Residential Agricultural Suburban Zone 2 (RAS-2) and has a General Plan land use designation of Very Low Density Residential. The proposed project would be developed in a manner that would be compatible with existing surrounding land uses, consisting of single-family residences and open space, and would therefore be consistent with the underlying zoning and land use designation. Additionally, the proposed project would comply with the City's Silhouette Construction Guidelines, which will delineate the roof ridges and property, setback and easement lines prior to construction (Rolling Hills 2019a). Therefore, the proposed project would not have a substantial adverse effect on scenic vistas visible from the project site and site vicinity. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The project site is located in the southern portion of the Palos Verdes Peninsula, between an open space preserve and residential development. The site is undeveloped, private land that contains trees or historic buildings. As discussed in Section 4, *Biological Resources*, an area of exposed rock occurs just south of the project footprint, where there is a small rock slide above Klondike Canyon. However, this area is outside the project footprint and development of the proposed project would not impact this rock outcropping. Scenic views from the project site include views of the Pacific Ocean and Catalina Island south of site. The highway nearest to the project site is California State Route (SR) 213, located approximately 2.5 miles to the east. However, SR-213 is not a designated state scenic highway or eligible for designation as a scenic highway (California Department of Transportation [Caltrans] 2017). Pacific Coast Highway (Highway 1) is an eligible state scenic highway; however, the nearest eligible segment of Highway 1 is located approximately 12.5 miles east of the project site (Caltrans 2017). The City's General Plan Circulation Element also does not identify any scenic highways in the City (Rolling Hills 1990b). Additionally, as discussed in Checklist Question 1.a., due to the elevations of the proposed home, guesthouse, and access drive, the existing elevation of the existing residences located to the northeast of the project site and the existing intervening topography, no scenic views would be impacted by the implementation of the

proposed project. Therefore, the project would not damage scenic resources within a state scenic highway, and no impact would occur.

NO IMPACT

- c. *Would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings?*

The project site is located in the southern portion of the Palos Verdes Peninsula between an open space preserve and residential development. The parcel is bordered on three sides by reserves: the Portuguese Bend Reserve extends from the north border of the property around its western and southern sides, and the Forrestal Nature Reserve is immediately southeast of the property. The property is bordered to the northeast by existing residential development along Running Brand Road. Burma Road in the Portuguese Bend Reserve terminates near the southern corner of the project site. Additionally, Klondike Canyon Creek is approximately 200 feet southeast of the property and Paintbrush Canyon Creek is immediately northwest of the property. However, due to topographical differences and location of the proposed home, views of the site may only be available from Klondike Canyon Creek. Nearby trails that may offer views of the project despite topographical difference include, but are not limited to, Canyon View Trail and Red Tail Trail approximately 650 feet southeast of the project site; Barn Owl Trail approximately 430 feet southwest of the project site; and Rim Trail located approximately 125 feet northwest of the property.

Construction of the proposed project would include the use of heavy equipment, removal of vegetation, and stockpiling of soil materials. However, construction activities would be temporary and limited to the location of the proposed single-family home on the site. Construction equipment may be visible from public views from nearby reserves (e.g., Portuguese Bend Reserve, Forrestal Nature Reserve), roadways (e.g., Palos Verdes Drive), creeks (e.g., Klondike Canyon Creek), and trails (e.g., Barn Owl Trail, Canyon View Trail, Red Tail Trail, Rim Trail). However, any obstruction would be temporary and all construction equipment would remain on the project site. In addition, the positioning of construction equipment would not remain static and would be temporary only during the length of the 14-month construction period and would not result in permanent impacts to public views. Impacts related to degradation of existing visual character or quality of the site and surroundings during construction activities would be less than significant.

Operation of the proposed project would result in development of approximately 45,000 sf (one acre) of the 21-acre project site by converting undeveloped, open space into a single-family residence, guesthouse, pool area, and an access drive and crib and vertical walls. According to SoCalGas's "will serve" letter (see Appendix G), due to the possibility of land movement in the area, the project would include above-ground gas piping. Any above ground gas piping would be located along the ground surface and infrastructure would not be easily visible. The proposed one-story home and guesthouse would be compatible in architecture and density when compared to the adjacent single-family residences 430 feet to the northeast. The proposed project would include a three-foot retaining wall on the southeastern boundary of the project site along the proposed access drive. However, the wall would serve to protect the access drive from potential isolated rock falls and slumps. It is not unusual for hillside projects to incorporate retaining wall into the development area. In addition, the wall and proposed project components would not be clearly visible from the adjacent single-family residences to the north and northeast or from public roadways (e.g., Palos Verdes Drive) to the south. Similar to visibility of the property during construction, the project may be visible from the surrounding reserves, creeks, and trails despite

topographical differences during operation; however, the proposed project components would not conflict with the character of the community as the type and scale of the proposed development is similar to other single-family residence developments in the vicinity. In addition, the proposed project would convert approximately five percent of the 21-acre site, while approximately 20 acres of the site would remain in natural conditions. Therefore, existing on-site shrubs and grasses would continue to dominate the site's visual character and quality, and the project would not substantially degrade the existing visual character or quality of the site and its surroundings. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The undeveloped project site is private property that does not contain any sources of daytime or nighttime light or glare. Policy 2.2 of the City's Land Use Element requires that lighting of residential properties not adversely affect adjacent residential properties (Rolling Hills 1990c). Construction of the proposed project would include slight glare from equipment use, such as excavators, graders, dump trucks, and tractors. However, construction activities would be temporary and limited to the location of the proposed home, guesthouse and pool area on the site, and associated access drive, which would include crib and vertical walls. According to Section 15.36.020 of the RHMC, construction hours are restricted to Monday through Saturday between 7 AM and 6 PM. Therefore, construction would generally not require lighting sources during spring and summer months, and use of construction lighting would be temporary during the fall and winter months and likely be limited to a no more than two hours past sunset to 6 PM. Construction light and glare would result in temporary impacts to off-site residences during sensitive evening hours that would be less than significant.

Operation of the proposed project would generate light and glare typically associated with single-family residences, such as window glares, car lights from vehicles entering and exiting the site, and decorative lighting fixtures. Therefore, the project would result in impacts since the project site is currently vacant land. However, on-site light and glare sources would not be out of character with the surrounding development since there are existing single-family residences, with the nearest property located approximately 400 feet from the project site. Furthermore, the single-family residences located at 73 and 74 Portuguese Bend Road are set back approximately 400 and 600 feet away from the site, respectively, and angled such that the majority of views from these residences are directly to the south and southeast, while the project site is southwest of the primary viewsheds from these residences. In addition, topography and elevation change separate the site from the residences, which would further minimize potential impacts associated with the new sources of light or glare and would not adversely affect day or nighttime views in the area.

Due to the distances, the angles of the views, and difference in property elevations, potential impact by daytime or nighttime light and glare to existing off-site single-family residences from the proposed project would be less than significant. Furthermore, the proposed project would comply with Section 17.16.190 of the RHMC, which includes residential development standards for outdoor lighting that would ensure avoidance of light spillage and preservation of natural darkness in the area. Therefore, impacts associated with light and glare would be less than significant.

LESS THAN SIGNIFICANT IMPACT

2 Agriculture and Forestry Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land. This includes the Forest and Range Assessment Project and the Forest Legacy Assessment Project, along with the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

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

- a. Would the project convert Prime Farmland, Unique Farmland, 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?*
- b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*
- c. Would the project 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))?*
- d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?*
- e. Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?*

Based on the California Department of Conservation's (DOC) Farmland Mapping and Monitoring Program and Williamson Act maps, neither the project nor adjacent properties are State-designated Farmland, enrolled in Williamson Act contracts, or support forest land or resources (California DOC 2016a California DOC 2016b). Furthermore, according to the City of Rolling Hills General Plan Land Use Element and Zoning, there are no agricultural lands in the City (Rolling Hills 1990c). The project site is not located on or adjacent to agricultural land or forest land, and the project would not involve development that would result in the conversion of farmland to non-agricultural uses. Therefore, the proposed project would have no impact with respect to the conversion of Farmland to non-agricultural use and conflicts with existing agricultural zoning or Williamson Act contract and would not result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur.

NO IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

A background to this section, including the applied methodology and thresholds, is included in Appendix A-1.

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

SCAQMD's 2016 AQMP is a comprehensive and integrated plan with a primary focus on addressing the standards for ozone and PM_{2.5} because these are the only standards for which the Basin is not in attainment (SCAQMD 2017).

Ozone and PM_{2.5} pollutant emissions, along with the other identified criteria air pollutants, and their associated emissions from vehicular use and energy consumption, are directly related to population growth. As such, a project may be inconsistent with the applicable air quality plan, such as the 2016 AQMP, if it would result in an increase in either population or employment that exceeds growth estimates included in the plan. Such growth would generate emissions not accounted for in the applicable air quality plan emissions budget. Therefore, projects need to be evaluated to determine whether they would generate population and employment growth and, if so, whether that growth would exceed the growth rates included in the applicable air quality plan.

SCAQMD uses the Southern California Association of Governments' (SCAG) growth forecast. The California Department of Finance (DOF) estimates the current 2022 population of Rolling Hills is 1,684 (DOF 2019). As discussed in Section 14, *Population and Housing*, the City's current population is 1,684 with an average household size of 2.68 persons (DOF 2022). Because the proposed project would involve construction of a single-family residence, it would incrementally increase the City's population (see Section 14, *Population and Housing*, for a discussion on population growth). However, because the limited growth associated with one residence is within SCAG forecasts, the

proposed project would not conflict or obstruct implementation of the AQMP. No impact would occur.

NO IMPACT

- b. *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?*

The proposed project would generate temporary construction emissions and may also produce potential long-term operational emissions. Emissions associated with the proposed project were estimated using the CalEEMod version 2020.4.0.

Construction Emissions

Project construction would generate temporary air pollutant emissions associated with fugitive dust (PM₁₀ and PM_{2.5}), exhaust emissions from heavy construction vehicles, and reactive organic gases (ROG) that would be released during the drying phase of architectural coating (i.e., painting activities). The proposed project would be required to comply with all SCAQMD rules and regulations regarding construction emission control measures over a 14-month construction period.

The grading phase involves use of heavy equipment and the greatest generation of fugitive dust in comparison to the other phases of construction. For the purposes of construction emissions modeling, it was assumed that the project would comply with SCAQMD Rule 403, which identifies measures to reduce fugitive dust and is required to be implemented at all construction sites located within the Basin. Therefore, the following conditions, which are required to reduce fugitive dust in compliance with SCAQMD Rule 403, were included in CalEEMod for the site preparation and grading phases of construction.

1. **Minimization of Disturbance.** Construction contractors shall minimize the area disturbed by clearing, grading, earth moving, or excavation operations to prevent excessive amounts of dust.
2. **Soil Treatment.** Construction contractors shall treat all graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on-site roadways to minimize fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization materials, and/or roll compaction as appropriate. Watering shall be done as often as necessary, and at least twice daily, preferably in the late morning and after work is done for the day.
3. **Soil Stabilization.** Construction contractors shall monitor all graded and/or excavated inactive areas of the construction site at least weekly for dust stabilization. Soil stabilization methods, such as water and roll compaction, and environmentally safe dust control materials, shall be applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area shall be seeded and watered until landscape growth is evident, or periodically treated with environmentally safe dust suppressants, to prevent excessive fugitive dust.
4. **No Grading During High Winds.** Construction contractors shall stop all clearing, grading, earth moving, and excavation operations during periods of high winds (20 miles per hour or greater, as measured continuously over a one-hour period).

5. **Street Sweeping.** Construction contractors shall sweep all on-site driveways and adjacent streets and roads at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.

In addition, the emissions modeling includes the use of low-volatile organic compound (VOC) paint (50 gram per liter [g/L] for nonflat coatings) as required by SCAQMD Rule 1113.⁴

Table 2 summarizes the estimated maximum daily emissions of pollutants during construction on the project site. As shown in the table, the SCAQMD regional and LST thresholds would not be exceeded. Therefore, impacts would be less than significant.

Table 2 Estimated Construction Maximum Daily Emissions

	Maximum Daily Emissions ¹ (lbs/day)					
	ROG	NO _x	CO	PM ₁₀	PM _{2.5}	SO _x
Maximum Daily Emissions ²	7.7	13.8	14.9	3.9	2.1	<0.1
Regional Thresholds	75	100	550	150	55	150
SCAQMD Thresholds Exceeded?	No	No	No	No	No	No
Maximum On-site Emissions	6.3	13.86	12.5	3.8	2.1	<0.1
Localized Significance Thresholds ³	–	130	1,597	37	12	–
LST's Exceeded?	No	No	No	No	No	No

¹ Grading phases incorporate anticipated emissions reductions from compliance with SCAQMD Rule 403 to reduce fugitive dust. Architectural coating during construction incorporates compliance with SCAQMD Rule 1113, which requires use of the use of low-ROG paint (50 g/L for non-flat coatings).

² Daily maximum occurred during winter for ROG, NO_x, PM₁₀, SO_x and daily maximum occurred during summer for CO and PM_{2.5}.

³ LSTs are only applicable to NO_x, CO, PM₁₀ and PM_{2.5}.

Source: CalEEMod v.2020.4.0, results are provided in Appendix A-2

Operational Emissions

Operational emissions associated with the project would include resident vehicle trips (mobile sources); natural gas use (energy sources); and landscape maintenance equipment, consumer products, and architectural coatings associated with on-site operational activities (area sources). For the purposes of modeling operational emissions, several adjustments due to mandatory regulatory compliance have been made.

As shown in Table 3, operational emissions would not exceed SCAQMD thresholds for any criteria pollutant. Therefore, operational emissions would have a less-than-significant-impact on regional air quality.

⁴ Reactive Organic Gas/Compounds (ROG or ROC) or Volatile Organic Compounds (VOC) are a subset of Total Organic Gases (TOG). These reactive or volatile compounds contribute to the formation of ground level photochemical smog and are often referred to synonymously in criteria pollutant emission analyses.

Table 3 Estimated Operational Maximum Daily Emissions

Emissions Source	Maximum Daily Emissions (lbs/day)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area	0.5	<0.1	0.3	<0.1	0.1	0.1
Energy	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mobile	<0.1	<0.1	0.3	<0.1	0.1	<0.1
Total Operational Emissions	0.5	0.1	0.6	<0.1	0.1	0.1
SCAQMD Thresholds	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Notes: Emissions presented are the highest of the winter and summer modeled emissions. Numbers may not add up due to rounding.

Source: CalEEMod v.2020.4.0, results are provided in Appendix A-2

As shown in Table 2 and Table 3, project construction and operational emissions would not exceed SCAQMD thresholds for any criteria pollutant. Therefore, the project would not result in a cumulatively considerable net increase of any criteria air pollutant. These impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

Certain population groups, such as children, the elderly, and people with health problems, are considered particularly sensitive to air pollution. Sensitive receptors include land uses that are more likely to be used by these population groups, typically including health care facilities, retirement homes, school and playground facilities, and residential areas.

The California Air Resources Control Board (CARB) *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) recommends against siting sensitive receptors within 500 feet of a freeway, urban roads with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day (CARB 2005). The primary concern with respect to heavy-traffic roadway adjacency is the long-term effect of toxic air contaminants (TACs), such as diesel exhaust particulates, on sensitive receptors. The primary source of diesel exhaust particulates is heavy-duty trucks on freeways and high-volume arterial roadways.

The proposed project would have a significant impact if it would expose sensitive receptors to substantial levels of toxic air contaminants (TACs). The sensitive receptors closest to the project site are single-family residences to the northeast and east, with the closest residence located approximately 430 feet northeast of the project site. The proposed project would involve construction of a single-family residence with associated paving of a driveway that would extend Portuguese Bend Road to access the site. The project site is less than three miles west of State Route 213 (Western Avenue), which is the closest State highway, to the project site. Therefore, the nature of this development would not emit substantial levels of TACs and the site would not be located in proximity to a heavy-traffic roadway. Impacts to sensitive receptors would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

Odors are typically associated with industrial projects involving the use of chemicals, solvents, petroleum products, and other strong-smelling elements used in manufacturing processes. Other odor-inducing land uses include sewage treatment facilities and landfills. Construction activities associated with the proposed project could result in odorous emissions from diesel exhaust generated by construction equipment. However, odors associated with construction would be temporary and the highly diffusive properties of diesel exhaust would not substantially affect nearby receptors. Further, the 1993 SCAQMD *CEQA Air Quality Handbook* identifies land uses associated with odor complaints. Because single-family residences are not identified as land uses associated with odor complaints by SCAQMD, the project would not generate objectionable odors affecting a substantial number of people.

As discussed in Checklist Question 3.c., the project would not result in the generation of toxic air contaminants during construction or operation. As discussed in Checklist Question 3.b., the project would not result in the generation of any criteria pollutant emissions above SCAQMD regional or LST thresholds. As a residential project, the project does not include any uses that have the potential to generate harmful emissions that could lead to objectional odors. As such, the project would not result in any emissions that would expose or adversely affect sensitive receptors and this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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4 Biological Resources

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

A Biological Resources Assessment (BRA) was completed by Rincon Consultants, Inc. in January 2018, and is included as Appendix B. Rincon Biologist Amy Leigh Trost conducted a field reconnaissance survey of the site on foot on December 1, 2017. The purpose of the survey was to document the existing biological conditions, including plant and wildlife species, vegetation communities, the potential for occurrence of sensitive species and/or habitats, and jurisdictional waters. The results of this survey are summarized below and provided in the BRA. The following analysis is based on the findings of the BRA.

The biological resources study area (as defined in the BRA) is approximately 15.31 acres and consists of the 2.90-acre project footprint (defined as the area within the grading limits of the single-family residence and proposed improvements to the access drive), as well as a 150-foot buffer and the fuel modification areas around habitable structures (within the parcel boundary), pursuant to Los Angeles County requirements, to consider effects on resources adjacent to, but outside, the project footprint (see Figure 2 of Appendix B). Given the location of the project footprint both within the southeast portion of the property and just outside of it (for access drive improvements), the study area includes both on- and off-site areas, including a portion of the existing residences at 73 and 74 Portuguese Bend Road by the northern end of the proposed access drive.

The property is located on the southern portion of the Palos Verdes Peninsula, between open space reserves and residential development. The parcel is undeveloped, private land. It is bordered on three sides by reserves: the Portuguese Bend Reserve, which extends from the north border of the property around its western and southern sides, and the Forrester Nature Reserve, which is immediately southeast of the property. Additionally, Klondike Canyon Creek is approximately 200 feet southeast of the property and Paintbrush Canyon Creek is immediately northwest of the property. Currently, the property owners allow members of the Rolling Hills community with appropriate permission to cross the site on private trails connecting to the Portuguese Bend Reserve. The Burma Road trail in the Portuguese Bend Reserve terminates near the south property corner. An informal unpaved access route extends from that point through the property to Portuguese Bend Road. The property is bordered to the northeast by existing residential development along Running Brand Road. The project site generally slopes downward with moderate to gentle gradients to the west and localized steepened slopes along adjacent canyon walls to the south.

A fuel modification area would be required for the project pursuant to the Los Angeles County Fire Code Section 4908. A Fuel Modification Plan is a landscape plan showing all proposed and existing-to-remain vegetation on the property. The plan includes a site plan with the building footprint and Zone A, Zone B, and Zone C, which are concentric zones around each structure extending to the property line. Zone A is a setback zone and extends from the outer edge of the structure or appendage to 30 feet. Zone B is an irrigated zone and extends from the edge of Zone A to 100 feet from the structure. Finally, Zone C is a native brush thinning zone and extends from the edge of Zone B up to 200 feet from the structure, or to the property line. Deviations from these fuel modification zone sizes would require approval from the Los Angeles County Fire Department (Los Angeles County 2021).

Vegetation

Five vegetation/land cover types were observed within the study area: non-native annual grassland, coastal sage scrub, ornamental woodland, rock outcrop, and ruderal/disturbed and developed areas (see Figure 3 of Appendix B).

Non-native annual grasslands in the study area are dominated by non-native weedy species, with occasional native annuals. Approximately 1.33 acres of this vegetation community occur in the study area and 0.13 acre in the project footprint. Furthermore, this vegetation type covers approximately 0.29 acre of the fuel modification area outside of the project footprint, but within the parcel boundary. While this habitat is primarily defined as grassland, many annual herbaceous plants are commonly found in this habitat, with overall community height less than three feet. Dominant species include hare barley (*Hordeum murinum leporinum*), ripgut brome (*Bromus diandrus*), Mediterranean hoary mustard (*Hirschfeldia incana*), and black mustard (*Brassica nigra*). A portion of this community has been mowed and graded to manage fuels for fire suppression.

Coastal sage scrub in the study area encompasses approximately 8.58 acres, though its density varies. Furthermore, this vegetation type covers approximately 3.31 acres of the fuel modification area outside of the project footprint, but within the parcel boundary. Dominant species observed in the study area include California sagebrush (*Artemisia californica*) and lemonade berry (*Rhus integrifolia*), with black sage (*Salvia mellifera*), purple sage (*Salvia leucophylla*), California brittlebrush (*Encelia californica*), and California buckwheat (*Eriogonum fasciculatum*). Previous disturbances have resulted in a patchy configuration of 1.06 acres of this habitat in the project footprint, with intermixed ruderal and disturbed areas between patches of scrub. The establishment of weedy species, such as Mediterranean hoary mustard and nonnative annual grasses, has compromised the coastal sage scrub in the project footprint. Therefore, the habitat quality of this community is lower than that of a pristine stand of scrub.

Ornamental woodland within the study area occurs along Portuguese Bend Road between developed residential properties. Species found in this community are primarily non-native ornamental plantings. Ornamental trees including Peruvian pepper tree (*Schinus molle*), Brazilian pepper tree (*Schinus terebinthifolius*), eucalyptus (*Eucalyptus* sp.), and pine (*Pinus* sp.), are present within the study area. English ivy (*Hedera helix*) is abundant in the understory and growing on the trees. One coast live oak (*Quercus agrifolia*) was also observed near the proposed driveway. Ornamental woodlands cover 0.98 acre of the study area, of which 0.09 acre occur within the project footprint, primarily along the access road improvement area. This vegetation type is not located within the fuel modification area.

Ruderal/disturbed/developed areas include areas where vegetation is sparse, heavily disturbed, or absent. Ruderal/disturbed and developed areas in the study area include roadsides, footpaths, the mulched access drive, and a picnic area, the majority of which are outside the project footprint. This land cover type encompasses 4.26 acres in the study area and 1.62 acres in the project footprint. Furthermore, this vegetation type covers approximately 0.72 acre of the fuel modification area outside of the project footprint, but within the parcel boundary.

A 0.16-acre area of exposed rock occurs in the study area just south of the project footprint, where there is a small rock slide above Klondike Canyon. This landcover occurs outside the project footprint, though approximately 0.07 acre is within the fuel modification area.

Wildlife Habitat

The project site and surrounding area provide habitat for wildlife species that commonly occur in coastal scrub habitats and residential areas of the region. Wildlife species observed during the survey included red-tailed hawk (*Buteo jamaicensis*), black phoebe (*Sayornis nigricans*), house finch (*Haemorhous mexicanus*), yellow-rumped warbler (*Setophaga coronata*), American crow (*Corvus brachyrhynchos*), and California ground squirrel (*Otospermophilus beecheyi*).

Regulatory Setting

Regulatory authority over biological resources is shared by federal, state, and local authorities under a variety of statutes and guidelines. The California Department of Fish and Wildlife (CDFW) is a trustee agency for biological resources throughout the state under CEQA and has direct jurisdiction under the California Fish and Game Code (CFGF). Under the State and Federal Endangered Species Acts (ESA), the CDFW and the U.S. Fish and Wildlife Service (USFWS) also have direct regulatory authority over species formally listed as Threatened or Endangered. If federal and State listed species are present and may be impacted by the proposed project, permitting through the CDFW and USFWS would be required beyond the mitigation measures proposed by the project. In particular, projects that result in “take”⁵ of federal listed threatened or endangered species are required to obtain permits from the USFWS through either Section 7 (interagency consultation with a federal nexus) or Section 10 (Habitat Conservation Plan [HCP]) of the Federal ESA, depending on the involvement by the federal government in permitting and/or funding of the project. Non-federal (private and state land) actions affecting listed species and critical habitats are subject to the HCP requirements of Section 10 (a)(1)(B) of the Federal ESA. The U.S. Army Corps of Engineers (Corps) has regulatory authority over specific biological resources, namely wetlands and waters of the United States, under Section 404 of the Federal Clean Water Act. Additional details regarding authorities and roles of various regulatory agencies with jurisdiction over biological resources are included in the BRA Appendix A: Regulatory Guidance (Appendix B).

Plants or animals may be considered “special-status” due to declining populations, vulnerability to habitat change, or restricted distributions. Special-status species are classified in a variety of ways, both formally (e.g., State or Federally Threatened and Endangered Species) and informally (“Special Animals”). Species may be formally listed and protected as Threatened or Endangered by the CDFW or USFWS or as California Fully Protected (CFP). Informal listings by agencies include California Species of Special Concern (CSC), which is a broad database category applied to species, roost sites, or nests, or as USFWS Candidate taxa. CDFW and local governmental agencies may also recognize special listings developed by focal groups (e.g., Audubon Society Blue List, California Native Plant Society (CNPS) Rare and Endangered Plants, U.S. Forest Service regional lists). Section 3503.5 of the CFGF specifically protects birds of prey and their nests and eggs against take, possession, or destruction. Section 3503 of the CFGF also incorporates restrictions imposed by the federal Migratory Bird Treaty Act (MBTA) with respect to migratory birds (which consists of most native bird species).

The City of Rolling Hills Ordinance for new development and redevelopment projects (Section 8.32.095 of the RHMC) requires compliance with the Los Angeles County Municipal National Pollutant Discharge Elimination System (NPDES) Permit (MS4 Permit) and in some cases with the County of Los Angeles LID Standards Manual. The LID standards manual includes Best Management Practices (BMPs) and requirements intended to avoid impacting Significant Ecological Areas (SEAs) adjacent to development projects. As defined in the RHMC (Section 8.32.040), SEAs are areas “determined to possess an example of biotic resources that cumulatively represent biological diversity, for the purposes of protecting biotic diversity, as part of the Los Angeles County General Plan.”

The Rolling Hills Community Association (RHCA) also has jurisdiction over properties in the City. All new developments must be approved by the RHCA and the City Planning Department. The RHCA

⁵ “Take” under federal definition means to harass, harm (which includes habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

Covenants, Conditions, and Restrictions (CC&Rs) related to the preservation of biological resources include the following:

- The removal of trees twelve (12) feet or over requires approval by the Board of Directors of the Association.
 - The 2015 RHCA Landscape Guidelines outline recommended residential plantings and require a landscape plan, including plant lists, for all new residential developments.
 - Native California species or Mediterranean drought tolerant species are recommended for front yards (visible from the street).
 - Native species are also recommended in canyons and areas leading into canyons.
- a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?*

Special-status Species

For the purposes of this analysis, special-status species are those plants and animals listed, proposed for listing, or candidates for listing as Threatened or Endangered by the USFWS under the Federal ESA; those listed or proposed for listing as Rare, Threatened, or Endangered under the California Endangered Species Act (CESA) or Native Plant Protection Act; those identified as Fully Protected under Sections 3511, 4700, 5050, and 5515 of the CFGC; “Species of Special Concern” (SSC) identified by the CDFW; and plants occurring on Ranks 1 and 2 of the CNPS’s California Rare Plant Rank (CRPR) system. A list of special-status plant and animal species with potential to occur on-site was developed based on a review of the California Natural Diversity Database (CNDDB), previous knowledge of the vicinity of the site, and general knowledge of the regional area. The following analysis summarizes the results of this research; details are included in Appendix B.

Special-status Plants

Eight special-status plant species were identified as having a moderate potential to occur in the project area in coastal scrub habitat. These include Coulter's saltbush (*Atriplex coulteri*), CRPR 1B.2; south coast saltscale (*Atriplex pacifica*), CRPR 1B.2; Davidson's saltscale (*Atriplex serenana* var. *davidsonii*), CRPR 1B.2; island green dudleya (*Dudleya virens* ssp. *insularis*), CRPR 1B.2; mesa horkelia (*Horkelia cuneata* var. *puberula*), CRPR 1B.1; decumbent goldenbush (*Isocoma menziesii* var. *decumbens*), CRPR 1B.2; sea dahlia (*Leptosyne maritima*), CRPR 1B.2; and Brand’s star phacelia (*Phacelia stellaris*), CRPR 1B.1.

None of these species are state or federally listed; therefore, impacts to these species would only be considered significant under CEQA if the loss of individuals on the project site represented a population-level impact that resulted in a loss of, or risk to, the entire regional population. Given the small size of the project footprint, the presence of extensive areas of similar habitat (i.e., coastal sage scrub, annual grassland, and rock outcrops) in adjacent reserves and outside the project footprint on the property, direct impacts to non-listed special-status plants that may occur as a result of the project would not be significant.

Indirect impacts could occur due to the spread of invasive, non-native species from construction equipment or imported fill materials. Invasive, non-native plant species can out-compete native species and/or alter habitat towards a state that is unsuitable for special-status species. For

example, the spread of certain weed species can reduce the biodiversity of native habitats through displacement of vital pollinators, potentially eliminating special-status plant species. Indirect impacts to special-status plants species from invasive weeds are potentially significant because invasive weeds can spread to the extent that they affect rare plants at the local and/or regional population-level.

Implementation of Mitigation Measure BIO-1 is recommended to reduce potential indirect impacts to special-status plant species to a less-than-significant level.

Special-status Wildlife

The following five special-status wildlife species were identified to have a moderate or high potential to occur within the study area in coastal scrub habitat or adjacent grassland: southern California legless lizard (*Anniella stebbinsi*), SSC; Palos Verdes blue butterfly (*Glaucopsyche lygdamus palosverdesensis*), federally endangered; San Diego desert woodrat (*Neotoma lepida intermedia*), SSC; coastal California gnatcatcher (*Poliophtila californica californica*), federally threatened and SSC; and coast horned lizard (*Phrynosoma blainvillii*), SSC.

California gnatcatchers have a potential to be present (nesting) on or in the vicinity of the project footprint during construction. This species has been reported from the Portuguese Bend Reserve that borders the property, and some of the observations are from the same band of coastal scrub that extends into the study area (refer to Figure 4 of Appendix B). Direct impacts could include injury to or mortality of individuals through destruction of active nests during vegetation trimming, or through nest failure from noise and other disturbance in the vicinity of a nest. Any direct impacts to gnatcatcher would be significant.

The project site includes low quality foraging habitat for California gnatcatcher and project activity would result in a slight reduction of foraging habitat. The project would also convert approximately 1.19 acres of critical habitat to residential uses (the critical habitat impacted includes 1.06 acres of coastal sage scrub and 0.13 acre of annual grassland in the project footprint). Approximately 3.61 acres of critical habitat are within the proposed fuel modification area, but outside of the project footprint. Intensity of impact in the Fuel Modification area would be greatest in Zones A and B; Zone C would retain some existing vegetation as management is focused on thinning only. The project could result in indirect impacts to this species through loss of habitat. Implementation of Mitigation Measure BIO-2 is recommended to reduce potential impacts to California gnatcatcher to a less-than-significant level.

While the host plants of the Palos Verdes blue butterfly—locoweed (*Astragalus trichopodus* var. *lonchus*) and deerweed (*Acmispon glaber*, formerly *Lotus scoparius*)—were not observed during the reconnaissance survey, botanical surveys were not conducted and the timing of the survey was not conducive to detection. Critical habitat for the Palos Verdes Blue butterfly occurs approximately 1.6 miles to the southeast of the study area, at the switchbacks on Palos Verde Drive; historical occurrences are known from the adjacent Forrestal Nature Reserve. Considering the presence of critical habitat and historical occurrences in the vicinity of the study area, there is potential that the host plants of the Palos Verdes blue butterfly could occur on or adjacent to the project footprint, in which case the species may be present during construction. Direct impacts would be most likely to occur if eggs, larvae, or pupae are present; adults in flight are less likely to be directly impacted. Direct impacts include mortality of individuals due to crushing or removal of host plant species and would be considered significant. Indirect impacts may occur should unoccupied host plants be removed, creating a small reduction in suitable habitat. Therefore, Mitigation Measure BIO-3 is recommended to reduce potential impacts to a less-than-significant level.

In addition to the mitigation measures described on the following page, permitting would be required if federal and state listed species are present and may be impacted by the proposed project. If California gnatcatcher or Palos Verdes blue butterfly (both federally listed) are detected during surveys, an Incidental take permit (ITP) pursuant to Section 7(a) (2) or Section 10(a) 1(B) of the Federal ESA would be required. In addition, non-federal (private and state) actions affecting listed species and critical habitats are subject to the Habitat Conservation Plan (HCP) requirements of Section 10 (a)(1)(B) of the Federal ESA.

The remaining three species are not state or federally listed: southern California legless lizard, coast horned lizard, and San Diego desert woodrat. These species may occur on-site during construction and could be directly impacted due to injury or mortality. Impacts to these SSC species would be significant if they threaten the continued existence of the population. However, given the small size of the project footprint within the property and abundant habitat on the Portuguese Bend Preserve, both direct and indirect impacts on a population level are not expected; therefore, impacts would be less than significant.

The study area contains habitat, such as open grassland on the project site and trees and buildings in the adjacent area, which can support nesting birds, including raptors protected under the MBTA and the CFGC. Although some of these areas are outside of the project footprint, project impacts could, both directly (e.g., ground disturbance) and indirectly (e.g., construction noise, lighting, and fugitive dust), affect these species. Ground disturbing activities could result in the destruction of nests constructed by ground nesting birds and construction noise could result in the abandonment of nests in the adjacent trees. Potential impacts could be significant and, therefore, require implementation of Mitigation Measure BIO-4 to reduce impacts to a less-than-significant level.

Mitigation Measures

BIO-1 Special-Status Plant Avoidance – Invasive Weed Prevention

Reasonable efforts shall be made to avoid the spread or introduction of invasive weeds during implementation of the proposed project. Appropriate best management practices that are intended and designed to curtail the spread of invasive plant species shall be implemented during construction. These include, but are not limited to, the following:

- During construction, the project shall make all reasonable efforts to limit the use of imported soils for fill. Soils currently existing on-site shall be used for fill material.
- Equipment and vehicles must be confirmed to be free of caked on mud and weed seeds/propagules before accessing the project site. This can be achieved by washing vehicles and equipment prior to entry to the site, or other effective methods approved by the City.
- Because the site already contains several highly invasive species (rated by the California Invasive Plant Council [Cal-IPC]), all equipment and vehicles must be confirmed to be free of caked on mud and weed seeds/propagules before leaving the project site. This can be achieved by washing vehicles and equipment prior to leaving the site, or other effective methods approved by the City.
- Landscaping materials shall not include invasive, non-native ornamentals as identified by the Cal-IPC Inventory.

BIO-2 California Gnatcatcher Avoidance and Minimization Measures

AVOIDANCE AND MINIMIZATION MEASURES

Prior to grading and construction, protocol level surveys shall be completed in accordance with the latest guidelines issued by the USFWS. Surveys shall be conducted by a USFWS permitted biologist prior to the start of construction. The results of the survey must be provided in a report to USFWS. This report shall be submitted within 30 days of completion of surveys.

TAKE AVOIDANCE MEASURES

If protocol surveys determine that occupied habitat is present in the project footprint plus a 500-foot buffer, where accessible, possible methods required during project construction to avoid and/or minimize direct take of California gnatcatcher include:

- All brush clearing or grading taking place within occupied habitat of the California gnatcatcher (defined as within 500 feet of any gnatcatcher sightings [USFWS, 2007b]) during construction shall be conducted from September 1 through February 14, which is outside the coastal California gnatcatcher breeding season.
- When conducting all other construction activities during the California gnatcatcher breeding season of February 15 through August 30, within habitat in which California gnatcatcher are known to occur or have potential to occur, the following avoidance methods shall apply:
 - If an active nest is located, a 300-foot no-construction buffer shall be established around each nest site; however, there may be a reduction of this buffer zone depending on site-specific conditions (such as topography, line-of-sight to the nest, or the existing ambient level of activity) and implementation of measures to reduce indirect impacts, including noise (for example, placement of temporary noise walls or sound blankets around active construction areas). The Applicant shall contact USFWS to determine the appropriate buffer zone and acceptable measures that would reduce indirect impacts, such as noise, to levels that ensure disturbance of the active nest is avoided. No construction shall take place within this buffer until the nest is no longer active.
 - The project biologist shall meet with the owner, permittee or designee, and the construction crew to conduct an on-site educational session regarding the need to avoid impacts outside of the approved development area.
 - Conspicuous construction fencing shall be maintained to protect all habitat outside the approved construction area, until the conclusion of construction. Prior to commencement of grading, the project biologist shall confirm with the contractor or a licensed surveyor that the construction fencing has been placed at the outer edge of the construction area.
 - A Biological Monitor familiar with California gnatcatcher and its habitat shall be present during all vegetation clearing and other activities within coastal sage scrub and shall monitor the project to avoid or minimize unanticipated impacts to the California gnatcatcher and its habitat.
 - All active California gnatcatcher nests shall be reported within 24 hours to the USFWS upon detection.
 - If it is determined that active nests would be disturbed by construction activities, work shall be halted until further direction or approval to work is obtained from the appropriate agencies.

COMPENSATION MEASURES FOR SPECIES/HABITAT IMPACTS

Impacts requiring mitigation include permanent and temporary disturbance of occupied habitats. Permanent impacts to occupied habitat shall include acquisition and preservation of occupied habitat at a 1:1 ratio. Temporary impacts to occupied habitat shall be mitigated at a 1:1 ratio and can include 1:1 on-site restoration and 1:1 acquisition and preservation of occupied habitat.

BIO-3 Palos Verdes Blue Butterfly Preconstruction Surveys

Prior to grading and construction, a qualified biologist shall conduct surveys for locoweed and deerweed, host plants of Palos Verdes blue butterfly.

If host plants are located, they shall be avoided. If avoidance is not possible, focused surveys shall be conducted to determine the presence or absence of the butterfly species. This may include transect surveys during the adult flight period (January through May), and/or inspection of host plants for all life forms (egg, larva, pupa, and adult). If individuals of any life stage are detected during focused surveys, a permit for relocation shall be obtained from USFWS, and they shall be relocated by a USFWS permitted biologist.

BIO-4 Nesting Bird Avoidance

To avoid disturbance of nesting and special-status birds, including raptorial species protected by the MBTA and CFGC, activities related to the project shall include the following:

- Pre-construction nesting bird surveys shall be conducted to determine the presence/absence, location, and status of any active nests on-site. Nesting bird surveys are typically conducted within seven days prior to construction activities, dependent on local agency requirements.
- Pre-construction survey results shall be provided in a written report within 14 days of the completion of surveys. The report shall include the date of the report, authors and affiliations, contact information, introduction, methods, study location (include map), results, discussion, and literature cited.
- If active nests are discovered on the project site, a qualified biologist shall establish a buffer around the nest. Typical buffers range from 100 feet for nesting birds and up to 500 feet for nesting raptors around active nests. No construction within the buffer is allowed until a qualified biologist determines that the nest is no longer active. Encroachment into the buffer can occur at the discretion of a qualified biologist in coordination with the City.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

Plant communities are considered sensitive biological resources if they have limited distributions, have high wildlife value, include sensitive species, or are particularly susceptible to disturbance. The CDFW ranks sensitive communities as "threatened" or "very threatened" and keeps records of their occurrences in CNDDDB. Similar to special-status plant and wildlife species, vegetation alliances are ranked 1 through 5 based on NatureServe's methodology, with those alliances ranked globally (G) or statewide (S) with 1 through 3 considered as sensitive, though there are some exceptions. Southern coastal bluff scrub is documented in CNDDDB as occurring within a 5-mile radius of the project footprint. However, this community is restricted to a narrow band along the shoreline and adjacent

to coastal dunes. Accordingly, it is not present within the study area. No other sensitive plant communities, habitat types, or riparian areas were identified in the study area. Therefore, the project would have no impact on any riparian habitat or other sensitive natural communities.

NO IMPACT

- c. *Would the project 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?*

Although no wetlands or waters of the U.S. or State are present in the project footprint, Paintbrush Canyon Creek and Klondike Canyon Creek are in the vicinity. Paintbrush Canyon Creek is northwest of the project site. Klondike Canyon Creek is approximately 200 feet downslope of the project footprint, where it could be impacted by runoff and sedimentation during construction of the project. However, the City of Rolling Hills' Ordinance for new development and redevelopment projects (Section 8.32.095.A.6) requires compliance with the Los Angeles County Municipal NPDES Permit (MS4 Permit) and in some cases with the County of Los Angeles' LID Standards Manual. This requirement applies to new development directly adjacent to or discharging directly into SEAs as defined in the Los Angeles County General Plan. The County's updated General Plan identifies the Palos Verdes Peninsula and Coastline SEA occurring on the adjacent Portuguese Bend and Forrester Reserves and includes Klondike Canyon Creek and Paintbrush Canyon Creek. The proposed project would, therefore, be subject to the LID standards intended to avoid impacting SEAs adjacent to development projects. Upon compliance with the MS4 Permit and LID standard, potential impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project 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?*

The project footprint is small compared to the size of the property and surrounding preserved open space. Also, the study area is situated near existing disturbed areas, which minimizes the potential adverse effects on wildlife movement through intact habitat. Wildlife traveling between the Portuguese Bend and Forrester Reserves are more likely to cross south of the site due to the steepness of Klondike Canyon within and adjacent to the study area, and the existing development northeast and east of the site. The project could result in minor alterations of wildlife behavior, such as altered use of travel routes, in the immediate vicinity of the site due to noise and other temporary effects of construction activities. However, the project would not substantially interfere with the movement of resident or migratory fish or wildlife or impede the use of wildlife nursery sites. Therefore, potential impacts on wildlife movement would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- e. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

The RHCA has jurisdiction over properties within the City. All new development requires approval by the RHCA and the City Planning Department. Under the RHCA Covenants, Conditions, and Restrictions (CC&Rs), removal of trees 12 feet and over requires approval by the RHCA Board of Directors. Additionally, the 2015 RHCA Landscape Guidelines outline recommended residential

plantings. A landscape plan, including plant lists, is required for all new residences in the RHCA area. Native California species or Mediterranean drought tolerant species are recommended for front yards (visible from the street). Native species are also recommended in canyons and areas leading into canyons. Of these areas, the RHCA guidelines state that "California natives should be used since it is common for vegetation to spread property to property. Invasive, non-naturalized or exotic plants should never be planted in this sector."

No trees over 12 feet would be removed. In addition, the project applicant would be required to obtain approval from the City of Rolling Hills and the RHCA with regard to any necessary tree removals and the proposed landscape plan. Therefore, the project would not conflict with local policies and ordinances, and no impact would occur.

NO IMPACT

- f. Would the project 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 project site is adjacent to conservation easements under the City of Rancho Palos Verdes' draft NCCP/HCP. However, the site is not under the jurisdiction of any Habitat Conservation Plans (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan.

Special-status species within the preserve could be indirectly affected by disturbances from construction and a slight reduction in habitat caused by development. Special-status species habitats could also be impacted if nonnative invasive species were used in landscaping, which could spread to the preserve. However, the proposed project is subject to the requirements of the RHCA for native landscaping, as well as the County NPDES Permits and LID standards, which regulate potential runoff and sedimentation to adjacent areas. Additionally, the RHMC for site plan review (Section 17.46.050) requires that site designs integrate existing topographic features of the site and surrounding native vegetation, to the greatest extent possible. The City's residential development standards also include lighting restrictions for outdoor lighting, including limiting wattage, requiring certain fixtures to cast light downward, and limiting the time motion-activated lights are on (Section 17.16.190).

The mitigation measures described above (BIO-1 through BIO-4) address impacts to special-status species and natural habitats occurring within the study area. When implemented in combination with the RHCA, NPDES, and RHMC requirements, impacts to sensitive species and communities occurring on the adjacent preserve are not expected. Thus, no conflicts with the NCCP/HCP are expected, and additional mitigation is not required.

NO IMPACT

5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

A Cultural Resources Analysis (CRA) was completed for the proposed project by Rincon Consultants, Inc. on January 11, 2018, and revised on August 24, 2022, and is included as Appendix C-1. The CRA documents the cultural records search and field survey of the project site. This section provides an analysis of the project's impacts on cultural resources, including historic and archaeological resources. The following are California state regulations with respect to cultural resources.

CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources (PRC Section 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources, or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (State CEQA Guidelines, Section 15064.5[a] [1-3]).

A resource shall be considered historically significant if it:

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

In addition, if a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC, Section 21083.2[a], [b], and [c]. PRC, Section 21083.2[g]) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
 2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
 3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.
- a. *Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?*

The project site is undeveloped and has no past or present structures that have been developed on-site. As part of the CRA, Rincon conducted a search of the California Historical Resources Information System at the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton. The search was conducted to identify any previously recorded cultural resources and previously conducted cultural resources studies in the project site and within a half-mile radius. The records search additionally included a review of available historic maps and the National Register of Historic Places (NRHP) and the CRHR. The SCCIC records search identified two previously recorded cultural resources within a half-mile radius of the project site; however, both listings are located off-site and would not be impacted by the proposed project. In addition, the SCCIC records search identified five previously conducted cultural resources studies within a half-mile radius of the project site, one of which included a portion of the project site. However, this study did not identify any cultural resources on the project site. Therefore, based on the records search, the proposed project would have no impact on historical resources.

NO IMPACT

- b. *Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?*

On January 9, 2018, Rincon performed a pedestrian field survey of an approximately 3.15-acre area of the project site (see Attachment A of Appendix C-1 for a figure of the survey area).⁶ The survey area has been previously disturbed by grading of the existing easement, a fire road, earth moving equipment (e.g., tractor) to clear vegetation, and imported mulch. However, no archaeological resources were identified during the field survey. Despite this disturbance, the project site may still be considered sensitive for cultural archaeological resources. Since the project involves ground disturbances that may have the potential to uncover previously undiscovered archaeological resources, this is a potentially significant impact.

Mitigation Measure

Compliance with Mitigation Measure CR-1 would reduce impacts to unanticipated archaeological resources to a less-than-significant level by providing a process for evaluating and, as necessary, avoiding impacts to any identified resources.

CR-1 Unanticipated Discovery of Archaeological Resources

If archaeological resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology must be contacted immediately to evaluate the find. The

⁶ The pedestrian field survey included a survey of a 3.15-acre area. The new disturbance footprint for the project site is 2.9 acres.

evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility if the preparation of such a plan is determined necessary by the qualified archaeologist in consultation with the City of Rolling Hills. If the discovery proves to be significant under CEQA, additional work, such as data recovery excavation, may be warranted. A significance determination will be made by the City based on the recommendations of the qualified archaeologist.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

Although human remains are not known to be present on-site, the potential for the recovery of human remains is always a possibility during ground-disturbing activities and may result in a significant impact related to the disturbance of human remains. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, who will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours and provide recommendations to the landowner as to the treatment of the human remains. With adherence to existing regulations regarding the treatment of human remains, this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

6 Energy

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

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

The proposed project would involve the use of energy during construction and operation. Energy use during construction would be primarily in the form of fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators for lighting. Temporary grid power may also be provided to construction trailers or electric construction equipment. Long-term operation of development projects would require permanent grid connections for electricity and natural gas service to power internal and exterior building lighting, and heating and cooling systems. In addition, the increase in vehicle trips associated with the addition of a single-family residence would increase fuel consumption.

Southern California Edison (SCE) would provide electricity service for the proposed project. SCE's power mix consists of approximately 33 percent renewable energy sources (wind, geothermal, solar, eligible hydroelectric, and biomass and biowaste) (California Energy Commission [CEC] 2020a). Gas service for the proposed project would be provided by SoCalGas. According to SoCalGas, more than 101,000 miles of transmission and distribution pipes and four natural gas storage facilities make up the natural gas infrastructure needed to provide natural gas through the SoCalGas service territory (SoCalGas2022).

According to the CEC, California used 280,738,377 megawatt hours (MWh) of electricity in 2021 and 1,108,501,634,359 kilo British thermal units (kBtu) of natural gas in 2021 (CEC 2021a; 2021b;). According to the California Department of Tax and Fee Administration, Californians consumed approximately 13.8 billion gallons of motor vehicle fuels in 2021 (CEC 2022). Total estimated energy usage of the proposed project, including motor vehicle fuel, is summarized and compared to statewide usage in Table 4. The proposed project would result in increased weekday trips and vehicle miles traveled (VMT) as compared to the current undeveloped site. However, development and operation of the single-family residence under the proposed project would make a minimal contribution to statewide energy consumption and would not adversely affect energy supplies.

Table 4 Project-Related Energy Usage Compared to State-Wide Energy Usage

Form of Energy	Units	Annual Project-Related Energy Use ¹	Annual State-Wide Energy Use	Project % of State-Wide Energy Use
Electricity	MWh	8 ¹	280,738,377 ²	0.000003%
Natural Gas	kBtu	23,898 ¹	1,108,501,634,359 ³	0.000002%
Motor Vehicle Fuels	gallons	876 ¹	13,800,000,000 ⁴	0.000006%

MWh = megawatt-hour; kBtu = kilo British thermal unit

¹ Energy Use provided in CalEEMod output (see Appendix A-2). The project's estimated annual VMT of 31,872 was divided by the average fuel economy for passenger vehicles (36.4 miles per gallon) provided by the United States Department of Transportation, Bureau of Transportation Statistics (2016) to obtain the project's annual fuel demand.

² California Energy Commission, 2021a. Electricity Consumption by County. Available: <https://ecdms.energy.ca.gov/elecbycounty.aspx>.

³ California Energy Commission, 2021b. Natural Gas Consumption by County. Available: <https://ecdms.energy.ca.gov/gasbycounty.aspx>.

⁴ California Energy Commission, 2022. California Gasoline Data, Facts, and Statistics. Available: <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-gasoline-data-facts-and-statistics>.

The proposed project would be subject to the energy conservation requirements of the 2022 California Energy Code (Title 24, Part 6, of the California Code of Regulations, *California's Energy Efficiency Standards for Residential and Nonresidential Buildings*) and the 2022 California Green Building Standards Code (Title 24, Part 11 of the California Code of Regulations). The 2022 California Energy Code provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California, and applies to the building envelope, space-conditioning systems, and water-heating and lighting systems of buildings and appliances. The 2022 California Energy Code provides guidance on construction techniques to maximize energy conservation. Minimum efficiency standards are given for a variety of building elements, including appliances; water and space heating and cooling equipment; and insulation for doors, pipes, walls and ceilings. The 2022 California Energy Code emphasizes saving energy at peak periods and seasons, and improving the quality of installation of energy efficiency measures. The 2022 California Green Building Standards (2022 CALGreen) Code aims to improve public health, safety, and general welfare by enhancing the design and construction of buildings through concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices, including planning and design, energy efficiency, water efficiency, and material conservation. The 2022 CALGreen Code includes a set of mandatory minimum environmental performance standards for all ground-up new construction of residential structures and stricter voluntary performance standards. Meeting Title 24 energy conservation requirements would minimize the potential for energy to be used in an inefficient, wasteful, or unnecessary manner per PRC Section 21100(b)(2). Therefore, the proposed project's impacts to energy resources during construction and operation would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

In 2018, the City of Rolling Hills developed a Climate Action Plan (CAP) in cooperation with the South Bay Cities Council of Governments (SBCCOG) to reduce greenhouse gas (GHG) emissions in the City. Although the CAP's primary purpose is to reduce GHG emissions, many of the GHG reduction strategies contained in the CAP target energy efficiency and renewable energy as means to

achieving GHG reduction goals. As discussed in detail in Section 8, *Greenhouse Gas Emissions* and outlined in Table 8, the proposed project would be consistent with City's CAP and the applicable energy efficiency strategies contained therein. As described above in Checklist Question 6.a, construction and operation of the proposed project would be required to comply with relevant provisions of the 2022 California Energy Code and CALGreen Code. The project would not conflict with a State or local plan for renewable energy or energy efficiency, such as the City's CAP, and this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potentially substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is made unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial directly or indirectly risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Coast Geotechnical, Inc. (Coast) prepared the following reports and memos for the proposed project: Preliminary Geologic Investigation (2012), Report of Percolation Feasibility (2013), Addendum Report to Percolation Feasibility (2015a), Geotechnical Review of Proposed Grading Plan (2015b), Geologic Assessment of Proposed Private Offsite Access Drive (2016), the Response to Geotechnical Comments Concerning Proposed Offsite Driveway Construction (2017), a response report dated August 2020 to respond to peer review comments provided by GMU (2019), and additional response reports dated March 2021 and November 2021. SWN Soiltech Consultants, Inc. (SWN Soiltech) prepared a Preliminary Soils Engineering Investigation for the proposed project in May 2012. Willdan Geotechnical provided a geotechnical review of this investigation in June 2017, and, in July 2018, Willdan provided an approval of the geotechnical report with a condition of approval that is included in Mitigation Measure GEO-1, below (Willdan 2018). In addition, GMU conducted a peer review of the aforementioned reports and memos in December 2019. This peer review prepared by GMU (2019) and the response reports from Coast (2020, 2021a, and 2021b) are also included in Appendix D of this IS/MND, in addition to all other referenced reports and memos.

The geotechnical assessments for the project evaluated subsurface soil and geologic conditions underlying the site, and provided conclusions and recommendations pertaining to the geotechnical aspects of project design and construction. Neither soil nor geologic conditions were encountered during the investigation that would impede construction of the proposed project provided the recommendations presented in the geotechnical assessments are followed and implemented during design and construction. The following is based on the information and analysis contained in the geotechnical assessments and peer reviews completed for the project, which are provided as Appendix D.

- a.1. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*

Southern California is located in an active seismic region. Moderate to strong earthquakes can occur on numerous local faults. Southern California faults are classified as “active,” “potentially active,” or “inactive.” Faults from past geologic periods of mountain building that do not display any evidence of recent offset are considered “potentially active” or “inactive.” Faults that have historically produced earthquakes or show evidence of movement in the past 11,000 years are known as “active faults.” No active seismic faults are known or suspected to traverse the project site; however, the Palos Verdes fault is located approximately one mile northeast of the project site, which could be classified as active due to increased amount of seismicity (Coast 2012; Coast 2016).

According to the DOC Earthquake Zones of Required Investigation online viewer and Fault Activity Map of California online viewer, the proposed project is not within an Earthquake Fault Zone or an The Alquist-Priolo Earthquake Fault Zone (DOC 2022; DOC 2015). Furthermore, no known active faults transverse the project site, including the access drive; therefore, the potential for surface fault rupture at the site is remote (Coast 2012; Coast 2016). Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.2. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

No known faults traverse the project site; however, the Palos Verdes fault is located approximately one mile northeast of the site. The proposed project is located in a seismically active area that has historically been affected by moderate to occasionally high levels of ground motion. Due to the proximity to the Palos Verdes fault, the proposed project could experience ground shaking as well as some background shaking from other seismically active areas of Southern California (Coast 2012; Coast 2016). However, this hazard is common throughout California and the proposed project would pose no greater risk than is already present for the region to public safety or destruction of property by exposing people, property, or infrastructure to seismically associated hazards. According to the geotechnical assessments, the proposed project would not result in a substantial adverse effect involving seismic ground shaking if recommendations presented in the geotechnical assessments are followed and implemented during design and construction (Coast 2012; Coast 2016). Recommendations included in the geotechnical assessments provide measures related to slope construction and site stability, foundation support, on-site retaining walls, proper seismic design, and plan review. See Appendix D for the geotechnical assessments and project recommendations provided by Coast. In addition, the proposed project would be constructed in accordance with California Building Code (CBC) standards for earthquake safety. The CBC requires various measures of all construction in California to account for hazards from seismic shaking. Impacts related to seismically induced ground shaking would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.3. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

Liquefaction is a seismic phenomenon in which loose, saturated, non-cohesive granular soils exhibit severe reduction in strength and stability when subjected to high-intensity ground shaking. Liquefaction-related effects include loss of bearing strength, amplified ground oscillations, lateral spreading, and flow failures. Liquefaction occurs when three general conditions exist: shallow groundwater; low density, non-cohesive sandy soils; and high-intensity ground motion. The project site is underlain by cohesive soils and near surface bedrock and liquefaction potential is negligible (Coast 2012; Coast 2016). In addition, according to the DOC, the project site is not located within a liquefaction zone (Coast 2016; DOC 2022). Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.4. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

The portion of the project site that would include the construction of the proposed home, guesthouse and pool area is underlain by bedrock (Coast 2012). The project site generally slopes downward to the southwest with moderate to gentle gradients, with localized steepened slopes along adjacent canyon walls. Global ancient and recent land movement has affected portions of the 21-acre property, while other portions of the property do not show any recent movement. According to the Coast geotechnical assessments, the proposed single-family residence would not be located in areas most likely to experience some magnitude of movement. However, a section of the proposed access drive would be located in a portion of the Flying Triangle Landslide area and would be subject to movement and future distress. The site for the proposed access drive is underlain by unmapped artificial fill, colluvium, bedrock, and landslide materials. The Flying Triangle

Landslide zone is a 120-acre triangular shaped area in Klondike Canyon that has been subject to major reactivated landslides (Coast 2012; Coast 2016). However, the proposed access drive would not aggravate the stability of the landslide zone provided the project does not increase the slide mass and utilizes controlled drainage to minimize infiltration and surface runoff of surface waters (Coast 2016). In addition, the proposed driveway construction is intended to improve local conditions such as drainage and surface runoff, which if left uncontrolled, would typically be detrimental to the global or local stability of slopes (Coast 2017). According to the Preliminary Soils Engineering Investigation prepared for the project by SWN Soiltech (2012), the potential for gross instability that may affect the project would be low if the site is improved and maintained in accordance with the report's recommendations, which include measures for preventative site and slope maintenance, and proper on-site and driveway drainage control. In addition, the Geotechnical Review of Proposed Grading Plan includes added recommendations related to grading and construction of the proposed project (Coast 2015b; Coast 2020). Recommendations included in the geotechnical assessments provide measures related to site preparation, slope construction and site stability, seismic design parameters, utility placement, pool area design, foundation support, and concrete slabs (Coast 2012; SWN Soiltech 2012; Coast 2015a; Coast 2016; Coast 2020). See Appendix D for all geotechnical assessments and project recommendations provided by Coast and SWN Soiltech. Compliance with project recommendations would result in a less than significant impact associated with landslides. The specific measures under Mitigation Measure GEO-1 would be required to reduce potential impacts to a less than significant level.

Mitigation Measure

Compliance with Mitigation Measures GEO-1 would reduce potential geological impacts to a less than significant level by ensuring that geotechnical measures for preventative site and slope maintenance, and proper on-site and driveway drainage control are implemented.

GEO-1 Geological Construction Measures

Prior to issuance of grading related permits, the City Engineer shall review and approve the final design plans and confirm that the following measures have been included:

- Mechanically stabilized and compacted soil shall be used for the downslope wall.
- A crib wall shall be constructed to hug the slope of the uphill wall along the access drive.
- The access drive shall be designed such that stormwater is directed to the project site, captured through an on-site drainage system, and channelized into the existing stormwater system.
- A shallow leach field is utilized for disposal of effluent into earth material to ensure that the zone of saturation from disposal will be above any bedrock zones.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

Unmapped artificial fill and colluvium, terrace deposits, bedrock, and landslide materials underlie the project site (Coast 2012; Coast 2016). The project site is undeveloped and slopes downward, which could lead to on-site soil erosion and off-site soil runoff. Generally, a project's grading and excavation phase during construction is when soils are exposed and have the highest potential for erosion. However, as noted in Section 3, *Air Quality*, the proposed project would be required to comply with SCAQMD Rule 403 regarding incorporation of measures to reduce fugitive dust, which

would also reduce the potential for construction related erosion (SCAQMD Rule 403(d)(2)). Rule 403 includes measures for the application of water or stabilizing agents to prevent generation of dust plumes, pre-watering materials prior to use, use of tarps to enclose haul trucks, stabilizing sloping surfaces using soil binders until vegetation or ground cover effectively stabilize slopes, hydroseed prior to rain, washing mud and soils from equipment at the conclusion of trenching activities. These measures are also effective for reducing soil erosion. In addition, the geotechnical assessments prepared for the proposed project include recommendations relating to construction site maintenance, excavation, preventative slope maintenance, landscaping, and site drainage control, which would reduce soil erosion throughout construction and operation of the proposed project. See Appendix D for all geotechnical assessments and project recommendations provided by Coast and SWN Soiltech. Furthermore, as discussed in Section 4, *Biological Resources*, and Section 10, *Hydrology and Water Quality*, the proposed project would be required to control pollutant discharge by implementing BMPs during general operation of the project to ensure that stormwater runoff meets the established water quality standards and waste discharge requirements. Compliance with applicable regulations, project recommendations, and BMPs would minimize effects from soil erosion and loss of topsoil. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project be located on a geologic unit or soil that is made unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?*

As discussed in impacts *a.3.* and *a.4.*, the project site would be subject to less-than-significant impacts from landslides and liquefaction. Lateral spreading is the horizontal movement or spreading of soil toward an open face. Lateral spreading may occur when soils liquefy during an earthquake event, and the liquefied soils with overlying soils move laterally to unconfined spaces. The project site is underlain by cohesive soils and near surface bedrock and liquefaction potential is negligible; therefore, the site would not be subject to seismic-induced lateral spread (Coast 2012; Coast 2016).

Unmapped artificial fill and colluvium, terrace deposits, bedrock, and landslide materials underlie the project site (Coast 2012; Coast 2016). Subsidence is the sudden sinking or gradual downward settling of the earth's surface with little or no horizontal movement. Subsidence is caused by a variety of activities, which include, but are not limited to, withdrawal of groundwater, pumping of oil and gas from underground, the collapse of underground mines, liquefaction, and hydrocompaction. Poorly compacted artificial fill may experience subsidence (Coast 2016). However, according to the geotechnical assessments, the proposed project would not result in any significant effect involving subsidence if recommendations presented in the geotechnical assessments are followed and implemented during design and construction. Recommendations included in the geotechnical assessments provide measures related to site preparation, slope construction and site stability, lateral design, proper on-site and driveway drainage control, seismic design parameters, preventative site and slope maintenance, utility placement, pool area design, foundation support, and concrete slabs (Coast 2012; SWN Soiltech 2012; Coast 2015a; Coast 2016; Coast 2020). See Appendix D for the geotechnical assessments and project recommendations provided by Coast and SWN Soiltech. The specific measures under Mitigation Measure GEO-1 would be required to reduce potential impacts to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- d. *Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial directly or indirectly risks to life or property?*

Unmapped artificial fill and colluvium, terrace deposits, bedrock, and landslide materials underlie the project site. According to the geotechnical assessments, site earth materials are expansive nature and experience changes in volume as wetting and drying cycles occur (Coast 2012; Coast 2016). However, the proposed project would not result in any significant effect involving expansive soils if recommendations presented in the geotechnical assessments are followed and implemented during design and construction. Recommendations included in the geotechnical assessments provide measures related to site preparation, slope construction and site stability, lateral design, proper on-site and driveway drainage control, seismic design parameters, preventative site and slope maintenance, utility placement, pool area design, foundation support, and concrete slabs (Coast 2012; SWN Soiltech 2012; Coast 2015a; Coast 2016; Coast 2020). See Appendix D for the geotechnical assessments and project recommendations provided by Coast and SWN Soiltech. The specific measures under Mitigation Measure GEO-1 would be required to reduce potential impacts to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- e. *Would the project 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?*

The proposed project would require a private on-site disposal system for the proposed home and guesthouse. To minimize infiltration of wastewater into subsurface bedrocks, the site would be restricted to the use of a leach field system (Coast 2012; Coast 2021). The use of a leach field disposal system would not affect the geologic stability of the site provided the system is properly located, constructed, and maintained. According to the Report of Percolation Feasibility Study and Addendum Report to Percolation Feasibility prepared for the proposed project, the primary and secondary disposal systems would consist of a septic tank with leach lines (Coast 2013 and Coast 2015a). The proposed 1,500-gallon septic tank and leach trenches would be located southwest of the proposed guesthouse (Coast 2015a). As recommended in the Percolation Feasibility report (see Appendix D), the projects' primary and secondary disposal systems would consist of four leach lines each 42 feet in length by three feet in width with two feet of gravel beneath each pipe. The County of Los Angeles Department of Public Health approved the proposed project's method of sewage disposal in March 2015. Furthermore, in response to additional peer review of the geologic reports, a supplemental report was provided that recommends that a shallow leach field is utilized for disposal of effluent into earth material to ensure that the zone of saturation from disposal will be above any bedrock zones (Coast 2021). See Appendix D for the Percolation Feasibility report, description of the proposed on-site disposal system, the County's approval letter, and the supplemental report. Impacts associated with use of a septic system would be less than significant with implementation of Mitigation Measure GEO-1.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

A Paleontological Resource Assessment (PRA) was completed for the proposed project by Rincon Consultants, Inc. on February 5, 2018, and is included as Appendix C-2. The PRA includes a paleontological locality records search, which resulted in no previously recorded fossil localities within the project site boundaries. According to LACM collection records, the closest vertebrate locality (LACM 7936) recorded within the middle Miocene Altamira Shale member of the Monterey Formation was identified nearby at an unspecified location just southwest of the project site, which produced five fossil specimens of the primitive baleen whale (*Cetotheriidae*).

The results of the PRA indicate that the geologic units underlying the project area have a paleontological sensitivity ranging from no potential to high potential, dependent on the geologic unit mapped at the surface. The geologic units and detailed descriptions of the geologic formations on the site can be found in the PRA in Appendix C-2.

Impacts to paleontological resources would be significant if construction activities result in the destruction, damage, or loss of scientifically important paleontological resources and associated stratigraphic and paleontological data. The activities may include grading, excavation, or any other activity that disturbs the surface or subsurface geologic formations with a high paleontological sensitivity. Consequently, ground disturbing activities in previously undisturbed portions within the project footprint underlain by geologic units with a high paleontological sensitivity (i.e., the early middle Miocene lower Altamira Shale member of the Monterey Formation) may uncover paleontological resources and result in significant impacts to paleontological resources.

Although construction of the proposed project would not require deep excavation, the following mitigation measures would address the potentially significant impact related to the discovery of paleontological resources during project implementation and ground-disturbing activities. These measures would apply to all phases of project construction and would ensure that any fossils present on-site are preserved. In combination, Mitigation Measures GEO-2 through GEO-4, which are presented below, would effectively mitigate the project's impacts to these resources through the recovery, identification, and curation of previously unrecovered fossils to a less than significant level.

Mitigation Measures

GEO-2 Paleontological Monitoring

Prior to the commencement of ground disturbing activities under the project, a qualified professional paleontologist shall be retained by the landowner. The Qualified Paleontologist (Principal Paleontologist) shall have at least a master's degree or equivalent work experience in paleontology, shall have knowledge of the local paleontology, and shall be familiar with paleontological procedures and techniques.

Ground disturbing construction activities (including grading, trenching, drilling with an auger greater than 3 feet in diameter, and other excavation) within the majority of the project footprint with high paleontological sensitivity (i.e., the early middle Miocene lower Altamira Shale member of the Monterey Formation) shall be monitored on a full-time basis. Monitoring shall be supervised by the Qualified Paleontologist and shall be conducted by a qualified paleontological monitor, who is defined as an individual who meets the minimum qualifications per standards set forth by the SVP

(2010), which includes a B.S. or B.A. degree in geology or paleontology with one year of monitoring experience and knowledge of collection and salvage of paleontological resources.

The duration and timing of the monitoring shall be determined by the Qualified Paleontologist. If the Qualified Paleontologist determines that full-time monitoring is no longer warranted, he or she may recommend reducing monitoring to periodic spot-checking or cease entirely. Monitoring would be reinstated if any new ground disturbances are required and reduction or suspension would need to be reconsidered by the Qualified Paleontologist. Ground disturbing activity in the landslide deposits or basalt unit would not require paleontological monitoring.

GEO-3 Fossil Discovery, Preparation, and Curation

In the event that a paleontological resource is discovered, the monitor shall have the authority to temporarily divert the construction equipment around the find until it is assessed for scientific significance and collected. Typically, fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases, larger fossils (such as complete skeletons or large mammals) require more extensive excavation and longer salvage periods. In this case, the paleontologist shall have the authority to temporarily direct, divert or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner.

Once salvaged, significant fossils shall be identified to the lowest possible taxonomic level, prepared to a curation-ready condition and curated in a scientific institution with a permanent paleontological collection (such as the LACM) along with all pertinent field notes, photos, data, and maps. The cost of curation is assessed by the repository and is the responsibility of the project owner.

GEO-4 Final Paleontological Mitigation Report

In the event that a paleontological resource is discovered, at the conclusion of laboratory work and museum curation, a final report shall be prepared describing the results of the paleontological mitigation monitoring efforts associated with the project. The report shall include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. If the monitoring efforts produced fossils, then a copy of the report shall also be submitted to the designated museum repository. Preparation of the report may occur during and after construction and would not require construction to be suspended.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

8 Greenhouse Gas Emissions

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

Regulatory Setting

The accumulation of GHGs in the atmosphere regulates Earth's temperature. GHGs produced by human activities have caused an overall warming influence on the Earth's climate since 1750 (United States Environmental Protection Agency [USEPA] 2022). Carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O) are the GHGs that are emitted in the greatest quantities from human activities. Emissions of CO₂ are largely by-products of fossil fuel combustion. CH₄ results from fossil fuel combustion as well as off-gassing associated with agricultural practices and landfills. N₂O is produced by microbial processes in soil and water, including those reactions that occur in fertilizers that contain nitrogen, fossil fuel combustion, and other chemical processes.

Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. Potential impacts of climate change in California may include loss in snowpack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, more drought years, coastal flooding and erosion, habitat loss, lower water supply, decline in agriculture, and an overall decline in public health (State of California 2018).

California's major initiative for reducing GHG emissions is outlined in Assembly Bill 32 (AB 32), the "California Global Warming Solutions Act of 2006," signed into law in 2006. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 (essentially a 16 percent reduction below 2005 emission levels; the same requirement as under S-3-05) and requires the ARB to prepare a scoping plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 requires ARB to adopt regulations to require reporting and verification of statewide GHG emissions.

After completing a comprehensive review and update process, ARB approved a 1990 statewide GHG level and 2020 limit of 427 million metric tons (MMT) of CO₂ equivalent (CO₂e). The original Scoping Plan was approved by ARB on December 11, 2008, and included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures.

In May 2014, ARB approved the first update to the AB 32 Scoping Plan. The 2013 Scoping Plan Update defines ARB's climate change priorities and sets the groundwork to reach post-2020 goals set forth in EO S-3-05. The update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluates how to align the State's longer-term GHG reduction strategies with other State policy priorities, such as for water, waste, natural resources, clean energy and transportation, and land use (ARB 2014).

Senate Bill (SB) 97, signed in August 2007, acknowledges that climate change is an environmental issue that requires analysis in CEQA documents. In March 2010, the California Resources Agency (Resources Agency) adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts.

Senate Bill (SB) 375, signed in August 2008, enhances the state's ability to reach AB 32 goals by directing ARB to develop regional GHG emission reduction targets to be achieved from vehicles for 2020 and 2035. In addition, SB 375 directs each of the state's 18 major Metropolitan Planning Organizations (MPO) to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP). On September 23, 2010, ARB adopted final regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035.

On September 8, 2016, SB 32 was signed into law, formally codifying into California legislation the target to achieve a 40 percent GHG emission reduction below 1990 levels by 2030 that was adopted by Governor Brown in April 2015 through an executive order (B-30-15). SB 32 became effective on January 1, 2017 and requires the ARB to develop technologically feasible and cost-effective regulations to achieve the targeted 40 percent GHG emission reduction.

On December 14, 2017, ARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. To meet reduction targets, the 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of recently adopted policies and policies, such as SB 350 and SB 1383 (see below). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) CO₂e by 2030 and two MT CO₂e by 2050 (CARB 2017).

Significance Thresholds

CEQA Guidelines provide regulatory direction for the analysis and mitigation of GHG emissions appearing in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. The proposed project is evaluated qualitatively, based on consistency with applicable plans, policies, and regulations intended to reduce GHG emissions. Nonetheless, for informational purposes, this analysis also includes a quantitative discussion of the project's GHG emissions based on CalEEMod outputs.

As discussed in Section 6, *Energy*, in 2018, the City of Rolling Hills developed a CAP in cooperation with the SBCCOG to reduce GHG emissions within the City. To be on track to meet the AB 32 2050

goal, the CAP identifies an emission reduction goal of 49 percent below 2005 levels by 2035 in overall City emissions. This would involve a community emissions reduction goal of 3,000 MT CO₂e. As residential energy use is one of the largest contributors to GHG emissions in the City, supporting strategies that promote renewable energy could greatly move the City towards meeting their goal (SBCCOG 2018).

In guidance provided by the SCAQMD's GHG CEQA Significance Threshold Working Group in September 2010, SCAQMD considered a tiered approach to determine the significance of residential and commercial projects. The draft tiered approach is outlined in meeting minutes dated September 29, 2010.

- **Tier 1.** If the project is exempt from further environmental analysis under existing statutory or categorical exemptions, there is a presumption of less-than-significant impacts with respect to climate change. If not, then the Tier 2 threshold should be considered.
- **Tier 2.** Consists of determining whether or not the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. The concept embodied in this tier is equivalent to the existing concept of consistency in CEQA Guidelines section 15064(h)(3), 15125(d) or 15152(a). Under this Tier, if the proposed project is consistent with the qualifying local GHG reduction plan, it is not significant for GHG emissions. If there is not an adopted plan, then a Tier 3 approach would be appropriate.
- **Tier 3.** Establishes a screening significance threshold level to determine significance. The Working Group has provided a recommendation of 3,000 MT of CO₂e per year for residential, commercial, and mixed use projects.
- **Tier 4.** Establishes a service population threshold to determine significance. The Working Group has provided a recommendation of 4.8 MT of CO₂e per year for land use projects.

Under Tier 2, project impacts would be less than significant if a project is consistent with an approved local or regional plan. As discussed above, the City of Rolling Hills has adopted the EECAP created for the City by SBCCOG, which provides specific measures and actions for new residential development to be consistent with the City's reduction targets. However, the City's CAP is not a qualified CAP under the CEQA Guidelines. Therefore, Tier 2 alone would not be a suitable threshold to use for this analysis.

SCAQMD recommended that Tier 3 thresholds are the most appropriate screening level quantitative thresholds. If a project is not exempt from analysis and a local or regional GHG reduction policy or plan does not apply to a project, emissions would be less than significant if they are under the Tier 3 screening level threshold. The proposed project would not be exempt, the City does not have a qualified GHG reduction plan, and the project involves development of a residential land use. Therefore, for informational purposes, this analysis uses the SCAQMD recommended screening level quantitative threshold for all land use types of 3,000 MT of CO₂e per year. However, the significant determinations for the GHG emissions analysis are based on the project's consistency with applicable plans, policies, and regulations.

The quantitative analysis is based on the methodologies recommended by the California Air Pollution Control Officers Association (CAPCOA) *CEQA and Climate Change* (2008) white paper and focuses on CO₂, N₂O, and CH₄ as these are the GHG emissions that on-site development would generate in the largest quantities.

- a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*
- b. *Would the project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

Quantitative Analysis

The project’s proposed energy use, daily operational activities, and mobile sources (traffic) would generate GHG emissions. CalEEMod was used to calculate emissions resulting from short-term construction activities and long-term operation.

Project-related construction emissions are confined to a relatively short period of time in relation to the overall life of the proposed project. For the purpose of this analysis, it is assumed that construction activity would occur over approximately 14 months, beginning in January 2024with full completion by March 2025. This construction schedule was determined based on the applicant-provided construction schedule. As shown in Table 5, construction activity for the proposed project would generate an estimated 296 metric tons (MT) of CO₂e. When amortized over a 30-year period, construction of the project would generate about 9.9 MT of CO₂e per year.

Table 5 Estimated Construction GHG Emissions

Year	Project Emissions (MT/yr CO ₂ e)
2024	270
2025	26
Total	296
Total Amortized over 30 Years	9.9

See Appendix A-2 for CalEEMod worksheets.

Operational emissions include mobile sources, area sources (consumer products, landscape maintenance equipment, and painting), energy use (electricity and natural gas), solid waste, and electricity to deliver water.⁷

Table 6 combines the construction, operational, and mobile GHG emissions associated with development of the proposed project. The increase in annual emissions from the proposed project would total approximately 24.3 MT of CO₂e per year.

⁷ Electrical consumption from use of the private swimming pool area was incorporated into CalEEMod.

Table 6 Combined Annual Emissions of Greenhouse Gases

Emission Source	Annual Emissions (CO ₂ e in metric tons)
Construction	9.9
Operational	
Area	0.3
Energy	2.7
Solid Waste	0.6
Water	0.4
Mobile	10.5
Total	24.3
See Appendix A-2 for CalEEMod worksheets.	

For informational purposes, this analysis quantitatively shows that the project's combined GHG emission would be below 3,000 MT of CO₂e per year. Moreover, as discussed under the following qualitative analysis, the proposed project is generally consistent with the applicable goals and measures of the 2020 RTP/SCS, the 2017 Scoping Plan, and the City's CAPs.

Qualitative Analysis

On September 3, 2020, SCAG's Regional Council formally adopted the 2020-2045 RTP/SCS (Connect SoCal). The 2020-2045 RTP/SCS builds on the 2016-2040 RTP/SCS, recognizing that transportation investments and future land use patterns are inextricably linked, and continued recognition of this close relationship will help the region make choices that sustain existing resources and expand efficiency, mobility, and accessibility for people across the region. In particular, the RTP/SCS draws a closer connection between where people live and work, and it offers a blueprint for how Southern California can grow more sustainably. The RTP/SCS also includes strategies focused on compact infill development and economic growth by building the infrastructure the region needs to promote the smooth flow of goods and easier access to jobs, services, educational facilities, healthcare and more.

The SCAG 2020-2045 RTP/SCS is forecast to help California reach its GHG reduction goals by reducing GHG emissions from passenger cars by 8 percent below 2005 levels by 2020 and 19 percent by 2035 in accordance with the most recent CARB targets adopted in March 2018. The 2016-2040 RTP/SCS includes ten goals with corresponding implementation strategies for focusing growth near destinations and mobility options, promoting diverse housing choices, leveraging technology innovations, and supporting implementation of sustainability policies. The CARB targets were adopted after publication of the 2016 RTP/SCS; as a result, the updated targets have been incorporated into the 2020-2045 RTP/SCS. The 2016 RTP/SCS and/or the 2020-2045 RTP/SCS are expected to fulfill and exceed SB 375 compliance with respect to meeting the State's GHG emission reduction goals.

In addition to demonstrating the region's ability to attain and exceed the GHG emission-reduction targets set forth by CARB, the 2020-2045 RTP/SCS outlines a series of actions and strategies for integrating the transportation network with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands. Thus, successful implementation of the 2020-2045 RTP/SCS would result in more complete communities with a

variety of transportation and housing choices, while reducing automobile use. While the project site is not located in an area with identified active or public transit opportunities, the project would not conflict with the RTP/SCS’s goals for reducing greenhouse gas emissions.

Plans and policies have been adopted to reduce GHG emissions in the Southern California region, including the State’s 2017 Scoping Plan and City of Rolling Hills Climate Action Plan. The project’s consistency with these plans and policies are discussed in the following subsections. As discussed herein, the project would not conflict with plans and policies aimed at reducing GHG emissions.

Consistency with 2017 Scoping Plan

The principal State plan and policy are AB 32, the California Global Warming Solutions Act of 2006, and the follow-up, SB 32. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020, and the goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030. Pursuant to the SB 32 goal, the 2017 Scoping Plan was created to outline goals and measures for the state to achieve the reductions. The 2017 Scoping Plan’s goals include reducing fossil fuel use and energy demand and maximizing recycling and diversion from landfills. The project would be consistent with these goals through project design such as complying with the latest 2022 California Energy Code and CALGreen Code. The project would install energy efficient appliances and lighting, reclaimed water for outdoor use, and water efficient appliances, fixtures, and irrigation. As summarized in Table 7, the project would be consistent with the 2017 Scoping Plan.

Table 7 Consistency with 2017 Scoping Plan

Measure	Responsible Party	Project Consistency
SB 100 SB 100 increases the standards of the California RPS program by requiring that the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources be increased to 44 percent by 2024, 60 percent by 2030, and 100 percent by 2045.	CPUC ¹ , CEC, CARB	Consistent. SCE is required to generate electricity that would increase renewable energy resources to 33 percent by 2020, 44 percent by 2024, 60 percent by 2030, and 100 percent by 2045. Because SCE would provide electricity service to the project site, in addition to the CALGreen required solar panel installation, the project would use electricity consistent with the requirements of SB 100. It is assumed that SCE will receive at least 33 percent of electricity from renewable sources by the year 2020 and 44 percent by the year 2024. As required under SB 350, doubling of the energy efficiency savings from final end uses of retail customers by 2030 would primarily rely on the existing suite of building energy efficiency standards under CCR Title 24, Part 6 (consistency with this regulation is discussed below) and utility-sponsored programs such as rebates for high-efficiency appliances, HVAC systems, and insulation. The project would comply with this this action/strategy since the project site is located in the SCE service area and would comply with the 2022 California Energy Code and CALGreen Code, including the implementation of solar panels.

Measure	Responsible Party	Project Consistency
SB 350 (Clean Energy and Pollution Reduction Act of 2015) Required measures include: <ul style="list-style-type: none"> ▪ Increase RPS to 50 percent of retail sales 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. ▪ Reduce GHG emissions in the electricity sector through the implementation of the above measures and other actions as modeled in IRPs to meet GHG emissions reductions planning targets in the IRP process. Load-serving entities and publicly owned utilities meet GHG emissions reductions planning targets through a combination of measures as described in IRPs. 	CPUC, CEC, CARB	Consistent. As required under SB 350, doubling of the energy efficiency savings from final end uses of retail customers by 2030 would primarily rely on the existing suite of building energy efficiency standards under CCR Title 24, Part 6 (consistency with this regulation is discussed below) and utility-sponsored programs such as rebates for high-efficiency appliances, HVAC systems, and insulation. See above response for SB 100.

¹ California Public Utilities Commission (CPUC)

Source: CARB 2017

City of Rolling Hills Climate Action Plan

In 2018, the City of Rolling Hills developed a Climate Action Plan (CAP) in cooperation with the South Bay Cities Council of Governments (SBCCOG) to reduce greenhouse gas (GHG) emissions in the City. To be on track to meet the AB 32 2050 goal, the CAP identifies an emission reduction goal of 49 percent below 2005 levels by 2035 in overall City emissions. As residential energy use is one of the largest contributors to GHG emissions in the City, supporting strategies that promote renewable energy could greatly move the City towards meeting their goal (SBCCOG 2018). Although the CAP's primary purpose is to reduce GHG emissions, many of the GHG reduction strategies contained in the CAP target energy efficiency and renewable energy as means to achieving GHG reduction goals. Table 8 shows the proposed project's consistency with the applicable goals and measures of the City's CAP.

Table 8 Project Consistency with Applicable CAP Goals and Measures

Goal	Measure
Energy Efficiency Increase Energy Efficiency in New Residential Developments. Increase Energy Efficiency through Water Efficiency.	Consistent. The proposed project would involve construction of a single-family residence. The project would be required to comply with the latest 2022 California Energy Code and CALGreen Code. In accordance with the CALGreen Code, the project would enhance building design through sustainable construction strategies including more efficient energy efficiency (i.e., solar panel installation), water efficiency, and material conservation practices. The California Energy Code provides energy conservation standards for all new residential buildings constructed in California. The Code applies to the building envelope, space-conditioning systems, and water-heating and lighting systems of buildings and appliances. The Code provides guidance on construction techniques to maximize energy conservation. Minimum efficiency standards are given for a variety of building elements, including appliances; water and space heating and cooling equipment; and insulation for doors, pipes, walls, and ceilings. As discussed in Section 19, <i>Utilities and Service Systems</i> , the proposed project's annual water demand would constitute approximately 0.002 percent of the California Water Service Company Palos Verdes District water supply for the year 2025 at completion of the proposed project. The project would not substantially contribute to the City's energy or water consumption nor conflict with the City's energy and water efficiency goals.
Solid Waste Increase Diversion and Reduction of Residential Waste	Consistent. The proposed project would generate solid waste during construction and operation of the project. The handling of all debris and waste generated during construction would be subject to the State's requirements under AB 939 for salvaging, recycling, and reuse of materials from construction activity on the project site. In addition, the proposed project would be required to comply with 8.08.580 of the RHMC, which requires that projects divert at least 65 percent of all construction or demolition waste. As discussed in Section 19, <i>Utilities and Service Systems</i> , the project would generate approximately 0.005 tons of waste per day, which would not exceed the existing daily capacity of any of the active landfills serving Los Angeles County. The project would not substantially contribute residential waste and would comply with the RHMC for diversion of construction waste.
Source: SBCCOG 2018	

As demonstrated in this analysis, the project would not conflict with plans and policies aimed at reducing GHG emissions. Therefore, the project would not conflict with the State's 2030 GHG reduction goals as outlined in SB 32, and impacts related to GHG would be less than significant.

LESS THAN SIGNIFICANT IMPACT

9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- b. *Would the project 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?*

Operation of the proposed residential project would not involve the transport, use, storage, or disposal of hazardous materials. Therefore, the proposed project would not create a significant hazard to the public or environment through the routine handling of hazardous materials. Potentially hazardous materials, such as fuels, lubricants, and solvents, would be used by heavy machinery during construction activities. However, the transport, use, and disposal of hazardous materials during 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, the California Hazardous Materials Management Act, and the California Code of Regulations, Title 22. In the event of an unanticipated spill or related accident during the construction of the project, the applicant would be required to comply with applicable local, state, and federal laws for responding to spills or handling potentially hazardous materials. Adherence to these requirements would reduce potential impacts to a less than significant level. Overall, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

There are no schools immediately adjacent to or within 0.25 mile of the project site. The school nearest to the project site is Rancho Del Mar High School, located approximately one mile north. In addition, the proposed project would not involve the use of large quantities of hazardous materials. Furthermore, the transport, use, and storage of hazardous materials during construction would be conducted in accordance with all applicable state and federal laws, as discussed under impacts 9.a and 9.b. Therefore, impacts from potential hazardous emissions or materials on nearby schools would not occur.

NO IMPACT

- d. *Would the project be located on a site included on a list of hazardous material 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?*

The following databases and listings compiled pursuant to Government Code Section 65962.5 were reviewed for known hazardous materials contamination at the project site:

- **United States Environmental Protection Agency (USEPA)**
 - Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)/Superfund Enterprise Management System (SEMS)/Envirofacts database search
- **State Water Resources Control Board (SWRCB)**
 - GeoTracker search for leaking underground storage tanks (LUST) and other cleanup sites

▪ **Department of Toxic Substances Control (DTSC)**

- EnviroStor database for hazardous waste facilities or known contamination sites
- Cortese list of Hazardous Waste and Substances Sites

The project site is not located on or directly adjacent to any known hazardous or contaminated sites. The USEPA is retiring the CERCLIS database and is replacing it with the SEMS database. The SEMS database search did not produce any results associated with the project site, indicating that the site does not contain known hazards or contaminants (USEPA 2018).

A search on the EnviroStor database did not identify any hazardous waste facilities or other cleanup sites within 0.25 mile of the site. The EnviroStor listing nearest to the site is approximately 0.3 mile southeast at the Ladera Linda Site. However, this site has been listed as an active cleanup site since August 3, 2016. Therefore, potential impacts to the project site would not occur due to the distance and status of the nearest EnviroStor listing (DTSC 2018).

A search on the Geotracker database did not identify any Leaking Underground Storage Tank (LUST) Sites, Department of Defense Sites, and Cleanup Program Sites located on or directly adjacent to the project site. The Geotracker listing nearest to the site is approximately 0.5-mile northwest, identified as Trucker's Property in the City of Rancho Palos Verdes. However, this site has been listed as a closed case since December 3, 1996 (SWRCB 2015). Based on the results of the database searches, the project would not be located on a site included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as such, would not create a significant hazard to the public or the environment. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- 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?*

The airport closest to the project site is Zamperini Field Airport approximately 3.7 miles north of the project site in the City of Torrance. According to the Los Angeles County Airport Land Use Commission (ALUC), the project site is not within the airport's Runway Protection Zone (RPZ) (ALUC 2003). Although the project area experiences overhead flights, overhead flight noise would be minimal due to the distance between the project site and the closest identified airport. Additionally, the proposed project would be one story in height and would not result in a safety hazard for people residing on-site. Therefore, since the project would not expose residents or workers to safety hazards or excessive noise, no impact would occur.

NO IMPACT

- f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

No roads would be permanently closed as a result of the construction or operation of the project, and the project 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. Primary vehicle access would be provided by an access drive along the road easement extending from the paved end of Portuguese Bend Road to the project site. Figure 3 shows the site plan and location of driveway/fire lanes that would provide ingress/egress for emergency vehicles and the proposed project's plan set is provided in Appendix H. The design of any

new access points would be reviewed and approved by the City and the LACoFD to ensure that emergency access meets standards. The project site would also have secondary access from Burma Road located south of the site. Burma Road is a dirt road in the preserve area owned by the Palos Verdes Peninsula Land Conservancy that connects to Crenshaw Boulevard approximately one mile northwest of the site. According to a conversation between the City and Captain Chris Benoit at Fire Station 56 of the LACoFD, Captain Benoit confirmed that a Type 3 vehicle, which is characterized as a four-wheel vehicle or low patrol vehicle (heavy duty truck), can travel through Burma Road. Upon compliance with City and LACoFD standards, implementation of the proposed project would not interfere with existing emergency evacuation plans or emergency response plans in the area. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- g. Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires?*

The City of Rolling Hills is vulnerable to wildfire hazards. The City is exposed to brush fire hazards from both outside and within the City's jurisdiction (Rolling Hills 2022). The entire City is designated as a Very High Fire Hazard Severity Zone by the California Department of Forestry and Fire Protection and Section 15.20.025 of the RHMC (CAL FIRE 2022). However, the proposed project would include fire lanes, a fire hydrant, and all electrical utility lines would be required to be installed underground in accordance with RHMC Section 15.04.070. Primary vehicle access would be provided by an access drive along the road easement extending from the paved end of Portuguese Bend Road to the project site. The relevant portion of the existing private off-site access drive would be intact or improved as part of the proposed project. See Figure 10 for the location and layout of the proposed driveway, which would consist of paving the road with asphalt and stone pavers. Additional improvements to the fire road would include implementation of a fire hydrant adjacent to the proposed single-family home, as shown in Figure 3.

In the event that primary access to the site is determined to be unsafe due to wildfire, the project site would also have secondary access from Burma Road located south of the site. Burma Road connects to Crenshaw Boulevard approximately one mile northwest of the site and would provide an alternative means of evacuation.

The proposed home and guesthouse would include sprinkler systems, and they are below the water main so water pressure is above the City's threshold. The project would also be reviewed and approved by the City and LACoFD to ensure that the project complies with applicable standards. As discussed in Section 4, *Biological Resources*, a fuel modification area would be required for the project pursuant to the Los Angeles County Fire Code Section 4908. A Fuel Modification Plan is a landscape plan showing all proposed and existing-to-remain vegetation on the property. The plan includes a site plan with the building footprint and Zone A, Zone B, and Zone C, which are concentric zones around each structure extending to the property line. Zone A is a setback zone and extends from the outer edge of the structure or appendage to 30 feet. Zone B is an irrigated zone and extends from the edge of Zone A to 100 feet from the structure. Finally, Zone C is a native brush thinning zone and extends from the edge of Zone B up to 200 feet from the structure, or to the property line. Deviations from these fuel modification zone sizes would require approval from LACoFD (Los Angeles County 2021).

As discussed in the City's Community Wildfire Protection Plan (CWPP), the City's nuisance code enforcement of Chapter 8.30 (Fire Fuel Abatement) is actively enforced by a dedicated City code enforcement official, and the LACoFD and Agricultural Commissioner personnel conduct an annual

inspection of all the properties commencing June 1 for non-compliance with the Fire Code (Rolling Hills 2020).

Due to the fire-related infrastructure that are included in the project plans, and compliance with the City's fuel management requirements and applicable building standards, construction and operation of the project would not result expose people or structures to significant risks involving wildland fires. Therefore, potential impacts associated with wildland fires would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage 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 that would:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(i) Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. In flood hazard, tsunامي, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

P.A. Arca Engineering, Inc. prepared a Hydrology Study/Water Quality Plan for the proposed project in November 2016. The purpose of this study was to evaluate and to determine the stormwater runoff qualities for the proposed project. The following analysis utilizes information contained in the hydrology study, which is provided as Appendix E.

- a. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?*

The 21.14-acre project site consists of undeveloped land and is located at the southern terminus of Portuguese Bend Road via an unpaved road. The project site is transected by various dirt roads and paths, and moderate to heavy growth of shrubs and grasses cover the site and site vicinity.

As part of Section 402 of the Clean Water Act, the USEPA has established regulations under the NPDES program to control direct storm water discharges. In California, the SWRCB administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. The project would be required to comply with the NPDES permitting system. Under the conditions of the permit, the project applicant would be required to eliminate or reduce non-stormwater discharges, develop and implement a Storm Water Pollution Prevention Plan (SWPPP) for the project construction activities, and perform inspections of the SWPPP measures and control practices to ensure conformance. The SWPPP would include erosion and sediment control and pollution prevention BMPs. Stormwater Management Requirements and BMPs for Small-Scale Non-Designated Projects (County of Los Angeles 2014) may include, but are not limited to:

- Porous pavement: Install porous pavement to allow stormwater runoff to infiltrate through it. Porous pavement includes, but is not limited to, porous asphalt, porous concrete, ungrouted paving blocks, and gravel. At least 50 percent of the pavement at the site must be porous.
- Downspout routing: Each roof downspout must be directed to one of the following simple BMPs, which must have a total capacity of at least 200 gallons.
- Rain barrel/cistern: Stored stormwater runoff can be used for irrigation or other non-potable uses as permitted under the Los Angeles County Building/Plumbing Code.
- Rain garden/planter box: Stormwater runoff can be retained or treated by these stormwater quality control measures.
- Disconnect impervious surfaces: Slope driveways and other impervious surfaces to drain toward pervious surfaces. If possible, stormwater runoff should be directed toward vegetated areas or stormwater quality control measures. One third of the lot must be pervious areas, such as landscaping, gravel, or porous pavement. Limit the total area not directed toward vegetated areas or stormwater quality control measures to 10 percent or less of the area of the site.
- Dry well: Install a dry well to infiltrate stormwater runoff. The dry well must be sized to contain and infiltrate at least 200 gallons of stormwater runoff in a 96-hour period.
- Landscaping and landscape irrigation: Plant trees near impervious surfaces to intercept precipitation in their leaves. Trees planted adjacent to impervious surfaces can intercept water that would otherwise become stormwater runoff. A minimum of two 15-gallon trees must be planted a maximum of 10 feet from impervious surfaces. Install irrigation systems that utilize a weather-based smart irrigation controller to minimize water usage and reduce dry weather urban runoff.
- Green roof: Install a green roof to retain and treat stormwater runoff on the rooftop. A green roof must cover at least 50 percent of the total rooftop area.

Pursuant to RHMC Section 8.32.080.E, BMPs shall be used in areas exposed to storm water for the removal and lawful disposal of all fuels, chemicals, fuel and chemical wastes, animal wastes, garbage, batteries, or other materials which have potential adverse impacts on water quality.

According to Chapter 8.32 of the RHMC, the proposed project would be required to comply with the LID requirements set forth by the Municipal NPDES Permit. Single-family hillside residential developments located in an area with known erosive soil conditions are normally exempt from having to capture and treat the required design volume. As this project's disturbed area is greater than one acre and adds more than 10,000 square feet or more of impervious surface, implementation of the LID standards is required, and the catchment area must be sized using the calculated storm water quality design volume (SWQDv). However, through agreement with the City, the proposed project would only be required to provide LID design for impervious areas associated with the roof of the proposed home and guesthouse, as well as impervious areas from the proposed pool area. In addition, the following measures must be implemented for single-family hillside residential developments:

- Conserve natural area;
- Protect slopes and channels;
- Provide storm drain system stenciling and signage; and
- Divert roof runoff and surface flow to vegetated areas before discharge unless the diversion would result in slope instability. (P. A. Arca Engineering, Inc. 2016)

Because the site is known to have erosive soil conditions and is surrounded by potential geotechnical hazards, the on-site infiltration LID BMPs and on-site retention of the full 100 percent SWQDv are considered infeasible (P.A. Arca Engineering Inc. 2016). According to the Hydrology Study/Water Quality Plan, five biofiltration planter areas would be installed throughout the project site. The runoff from the impervious surfaces would be collected and drained directly to the biofiltration areas. All biofiltration BMPs would be designed to ensure that all water would be drained within 96 hours or less. All biofiltration BMPs would be sized according to the latest Los Angeles County LID manual. Once filtered through the biofiltration BMPs, the treated water would be collected via underdrain and conveyed to another area of the project site where it would be disposed of in a non-erosive drainage device (P.A. Arca Engineering, Inc. 2016). Conformance with the NPDES permitting system would ensure that the proposed project does not violate any water quality standards or waste discharge requirements. Additionally, the project would not degrade surface or groundwater quality with conformance to identified BMPs and the NPDES permitting system. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*
- e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

Per the City of Rolling Hills Conservation Element, the majority of the Palos Verdes Peninsula is a consolidated rock formation where no groundwater resources are found (Rolling Hills 1990d). Per the California Department of Water Resources (DWR), the project site is not located in a groundwater basin and there are no applicable groundwater management plans applicable to the

site. The nearest groundwater basin, the Coastal Plain of Los Angeles, has a southern boundary located approximately 2.5 miles north of the site (DWR 2020). As discussed in the California Water Service (Cal Water) 2020 Urban Water Management Plan (UWMP), , the City does not have any groundwater wells in the Palos Verdes District. The District is located in an area of the basin where groundwater is unconfined marine sediment, and wells have not been found to be cost effective (Cal Water 2021). As discussed in Checklist Question 10.a. above, conformance with the NPDES permitting system would ensure that the proposed project does not violate any surface water quality standards or waste discharge requirements. Additionally, the project would not degrade surface or groundwater quality with conformance to identified BMPs and the NPDES permitting system. As such, the project would not conflict with a water quality control plan or groundwater management plan.

The proposed project would increase the area of impervious surface on-site by approximately 45,000 square feet due to the proposed home, pool/jacuzzi guesthouse, and paved driveway/access drive. Because groundwater was not observed on-site during site exploration and fieldwork for the preparation of the geological investigation of the project site and project construction would not involve substantial excavation, the project would not directly interfere with the groundwater table or impede sustainable groundwater management. Impacts related to the decrease in groundwater supplies and groundwater recharge and implementation of sustainable groundwater management would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project 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 that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;*
or
 - iv) *impede or redirect flood flows.*

The existing on-site drainage pattern is currently uncontrolled. On-site runoff is sourced from two areas. The first area primarily consists of sheet flow from the hills located northwest of the project site. The second area consists of sheet flow from Portuguese Bend Road. During large rain events, a substantial amount of rain from Portuguese Bend Road is conveyed down the access drive and continues southwest following the natural grade through the project site. Runoff continues to flow southwest along Burma Road until it descends at the end of the ridge down the hillside. At the bottom of the hill the water eventually flows into Klondike Canyon Creek. See Appendix E for a map of the existing hydrological conditions on and adjacent to the site (P.A. Arca Engineering, Inc. 2016).

Paintbrush Canyon Creek and Klondike Creek are in the vicinity of the site. Paintbrush Canyon Creek is located immediately northwest of the property, and Klondike Canyon Creek is approximately 200 feet southeast of the property. Construction of the proposed project would not alter the course of any stream or river as none are located on the project site. However, construction of the project would alter the existing drainage pattern of the project area. According to the proposed drainage

pattern provided in the Hydrology Study/Water Quality Plan, runoff from Portuguese Bend Road would sheet flow into the proposed access drive (see Appendix E). All runoff from the access drive would be captured via a storm drainpipe at the entrance gate of the proposed home. No runoff from the access drive would reach the proposed home. Runoff from the upstream side of the access drive would be captured by concrete gutters upstream of the access drive and conveyed via a Smartditch system (described in the *Project Description*) near the proposed residence. Runoff from the proposed project would be captured and treated via biofiltration planters and trench drains located on-site, then conveyed to dispersal basins surrounding the perimeter of the property. See Appendix E for a map of the proposed hydrological conditions after project completion. Alterations to the existing drainage pattern would be less than significant and would not result in substantial erosion, siltation, or flooding on- or off-site.

In addition, the project would be designed and engineered with drainage features appropriate to accommodate the needs of the proposed project. The project would not exceed the capacity of existing/planned stormwater drainage systems. As discussed above, five biofiltration planter areas would be installed throughout the project footprint. The runoff from the impervious surfaces would be collected and drained directly to the biofiltration gardens. All biofiltration BMPs would be designed to ensure that all water would drain within 96 hours or less of a rain event. Once filtered through the biofiltration BMPs, the treated water would be collected via underdrain and conveyed to another area of the project site where it would be disposed of through a non-erosive drainage device. The proposed project would not create runoff that would exceed the capacity of a storm drain system and would not provide a substantial additional source of polluted runoff. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*

The project site is located less than a mile from the coast of the Pacific Ocean. However, the City is not in a State-designated risk area (DOC 2019). No other bodies of water are located adjacent to the project site that would have the potential to inundate the site by a seiche. As such, the project would not result in impacts associated with the risk of pollutants due to inundation from tsunami or seiche zones.

Per the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map, Panel #06037C2026F (effective 9/26/2008), the project is located in Zone X – an Area of Minimal Flood Hazard, which is defined by FEMA as an area outside of the 100- and 500-year floodplain. As discussed in Checklist Question 10.c., the project would be designed and engineered with drainage features appropriate to accommodate needs of the proposed project, such that the project would not exceed the capacity of existing/planned stormwater drainage systems. As such, no flooding hazards would occur, and the project would not result in impacts associated with the risk of pollutants from flooding hazards.

LESS THAN SIGNIFICANT IMPACT

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11 Land Use and Planning

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

a. Would the project physically divide an established community?

The proposed project would involve construction of a single-family residence on an undeveloped, 21.14-acre site. The one-story proposed home would be compatible with adjacent single-family residences approximately 430 feet to the northeast. The project would also include construction of an access drive along the road easement extending from the paved end of Portuguese Bend Road to the project site. However, the access drive would be a continuation of the existing Portuguese Bend Road and would not physically divide the surrounding area. Construction of the project would not affect adjacent streets or interrupt neighborhood continuity or connectivity, or otherwise physically divide an established community. No impact would occur.

NO IMPACT

b. Would the project 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?

The 21.14-acre project site is currently designated Very Low Density Residential by the City's General Plan Land Use Element and zoned Residential Agricultural Suburban Zone 2 by the RHMC. According to the City's General Plan Land Use Element, development characteristics of a Very Low Density Residential designation include single-family residences on large lots, usually custom designed. Parcels with this designation contain varied topography and canyon areas. In addition, development standards for a Very Low Density Residential designation consist of more than two net acres per single-story dwelling unit. The City's General Plan Land Use Element development standards for the project site's designation correlate with the site's zoning standards. Pursuant to Chapter 17.16 of the RHMC, the Residential Agricultural Suburban Zone provides standards for development of single-family residential homes in the City, with the suffix indicating the minimum lot size requirement in acres. Accordingly, the Residential Agricultural Suburban Zone 2, or RAS – 2, means that the minimum lot size in this zone is two acres. As required by Section 17.18.020 of the RHMC, the proposed project would include a 1,000-square foot stable and corral at northern boundary of the project footprint. Development of the proposed one-story home would comply

with the current General Plan land use designation and zoning standards and would not involve changes to these existing designation and zoning.

Land Use Element

The Land Use Element of the City's General Plan contains goals and policies which guide residential development in the City. Policies 1.1 through 1.5 and 2.2 through 2.4 relate to maintaining the scenic rural character of the City, requiring landscaping and development to match the surrounding environment and reducing the amount of lighting generated by new development. As discussed in Section 1, *Aesthetics*, the project would not substantially degrade the existing visual character or quality of the site and its surroundings and would adhere to all existing regulations for limiting on-site lighting. The project would be consistent with these policies. As discussed in detail in Section 7, *Geology and Soils*, the project would adhere to the City's development standards for development in landslide hazard areas and would employ LID practices which include strict grading standards to reduce erosion and loss of topsoil. As such, the project would be consistent with policies from the Land Use Element intended to guide development in hazard prone areas (Policy 3.1 - landslide development standards and Policy 3.2 - strict grading practices).

Open Space and Conservation Element

The Open Space and Conservation Element of the City's General Plan contains goals and policies that guide residential development in the City. Policies 1.1 through 1.10 encourage the City to conserve and enhance the City's natural resources, facilitating development in a manner which reflects the characteristics, sensitivities, and constraints of these resources. Specifically, the project would be consistent with Policies 1.1 and 1.2, since, as discussed in Section 4, *Biological Resources*, the project would be designed and constructed such that no significant impacts after mitigation would occur to natural habitats or wildlife. Consistent with Policy 1.3, the project would include drought resistant and native landscaping to reduce water use. Consistent with Policy 1.4, the project would adhere to the City's specific grading regulations, as discussed in detail in the paragraph above and in Section 6, *Geology and Soils*. Consistent with Policy 1.5, and discussed in Section 1, *Aesthetics*, the proposed project would be developed in a manner that would be compatible with existing surrounding land uses and would not have a substantial adverse effect on scenic vistas visible from the project site and site vicinity. Consistent with Policy 1.6 and 1.10, and discussed in Section 3, *Air Quality*, and Section 6, *Energy*, the project would include installation of solar panels per the 2022 CALGreen Code, and the project would be consistent with the Air Quality Management Plan.

Safety Element

The Safety Element of the City's General Plan contains goals and policies that guide residential development in the City. Policies 1.1 through 1.4 intend to recognize the City's geologic/earthquake hazards and require seismic safety standards, geotechnical studies for development projects to identify potential hazards, review of projects by structural engineers, and enforce seismic design provisions by the CBC. Consistent with Policy 1.1, 1.3 and 1.4, the project would be required to comply with all CBC and seismic safety standards, and the project is subject to reviews by City and County staff to ensure compliance with all applicable regulations. The project applicant has also prepared a geotechnical investigation, and recommended measures included in the geotechnical report have been incorporated into Mitigation Measure GEO-1; therefore, the project would not conflict with Policies 1.2, 2.1 and 2.2.

As discussed in Section 9, *Hazards and Hazardous Materials*, the project is located in Zone X – an Area of Minimal Flood Hazard, which is defined by FEMA as an area outside of the 100- and 500-year floodplain. The project would be designed and engineered with drainage features appropriate to accommodate the needs of the proposed project such that the project would not exceed the capacity of existing/planned stormwater drainage systems. As such, no flooding hazards would occur, and the project would not result in impacts associated with the risk of pollutants from flooding hazards; therefore, the project would be consistent with Policy 2.1.

As discussed in Section 9, *Hazards and Hazardous Materials*, and Section 17, *Transportation*, the project would not result in significant impacts regarding inadequate emergency access, and as shown in Figure 3, the primary access drive includes a fire lane and fire truck turning pad along the southeastern boundary of the project footprint area for emergency response vehicle maneuverability. In the event that primary access to the site is determined to be unsafe due to wildfire, the project would also have secondary access from Burma Road located south of the site. Burma Road connects to Crenshaw Boulevard approximately one mile northwest of the site and would provide an alternative means of evacuation. Therefore, the project would be consistent with Policy 3.4.

Noise Element

The Noise Element of the City's General Plan contains goals and policies which guide residential development in the City. Policies 1.1 through 1.6 intend to reduce noise in the City and place compatible land uses adjacent to one another to reduce potential noise conflicts (Rolling Hills 1990e). Consistent with Policy 1.2, the project would be sited away from adjacent residences, thereby reducing reception of construction and operational noise. Consistent with Policy 1.6, a construction noise analysis has been prepared in Section 13, *Noise*, which found that the project is consistent with the thresholds and criteria in the City's noise ordinance. Therefore, noise impacts associated with the project would be less than significant.

Hazard Mitigation Plan

The City of Rolling Hills Hazard Mitigation Plan intends to identify and reduce potential risks and hazards from earthquakes, land movement, wildfires, and drought (Rolling Hills 2019b). As discussed in detail in Section 7, *Geology and Soils*, the project would be designed in conformance with the City's most recent and adopted building codes, as well as incorporate a project specific Mitigation Measure GEO-1 that requires implementation of the geotechnical recommendations included in the project's geotechnical report. As discussed in Section 9, *Hazards and Hazardous Materials*, and Section 20, *Wildfire*, the project is located in a Very High Fire Hazard Severity Zone (CAL FIRE 2022). However, the proposed project would include a fire lane, a fire hydrant, and all electrical utility lines would be required to be installed underground in accordance with RPMC Section 15.04.070. Primary vehicle access would be provided by an access drive along the road easement extending from the paved end of Portuguese Bend Road to the project site. The relevant portion of the existing private off-site access drive would be intact or improved as part of the proposed project. See Figure 10 for the location and layout of the proposed driveway, which would consist of paving the road with asphalt and stone pavers. Additional improvements to the fire road would include implementation of a fire hydrant adjacent to the proposed single-family home, as shown in Figure 3. In the event that primary access to the site is determined to be unsafe due to wildfire, the project would also have secondary access from Burma Road located south of the site. Burma Road connects to Crenshaw Boulevard approximately one mile northwest of the site and would provide an

alternative means of evacuation. The proposed home and guesthouse would include sprinkler systems, and they are below the water main so water pressure is above the City's threshold. The project would also be reviewed and approved by the City and LACoFD to ensure that the project complies with applicable standards.

The project applicant would be required to comply with all mitigation measures included in this Initial Study to reduce specific, identified environmental impacts to a less than significant level, and with any other conditions of approval required of the project by the City. Therefore, the project would not conflict with an applicable land use plan or other plan adopted for mitigating environmental effects and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b. *Would the project 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?*

The project site and surrounding properties are part of a hillside suburban community. According to the City's General Plan Open Space and Conservation Element, no mineral resources or mines are identified in the City (Rolling Hills 1990d). In addition to the lack of significant mineral resources, Section 13.080.040 of the RHMC prohibits any mining operations and the extraction of any minerals or mineral substances from any property in the City. Furthermore, the California Geological Survey (CGS) Information Warehouse was searched for the project site. According to the CGS mineral land classification maps, the project site is located within Mineral Resource Zone (MRZ) 1, which is defined as an area where no significant mineral deposits are present or where little likelihood for their presence (California DOC 1994). Because there are no known mineral resources on the project site or in the site vicinity and because the proposed project would not involve mining operations, the project would have no impact on the availability or recovery of mineral resources.

NO IMPACT

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13 Noise

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

A background to this section, including the applied methodology and thresholds, is included in Appendix F-1.

- a. *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Construction

Temporary noise levels caused by construction activity would be a function of the noise generated by construction equipment, the location and sensitivity of nearby land uses, and the timing and duration of noise-generating activities. Construction noise was estimated using the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM). The construction equipment included in RCNM are based on standard equipment assumptions for construction of the proposed project from CalEEMod (see Section 3, *Air Quality*). To determine construction noise impacts, noise levels were modeled at the nearest noise-sensitive receivers, consisting of existing single-family residences at 73 and 74 Portuguese Bend Road. The proposed project would involve construction of an access drive extending from the existing road easement located between the residences at 73 and 74 Portuguese Bend Road to meet the project site at 77 Portuguese Bend Road. Therefore, modeled construction noise levels assume that on-site construction activities would occur as close as 75 feet from existing single-family residences during the site preparation, grading, and paving phases. However, the majority of construction would occur at the main project site located

approximately 430 feet south of the single-family residence at 73 Portuguese Bend Road, and 600 feet southwest of the single-family residence at 74 Portuguese Bend Road.

Table 9 shows the equipment assumed to be used during each construction phase, as well as the average hourly noise levels (dBA, L_{eq}) at 75 feet, 430 feet, and 600 feet. Only the site preparation, grading, and paving phases were modeled at a distance of 75 feet as these construction activities would also include development of the proposed access drive. The building construction and architectural coating phases would only occur at the main project site. Construction noise estimates are based on the assumption that multiple pieces of construction equipment would operate simultaneously and do not account for the presence of intervening structures or topography, which could reduce noise levels at receiver locations. Therefore, the noise levels presented in Table 9 represent a conservative, reasonable worst-case estimate of actual construction noise.

Table 9 Construction Noise Levels by Phase

Construction Phase	Equipment	Approximate L_{eq} , dBA		
		75 Feet	430 Feet	600 Feet
Site Preparation	Grader, Dozer, Tractor	81	67	63
Grading	Grader, Dozer, Loader	80	65	62
Building Construction	Crane, Forklift, Tractor, Welders (3)	N/A	66	63
Paving	Cement and Mortar Mixer, Paver, Roller, Tractor	79	64	61
Architectural Coating	Air Compressor	N/A	55	52

N/A = Non-applicable construction phase at this distance.
 See Appendix F-2 for RCNM data sheets and assumptions.

The City does not have specific standards or limits related to construction noise. However, the Federal Transit Administration (FTA) provides reasonable criteria for assessing construction noise impacts based on the potential for adverse community reaction in their *Transit and Noise Vibration Impact Assessment Manual* (FTA 2018). For noise-sensitive residential uses, the daytime noise threshold is 80 dBA L_{eq} for an eight-hour period. By comparison, as shown in Table 1 in Appendix F-2, the existing ambient noise level in the project area is 41.4 dBA L_{eq} . As shown in Table 9, construction would increase ambient noise levels up to 81 dBA L_{eq} during the site preparation phase, 80 dBA L_{eq} during grading phase, and 79 dBA L_{eq} during paving. As discussed, the noise levels modeled at a distance of 75 feet reflect construction activities associated with development of the proposed access drive. Although construction would generate temporary noise levels in excess of ambient noise levels on the project site, excess construction noise would cease upon project completion. In addition, according to RHMC Section 15.36.020, construction activities in the City are limited to the hours between 7:00 AM and 6:00 PM, Monday through Saturday. Therefore, construction noise would not impact nearby residences during more sensitive nighttime and early morning hours. Nonetheless, construction noise levels would exceed the FTA daytime noise criterion of 80 dBA L_{eq} for construction activities at the access drive. Therefore, implementation of Mitigation Measure N-1 would apply to construction activities associated with development of the proposed access drive and would reduce construction noise at nearby residential properties to below the FTA 80 dBA L_{eq} noise threshold. As shown in Table 9, noise levels associated with construction of the

proposed home modeled at 430 feet and higher would not exceed the FTA daytime noise criterion of 80 dBA L_{eq} . Temporary construction noise would be less than significant with mitigation.

Operation

The proposed project would introduce a new single-family residence on vacant and undeveloped land. The project would involve construction of an access drive extending from the existing road easement located between the single-family residences at 73 and 74 Portuguese Bend Road to meet the project site. The nearest noise-sensitive receivers to the project site are existing single-family residences located at 73 Portuguese Bend Road and 74 Portuguese Bend Road northeast of the site. However, operation of the proposed home would not generate sources of noise that are new to the existing residential community. Outdoor amenities at the proposed home would include a swimming pool, pool deck, patios, circulation walkways, and a pond. However, these uses would be located approximately 700 feet from the nearest off-site single-family residence and would not result in a substantial increase in ambient noise levels. In addition, the proposed home would be positioned between the outdoor amenities and off-site single-family residences to the northeast (see Figure 3). Therefore, the proposed home would serve as a barrier to reduce on-site noise from the outdoor amenities at off-site noise-sensitive receivers. Other sources of noise would consist of vehicles entering and exiting the proposed home along the access drive. However, the access drive would be restricted to the project's residents and guests. The limited number of vehicle trips on the access road would not result in a substantial increase in ambient noise levels. Since there are no proposed project features in close proximity to sensitive receivers which would increase the ambient noise levels in the area, impacts would be less than significant with mitigation.

Mitigation Measure

N-1 Construction Noise Reduction

The construction contractor shall be required to implement noise-reduction measures upon construction activities associated with development of the proposed access drive, which may include, but are not limited to, the following:

- Retrofit mobile equipment with an industrial grade silencer or silencer of similar capacity.
- Enclose stationary equipment.
- Locate all construction areas for staging and warming up as far as possible from adjacent residential buildings and sensitive receivers.
- Erect temporary noise barriers with a minimum height of 12 feet or higher as necessary to block the line-of-sight between the access drive and single-family residences at 73 and 74 Portuguese Bend Road. The noise barriers shall be constructed with solid material with a density of at least one pound per square foot with no gaps from the ground to the top of the barrier and be lined on the construction side with acoustical blanket, curtain, or equivalent absorptive material rated sound transmission class (STC) 32 or higher.
- Provide a sign at the construction site entrance, or other conspicuous location, that includes a 24-hour telephone number for project information, and a procedure where a field engineer/construction manager shall respond to and investigate noise complaints and take corrective action, if necessary, in a timely manner. The sign shall have a minimum dimension of 48 inches wide by 24 inches high and be placed five feet above ground level.

- If a noise complaint(s) is registered, the contractor shall retain a City-approved noise consultant to conduct noise measurements at the use(s) that registered the complaint. The noise measurements shall be conducted for a minimum of one hour and shall include one-minute intervals. The consultant shall prepare a letter report for code enforcement summarizing the measurements, calculation data used in determining impacts, and potential measures to reduce noise levels to the maximum extent feasible.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

Construction activity associated with the project would create groundborne vibration. Operation of the proposed project would not generate significant ground-borne vibration as a single-family residence would not require the use of heavy industrial machinery. Therefore, this analysis considers vibration impacts from project construction only. To determine ground-borne vibration impacts, vibration levels were modeled at the nearest sensitive receivers, consisting of existing single-family residences at 73 and 74 Portuguese Bend Road. The proposed project would involve construction of an access drive extending from the existing road easement located between the residences at 73 and 74 Portuguese Bend Road to meet the project site at 77 Portuguese Bend Road. Therefore, modeled vibration assumes that on-site construction activities would occur as close as 75 feet from existing single-family residences. However, the majority of construction would occur within the primary larger project footprint located approximately 430 feet south from the single-family residence at 73 Portuguese Bend Road, and 600 feet southwest from the single-family residence at 74 Portuguese Bend Road.

Vibration levels were calculated at these sensitive receivers using the vibration velocity in decibels (i.e., VdB) of the highest impact pieces of equipment that would be used during project construction, which are the roller, dozer, and flat-bed delivery truck (see Table 9 under the discussion of Checklist Question 13.a.). Table 10 lists ground-borne vibration levels from a roller, dozer, and flat-bed delivery truck at 75 feet, 430 feet, and 600 feet from the source.

Table 10 Project Groundborne Vibration

Equipment	Approximate VdB		
	75 Feet	430 Feet	600 Feet
Roller	80	57	53
Dozer	73	50	46
Flat-bed Delivery Truck	71	49	44

See Appendix F-2 for data sheets.

As shown in Table 10, operation of construction equipment would generate peak vibration levels ranging from 44 VdB to 80 VdB at the nearest sensitive receivers. Although vibration would exceed 75 VdB (the approximate dividing line between barely perceptible and distinctly perceptible), such events would be intermittent and relatively short in duration. In addition, construction activity would be limited to daytime hours and would not disrupt residences during recognized hours of sleep. Ground-borne vibration would not reach levels that could cause building damage (100 VdB) at

single-family residences in the project vicinity. Therefore, vibration caused by project construction would result in a less-than-significant impact.

LESS THAN SIGNIFICANT IMPACT

- 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?*

The closest airport to the project site is Zamperini Field Airport approximately 3.7 miles north of the project site. According to the ALUC, the project site is not within the airport's noise contour areas (ALUC 2003). Although the project area experiences noise from overhead flights, such noise occurrences are intermittent and temporary by nature. In addition, the nearest private airstrip to the project site is McConville Airstrip in the City of Lake Elsinore located approximately 50 miles southeast of the site. The proposed project involves construction of a single-family home that would not expose people in the project area to excessive noise levels associated with airports or a private airstrip. Therefore, no impact would occur.

NO IMPACT

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14 Population and Housing

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

- a. *Would the project 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)?*

The California Department of Finance (DOF) estimates the current 2022 population of Rolling Hills is 1,684 persons with an average household size of 2.68 persons (DOF 2022). SCAG's 2020-2045 RTP/SCS forecasts that the population of Rolling Hills will grow to 2,000 by 2045, which is an increase of 78 persons, or approximately four percent (SCAG 2020). The proposed project involves construction of a single-family residence with a guest home. Based on the average household size of 2.68 for the City, the proposed project would increase the City's population to approximately 1,687, which is within the SCAG population forecast for 2045. The project would not cause a substantial unplanned increase in population; therefore, the impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The proposed project involves construction of a single-family residence on an undeveloped, 21.14-acre lot. There are no housing units on the project site or people currently residing on the project site. Therefore, the project would not displace any existing people or housing units or necessitate the construction of replacement housing. Therefore, no impact would occur.

NO IMPACT

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15 Public Services

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

a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

Fire protection, rescue services, and emergency medical (paramedic services) for the City of Rolling Hills are provided by the LACoFD. The fire station closest to the project site is Fire Station No. 56 located at 12 Crest Road West, approximately 0.9 mile north of the project site. Because the proposed project involves construction of a single-family residence, the project would not generate a substantial increase in the City's population or create the need for new or expanded fire protection facilities.

According to the project site plan, the proposed home would include a fire lane for access to the project site. Although the proposed project would incrementally increase existing demand for fire protection services, the project would be required to comply with applicable LACoFD fire and life safety standards and code requirements, such as fire hydrant flows, hydrant spacing, adequate turning-radius, access, and design. In addition, the proposed project would comply with standard design requirements in accordance with the CBC, which include fire sprinklers and fire alarm devices. Because the project site is located in the LACoFD's existing service area and would not

require new or expanded fire protection facilities, the project would result in a less than significant impact with respect to fire protection service.

LESS THAN SIGNIFICANT IMPACT

a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The Lomita Station of the Los Angeles County Sheriff Department (LACSD) provides police protection services for the City of Rolling Hills. The Lomita Station is located approximately 3.5 miles northeast of the project site at 26123 Narbonne Avenue in the City of Lomita. Because the proposed project involves construction of a single-family residence, the project would not generate a substantial increase in the City's population or create the need for new or expanded police protection facilities.

Although the project would incrementally increase existing demand for police protection services, project plans would be reviewed by the LACSD to ensure that all appropriate City requirements are met. Because the project is a single-family residence and would comply with applicable requirements, the project would not substantially degrade existing police response times or service ratios or require the construction of new or expanded police facilities. Therefore, the project would result in a less-than-significant impact with respect to police protection service.

LESS THAN SIGNIFICANT IMPACT

a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The City of Rolling Hills is served by the Palos Verdes Peninsula Unified School District (PVPUSD). The District has a student population of about 11,400 students who attend two early childhood centers, ten elementary schools, three middle schools, two high schools, and one continuation school (PVPUSD, About the District). The proposed project would involve the construction of a single-family residence, and any potential student-age children generated by the project would represent a minimal increase in the students served by the PVPUSD. However, in accordance with State law, the applicant would be required to pay school impact fees. Pursuant to Section 65995 (3)(h) of the California Government Code (Senate Bill 50, chaptered August 27, 1998), the payment of statutory fees "...is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization." Payment of the development fees would mitigate any potential impacts and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

As discussed in Section 14, *Population and Housing*, the project would increase the population by about three persons. However, the proposed project would also include an open courtyard, gym/work shop, swimming pool, outdoor walkways and landscaping, which would serve as the primary recreational uses for on-site residents. General recreational opportunities in the City include three community tennis courts located near City Hall, City-owned open space consisting of eight acres on the northern portion of Storm Hill Lane, equestrian facilities consisting of two riding rings, and approximately 30 miles of private trails open to horseback riders and pedestrians (Rolling Hills 1990d; RHCA 2022a; RHCA 2022b). As the proposed project is a single-family residence, on-site recreational uses would accommodate the majority of the residents' recreational needs. The project would not result in the need for new or physically altered parkland or other recreational facilities, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- a.5. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities?*

The proposed project would incrementally contribute to impacts to the City's public services and facilities, including libraries, recreation and community centers, and churches. Although the project would increase the City's population by three persons, this incremental increase in population and increased demand for other public services would not be substantial. There are no other public services for which substantial adverse effects are anticipated; therefore, the project would not create the need for new or expanded governmental facilities. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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16 Recreation

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

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

General recreational opportunities in the City include three community tennis courts located near City Hall, City-owned open space consisting of eight acres on the northern portion of Storm Hill Lane, equestrian facilities consisting of two riding rings, and approximately 30 miles of private trails open to horseback riders and pedestrians (Rolling Hills 1990d; RHCA 2022a; RHCA 2022b).

As discussed in Section 14, *Population and Housing*, the project would involve construction of a single-family residence and would increase the population by three persons. The proposed project would incrementally increase the current population in the City; however, on-site recreational uses would accommodate the majority of the residents' recreational needs. The proposed project would not increase the use of existing recreational facilities such that substantial deterioration would occur. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- 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?*

The proposed project would include construction of an open courtyard, gym/work shop, swimming pool, outdoor walkways and landscaping, which would serve as the primary recreational uses for on-site residents. The environmental impacts of these components have been evaluated in this Initial Study as part of the proposed project. As discussed in Checklist Question 16.a., adequate recreational facilities exist in the area such that construction of new or expansion of existing facilities is required. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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17 Transportation/Traffic

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

- a. *Would the project conflict with program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Construction

Construction of the proposed project would generate temporary traffic for deliveries of equipment and materials to and from the project site and construction worker traffic. However, construction traffic would be temporary and the movement of construction equipment would be limited to the project site for most of the construction period. No other single-family residential projects are proposed in the immediate area with the potential to result in cumulatively considerable construction traffic impacts. Therefore, since construction traffic would not substantially interfere with the City's circulation system and would not conflict with any City program, plan, ordinance, or policy addressing the circulation system, impacts would be less than significant.

Operation

The project involves the construction of a single-family home and guesthouse. The number of vehicle trips associated with operation of the project would be nominal and would not result in congestion-related effects to the local roadways. The proposed project is located in a semi-rural area, with surrounding single-family residential developments in the area. No other single-family residential projects are proposed in the immediate area with potential to result in cumulatively considerable traffic impacts. The proposed project would include construction of an access drive along the road easement extending from the paved end of Portuguese Bend Road to the project site. The access drive would be a continuation of the existing Portuguese Bend Road and would not conflict with the City's circulation system as the project's residents and their guests would be the

predominate users of the access drive. In addition, no public transit stops, pedestrian walkways, or bicycle paths are located in the site vicinity. Therefore, the proposed project would not conflict with any City program, plan, ordinance, or policy addressing the City's circulation system, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

Section 15064.3, which was recently added to the State CEQA Guidelines, describes specific considerations for evaluating a project's transportation impacts. Section 15064.3(b) establishes vehicle miles traveled (VMT) as the most appropriate measure of transportation impacts, shifting away from the use of LOS analysis that evaluates a project's impacts on traffic conditions at nearby roadways and intersections.

Per the Governor's Office and Planning Research's (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less than significant transportation impact (OPR 2018). Per the Institute of Transportation Engineer's Trip Generation Manual, 10th Edition, a single-family residence typically generates 9.44 trips per day. As such, this is substantially less than OPR's screening level guidance of 110 trips per day.

Because the project would not create a substantial increase in VMT, the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, and, as such, there would be a less than significant impact.

LESS THAN SIGNIFICANT IMPACT

- c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*

- d. Would the project result in inadequate emergency access?*

The proposed project would include construction of an access drive along the road easement extending from the paved end of Portuguese Bend Road to the project site. However, the access drive would be a continuation of the existing Portuguese Bend Road and would not increase hazards due to a geometric design feature or incompatible use. Furthermore, the proposed project would continue to meet the standards set forth by the LACoFD to ensure that there would be adequate access for emergency vehicles. Impacts associated with hazards and emergency access would be less than significant.

LESS THAN SIGNIFICANT IMPACT

18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a 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. 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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 2024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted and expands CEQA by defining a new resource category, "tribal cultural resources." Assembly Bill 52 establishes that "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3). PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and meets either of the following criteria:

- Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k), or
- 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 PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. AB 52 requires that lead agencies “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 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 as defined in Public Resources Code 21074 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 2024.1?*

Rincon requested a review of the Sacred Lands File (SLF) by the Native American Heritage Commission (NAHC). The NAHC sent a response on March 1, 2022, stating that a search of the SLF was completed with negative results.

The NAHC also provided a list of eight Native American contacts from the following tribes who may have knowledge regarding cultural resources of Native American origin within the project site:

- Gabrielino-Tongva Tribe
- Gabrielino Tongva Indians of California Tribal Council (Bellflower)
- Gabrielino Tongva Indians of California Tribal Council (Simi Valley)
- Gabrielino/Tongva Nation
- Gabrielino/Tongva San Gabriel Band of Mission Indians
- Soboba Band of Luiseño Indians
- Santa Rosa Band of Cahuilla Indians
- Gabrieleño Band of Mission Indians – Kizh Nation (Kizh Nation)

Pursuant to PRC Section 21080.3.1, the City mailed consultation letters to these tribes on March 15, 2022. A consultation meeting between the Gabrielino Tongva Indians of California Tribal Council and City staff was held on April 6, 2022, and consultation between Kizh Nation representatives and City staff was held on April 21, 2022. The consultation letters are attached as Appendix I.

During the consultation meetings, confidential materials regarding areas of potential sensitivity for tribal cultural resources were shared with the City, and discussions occurred regarding mitigations measures. There were follow up correspondence regarding the mitigation measures until the consultation period was closed on August 7, 2022 for both the Gabrielino Tongva Indians of California Tribal Council and Kizh Nation. The recommendations for mitigation measures were taken into consideration and incorporated into the measures presented below.

According to the CRA conducted for the proposed project (see Appendix C-1), the Palos Verdes Peninsula is prehistorically and historically known as an active habitation area for Gabrieleño Indians. A review of maps depicting Native American village locations in Los Angeles County identifies several village sites recorded on the peninsula, including one site appearing to be within five miles of the project site. Therefore, the peninsula should be considered as generally sensitive

for resources of Native American origin. The potential for the discovery of unknown resources of Native American origin remains a possibility during ground-disturbing activities. Compliance with Mitigation Measures TCR-1, TCR-2, and the aforementioned CR-1 would reduce potential impacts to a less-than-significant level by providing a process for evaluating and, as necessary, avoiding impacts to any identified resources.

Mitigation Measures

TCR-1 Native American Monitoring

A Native American monitor shall be retained from the project's consulting tribes (Gabrielino Tongva Indians of California and Gabrieleño Band of Mission Indians – Kizh Nation) to monitor all initial ground disturbing activities associated with the project, including but not limited to, vegetation removal, grading, boring, trenching, auguring, grubbing, drilling, and excavation within the project area and shall work in coordination with the qualified archaeologist. A copy of the executed monitoring agreement shall be submitted to the City of Rolling Hills prior to the commencement of any ground-disturbing activity. Should more than one of the consulting tribes wish to monitor, each tribe shall be provided equal representation during the monitoring effort through a rotation system with each tribe being provided an equal number of monitoring days onsite.

The Native American monitor shall complete monitoring logs on a daily basis that will provide descriptions of daily activities, construction locations, soil types, and cultural materials identified, if any. Monitor logs shall identify and describe any discovered tribal cultural resources, including, but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs shall be provided to the project applicant and the City of Rolling Hills upon completion of the ground-disturbing activities.

If, during initial ground disturbance, it is determined that ground disturbance would occur within culturally sterile soils, and that the ground-disturbing activities have little or no potential to impact cultural resources, monitoring may be reduced or eliminated. This decision shall be made in consultation with the qualified archaeologist, Native American monitor, and the City of Rolling Hills. The final decision regarding monitoring reduction or elimination shall be made by the City of Rolling Hills. Otherwise, on-site tribal monitoring shall conclude upon receipt of written confirmation to City of Rolling Hills from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete.

TCR-2 Unanticipated Discovery of Native American Resources

In the event that the Native American monitor identifies a cultural resource during monitoring, the monitor shall be given the authority to temporarily halt construction in the immediate vicinity and within a 50-foot buffer of the discovery. The Native American monitor, in consultation with the City of Rolling Hills, and the qualified archaeologist, shall determine whether the find qualifies as a tribal cultural resource under CEQA. If the resource is determined to be Native American in origin, the consulting Native American tribes shall coordinate with the City regarding treatment of the resource(s). This may include preservation in place (i.e., avoidance), reburial, or collection and curation. Should preservation in place be determine infeasible, a testing program to determine CRHR eligibility should be implemented through the preparation of a testing plan developed by a

Qualified Archaeologist in consultation with the consulting tribes and the City. If the discovery proves to be CRHR eligible, additional work, such as testing and data recovery, may be warranted.

Construction activity may continue unimpeded on other portions of the project site if cleared by the Native American monitor or Qualified Archaeologist. Ground Disturbance Activities in the area where resources were found may commence once the identified resources are properly assessed and processed by a Tribal Representative or, if no Tribal Representative is identified, a Qualified Archaeologist. At the completion of monitoring and/or field work, all artifacts of Native American origin shall be returned to the appropriate Native American tribe.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The proposed project would incrementally contribute to impacts to the City's utilities and service systems. As shown in the "will serve" letters included in Appendix G, SoCalGas, SCE, and Cal Water would provide natural gas, electricity, and water services for the proposed project, respectively. The following analysis evaluates impacts that the proposed project would have on other utilities and service systems that would serve the proposed project, including wastewater treatment facilities, storm drainage facilities, water supplies, and solid waste facilities.

- a. *Would the project 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?*
- c. *Would the project 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?*

Electric Power and Natural Gas

Although the project site is currently vacant/unused, the area has access to existing infrastructure related to electric power and natural gas due to the other single-family residential developments in the area. As discussed in Section 6, *Energy*, project operation would consume an estimated 8 MWh of electricity per year (Appendix A-2). The project's electricity demand would be served by SCE, which provided approximately 29.7 million MWh of electricity to residential uses in 2021 (CEC 2021a). Because it would represent approximately 0.000003 percent of all electricity provided by SCE, the project would not require or result in the relocation or construction of new or expanded electric power facilities. The construction of any minor electrical upgrades necessary to supply the project with electric power would be similar to the environmental impacts as analyzed in this Initial Study (minor trenching, grading, excavation, etc.). Impacts would be less than significant.

Estimated natural gas consumption for the project would be 23,898 kBtu per year (Appendix A-2). The project's natural gas demand would be serviced by SoCalGas, which provided approximately 2.3 billion therms, or approximately 226 billion kBtu of natural gas to residential uses in 2021 (CEC 2021b). Because it would represent approximately 0.00001 percent of all-natural gas provided by SoCalGas, the project would not require or result in the relocation or construction of new or expanded natural gas facilities. The construction of any minor natural gas upgrades necessary to supply the project with natural gas would be similar to the environmental impacts as analyzed in this Initial Study (minor trenching, grading, excavation, etc.). Impacts would be less than significant.

Telecommunications

The project site and surrounding area have access to existing infrastructure related to telecommunication facilities (wireless internet, cellular service, etc.) due to the other single-family residential developments in the area. No additional telecommunications facilities would be constructed as a result of the project. The construction of any minor telecommunication upgrades necessary to supply the project with telecommunication utilities would be similar to the environmental impacts as analyzed in this Initial Study (minor trenching, grading, excavation, etc.). Since the project would not require or result in the relocation or construction of new or expanded telecommunication facilities, impacts would be less than significant.

Wastewater

As discussed in Section 7, *Geology and Soils*, the proposed project would be served by an on-site septic system to minimize infiltration (Coast 2012). The Los Angeles County's Department of Public Health requires a Feasibility Study Report and Plan Submittal with regard to septic tank capacity. According to the Addendum Report to Percolation Feasibility prepared for the proposed project, the primary and secondary disposal systems would consist of a septic tank with leach lines. The proposed 1,500-gallon septic tank and leach trenches would be located west of the proposed guesthouse (Coast 2015b). Compliance with recommendations in the Percolation Feasibility Report

(see Appendix D) would regulate the use of a septic system on the project site. The proposed project would not exceed wastewater treatment requirements, require the construction of new wastewater treatment facilities, or impact the treatment capacity of existing wastewater treatment providers. No impact would occur.

Stormwater Drainage

As discussed in Section 10, *Hydrology and Water Quality*, all runoff from the access drive would be captured via a storm drainpipe at the entrance gate of the proposed home. Runoff from the upstream side of the access drive would be captured by concrete gutters upstream of the access drive and conveyed via a Smartditch system near the proposed home. Runoff from the proposed project would be captured and treated via biofiltration planters and trench drains located on-site, then conveyed to dispersal basins surrounding the perimeter of the property. Because the project would not require or result in the relocation or construction of new or expanded new stormwater drainage facilities, no impact would occur.

NO IMPACT

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

The project site is located within the Rancho Dominguez District of Cal Water. The Rancho Dominguez District is broken down into smaller districts, including the Palos Verdes District, Dominguez District, Hawthorn District, and Hermosa Redondo District. The Palos Verdes District supplies water to the City of Rolling Hills. According to the 2020 Urban Water Management Plan (UWMP) for the Palos Verdes District, the Palos Verdes District is located at the southwest corner of the Los Angeles coastal plain, approximately twenty miles from downtown Los Angeles. The service area covers approximately 26 square miles, encompassing all the area incorporated by the Cities of Palos Verdes Estates, Rancho Palos Verdes, Rolling Hills Estates, and Rolling Hills. Water provided by the Palos Verdes District is purchased from West Basin Municipal Water District (WBMWD), a regional wholesaler that distributes water from the Colorado River and State Water Project imported by the Metropolitan Water District (MWD) of Southern California. The Palos Verdes District manages 345 miles of pipeline, 18 storage tanks, and 24,000 service connections, and delivers an average of 16 million gallons of water per day, or approximately 17,934 acre-feet⁸ per year (AFY) to the service area (Cal Water2021). According to CalEEMod (Appendix A-2), the project would demand approximately 106,229 gallons of water per year, or 0.33 AF per year, to accommodate indoor and outdoor water uses. Table 11 shows the service area's water supply reliability assessment for a normal dry year, Table 12 shows supply and demand totals during a single dry year scenario, and Table 13 shows supply and demand totals during a multiple dry year scenario.

⁸ One acre-foot equals about 326,000 gallons, or enough water to cover an acre of land at one foot deep.

Table 11 Normal Dry Year Water Supply and Demand for Project Service Area (AFY)

	2025	2030	2035	2040	2045
Supply totals	17,873	17,976	18,144	18,264	18,494
Demand totals	17,873	17,976	18,144	18,264	18,494
Difference	0	0	0	0	0

Source: Cal Water 2021

Table 12 Single Dry Year Water Supply and Demand for Project Service Area (AFY)

	2025	2030	2035	2040	2045
Supply totals	18,246	18,346	18,518	18,641	18,976
Demand totals	18,246	18,346	18,518	18,641	18,976
Difference	0	0	0	0	0

Source: Cal Water 2021

Table 13 Multiple Dry Year Water Supply and Demand for Project Service Area (AFY)

		2025	2030	2035	2040	2045
First Year	Supply totals	18,476	18,576	18,750	18,874	19,113
	Demand totals	18,476	18,576	18,750	18,874	19,113
	Difference	0	0	0	0	0
Second Year	Supply totals	18,476	18,576	18,750	18,874	19,113
	Demand totals	18,476	18,576	18,750	18,874	19,113
	Difference	0	0	0	0	0
Third Year	Supply totals	18,476	18,576	18,750	18,874	19,113
	Demand totals	18,476	18,576	18,750	18,874	19,113
	Difference	0	0	0	0	0

Source: Cal Water 2021

The proposed project's water demand of 0.33 AF per year would constitute approximately 0.001 percent of the projected water supply for the year 2025 at completion of the proposed project (0.001 percent during normal, single, and multiple dry years). According to the 2020 UWMP, assessment of water supply reliability is complex and dependent upon a number of factors, such as the number of water sources, regulatory and legal constraints, hydrological and environmental conditions, climate change, and expected growth, among others (Cal Water 2021). MWD is projecting the continued ability to meet all demands of its member agencies through a level of investment in local supplies and demand management, as well as major infrastructure improvements in the delivery systems for both of its imported supplies. Based on this, the MWD would be able to meet forecasted WBMWD demands, and WBMWD would be able to meet

forecasted Cal Water demands (Cal Water 2021). Therefore, impacts associated with the proposed project would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project 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?*
- g. *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

Management of solid waste in the City involves trash, recyclables, and green waste collection provided twice a week by Republic Services (Allied Waste). The proposed project would generate solid waste during construction and operation of the project. The handling of all debris and waste generated during construction would be subject to the State's requirements under AB 939 for salvaging, recycling, and reuse of materials from construction activity on the project site. Development of the proposed single-family residence would not require demolition of existing structures; therefore, construction activities would not generate substantial solid waste. In addition, the proposed project would be required to comply with Section 8.08.580.A of the RHMC, which requires that projects divert at least 65 percent of all construction or demolition waste.

Solid waste generated by the proposed project would be collected by Republic Services and transferred to active landfills serving Los Angeles County. Table 14 summarizes the permitted daily throughput, estimated average waste quantities disposed, remaining capacity, and closure date for landfills nearest to the project site.

Table 14 Solid Waste Disposal Facilities

Facility	Permitted Daily Throughput (tons/day)	Average Daily Waste Disposed (tons/day)	Estimated Remained Daily Capacity (tons/day) ¹	Estimated Remaining Permitted Capacity (million tons)	Estimated Closure Date
Calabasas Landfill	3,500	1,946	1,554	4.31	2027
Scholl Canyon Landfill	3,400	1,527	1,873	3.83	2028
Sunshine Canyon Landfill	12,100	6,387	5,713	55.15	2037
Total	19,000	9,860	9,140	63.29	

¹ Estimated remaining daily capacity calculated by subtracting the average daily waste disposed from the permitted daily throughput.

Source: Los Angeles County 2019

As shown in Table 14, landfills that may serve the proposed project have an estimated average remaining capacity of 9,140 tons per day. According to CalRecycle's solid waste generation rates for single-family residences, the project would generate approximately 10 pounds of solid waste per day or approximately 0.005 tons of waste per day (CalRecycle 2019). This estimate is conservative as it does not factor in any recycling or waste diversion programs. The 0.005 tons generated by the project would not exceed the existing daily capacity of any of the landfills listed in Table 14. The project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. The proposed project would comply with federal, state, and local statutes and regulations related to

solid waste, such as AB 939, the RHMC, and the City's recycling program. Impacts related to solid waste facilities would be less than significant.

LESS THAN SIGNIFICANT IMPACT

20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

As discussed under Section 9, *Hazards and Hazardous Materials*, the City of Rolling Hills is vulnerable to wildfire hazards. The City is exposed to brush fire hazards from both outside and within the City's jurisdiction (Rolling Hills 2022). The entire City is designated as a Very High Fire Hazard Severity Zone by the California Department of Forestry and Fire Protection and Section 15.20.025 of the RHMC (CAL FIRE 2022).

- a. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

The project site, as with the entire City of Rolling Hills and the Palos Verdes Peninsula, is designated as a Very High Fire Hazard Severity Zone (CAL FIRE 2022). No roads would be permanently closed as a result of construction or operation of the proposed project, and the project would not involve development of structures that could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Primary vehicle access would be provided by an access drive along the road easement extending from the paved end of

Portuguese Bend Road to the project site. Figure 3 shows the site plan and location of driveways and fire lanes that would provide sufficient ingress/egress for emergency vehicles. As discussed in Section 9, *Hazards and Hazardous Materials*, the project would also have secondary access from Burma Road located south of the site. Burma Road is a dirt road in the preserve area owned by the Palos Verdes Peninsula Land Conservancy that connects to Crenshaw Boulevard approximately one mile northwest of the site. According to the LACoFD, a Type 3 vehicle, which is characterized as a four-wheel vehicle or low patrol vehicle (heavy duty truck), can travel through Burma Road (LACoFD 2022). In the event that primary access to the site is determined to be unsafe due to wildfire, Burma Road would provide an alternative means of evacuation.

In addition, the design of any new access points would be reviewed and approved by the City and LACoFD to ensure that emergency access meets standards. Therefore, implementation of the proposed project would not interfere with existing emergency evacuation plans or emergency response plans in the area, and upon compliance with City and LACoFD standards, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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?*

The project site, as with the entire City of Rolling Hills and the Palos Verdes Peninsula, is designated as a Very High Fire Hazard Severity Zone (CAL FIRE 2022). The project site is bordered on three sides by the Portuguese Bend Reserve and Forrester Nature Reserve, which are downslope, and the existing residences nearest the site are upslope. As discussed under Section 9, *Hazards and Hazardous Materials*, the proposed project would include fire lanes and a fire hydrant. See Figure 10 and Appendix H for the location and details for the improvements to the fire road, which would consist of paving the road with asphalt and stone pavers. The proposed fire lanes and hydrant would serve LACoFD to combat any wildfire event in the project vicinity. Moreover, the proposed home and guesthouse would include sprinkler systems. In addition, the project would be reviewed and approved by the City and LACoFD to ensure that the project complies with applicable standards. Heavy duty equipment used during project construction may produce sparks that could ignite vegetation. However, PRC Section 4442 mandates the use of spark arrestors, which prevent the emission of flammable debris from exhaust, on earth-moving and portable construction equipment with internal combustion engines that is operating on any forest-covered, brush-covered, or grass-covered land. Furthermore, PRC Sections 4427 and 4431 specify standards for conducting construction activities on days when a burning permit is required, and PRC Section 4428 requires construction contractors to maintain fire suppression equipment during the highest fire danger period (April 1 to December 1) when operating on or near any forest-covered, brush-covered, or grass-covered land. Because the project would not exacerbate wildfire risks that would expose project occupants to pollutant concentrations from a wildfire during construction or operation, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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?*

The project site, as with the entire City of Rolling Hills and the Palos Verdes Peninsula, is designated as a Very High Fire Hazard Severity Zone (CAL FIRE 2022). For access to the project site, the project would involve re-alignment and potential modification of an existing road into the easement area located between residences at 73 and 74 Portuguese Bend Road. Construction of the proposed driveway would also include implementation of a paved access drive with a fire lane, fire hydrant, and fire truck turning pad along the southeastern boundary of the project footprint. See Figure 10 for the location and details for the improvements to the fire road, which would consist of paving the road with asphalt and stone pavers. In accordance with RPMC Section 15.04.070, all electrical utility lines would be installed underground to avoid potential wildfire risk. According to The Gas Company's "will serve" letter (see Appendix G), due to the possibility of land movement in the area, the project may require above-ground gas piping. Construction and maintenance of any aboveground gas piping system would comply with the requirements established in the California Public Utilities Commission (CPUC) General Order No. 112 F, also known as the "State of California Rules Governing Design, Construction, Testing, Operation, and Maintenance of Gas Gathering, Transmission, and Distribution Piping Systems" (CPUC 2015). These rules are incorporated in addition to the Federal Pipeline Safety Regulations, specifically, Title 49 of the Code of Federal Regulations (49 CFR), Parts 191, 192, 193, and 199, which also govern the Design, Construction, Testing, Operation, and Maintenance of Gas Piping Systems in the State of California. Because the project would not exacerbate fire risk, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

The project site, as with the entire City of Rolling Hills and the Palos Verdes Peninsula, is designated as a Very High Fire Hazard Severity Zone (CAL FIRE 2022). As discussed under Section 7, *Geology and Soils*, recommendations included in the geotechnical assessments provide measures related to site preparation, slope construction and site stability, seismic design parameters, utility placement, pool area design, foundation support, and concrete slabs. See Appendix D for all geotechnical assessments and project recommendations provided by Coast and SWN Soiltech. Specifically, compliance with Mitigation Measure GEO-1 would reduce potential geological impacts to a less than significant level by ensuring that measures for preventative site and slope maintenance, and proper on-site and driveway drainage control are implemented. In addition, the project site is located at the southern terminus of Portuguese Bend Road. The existing residences nearest the site are upslope, and the site is bordered on three sides by the Portuguese Bend Reserve and Forrester Nature Reserve, which are downslope. Therefore, no people or structures would be exposed to post-fire risks, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
a. Have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Does the project have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, 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?*

The 21.14-acre project site consists of undeveloped land and is located at the southern terminus of Portuguese Bend Road via an unpaved road. The project site is transected by various dirt roads and paths, and moderate to heavy growth of shrubs and grasses cover the site and site vicinity. As described in Section 4, *Biological Resources*, implementation of Mitigation Measures BIO-1 through BIO-4 would address potential impacts to special-status species and natural habitats occurring in the 21.14-acre lot. As noted under Section 5, *Cultural Resources*, no historical or archaeological resources were identified on-site. Although the disturbance footprint of the project site was previously disturbed by grading of the existing easement, a fire road, earth moving equipment (e.g., tractor) to clear vegetation and imported mulch, the potential for the recovery of buried cultural

resources during development activities remains possible. Implementation of Mitigation Measure CR-1 would reduce impacts related to the unanticipated discovery of archaeological resources to a less than significant level by providing a process for evaluating and, as necessary, avoiding impacts to any identified resources during construction. Impacts would be less than significant with the mitigation incorporated for biological and cultural resources.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- 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)?*

The City is a predominantly residential community that is built out, and there are no planned or pending projects in the immediate vicinity of the project site. Other cumulative development in the City would generally consist of additional residences or modifications to existing residences; however, no projects are proposed in the immediate area with potential to result in cumulatively considerable impacts. As concluded in Sections 1 through 20, the project would have no impact, a less than significant impact, or a less than significant impact with mitigation incorporated, with respect to all environmental issues considered in this document. Cumulative impacts of several resource areas have been addressed in the individual resource sections, including Air Quality, Greenhouse Gases Emissions, Noise, and Transportation (See CEQA Guidelines Section 15064(h)(3)). As discussed in Section 4, *Air Quality*, and Section 8, *Greenhouse Gas Emissions*, the proposed project would result in less than significant impacts associated with air quality and GHG emissions. Noise and traffic analyses both considered cumulative increases in traffic and concluded that cumulative impacts would be less than significant. Some of the other resource areas (agricultural and mineral resources) were determined to have no impact in comparison to existing conditions. Therefore, the project would not contribute to cumulative impacts related to these issues. Other issues (e.g., geology, hazards and hazardous materials) are by their nature project-specific and impacts at one location do not add to impacts at other locations or create additive impacts. The project site, as with the entire City of Rolling Hills and the Palos Verdes Peninsula, is designated as a Very High Fire Hazard Severity Zone (CAL FIRE 2022). However, as discussed in Section 20, *Wildfire*, the project would not exacerbate wildfire risk or expose people or structures to post-fire risks (e.g., flooding, landslides). No roads would be permanently closed as a result of construction or operation of the proposed project, and the project would not involve development of structures that could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan for the area. Primary vehicle access would be provided by an access drive along the road easement extending from the paved end of Portuguese Bend Road to the project site; however, the project would also have secondary access from Burma Road located south of the site. In the event that primary access to the site is determined to be unsafe due to wildfire, Burma Road would provide an alternative means of evacuation for the project and other nearby residences. As such, cumulative impacts would be less than significant (not cumulatively considerable).

LESS THAN SIGNIFICANT IMPACT

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

In general, impacts to human beings are associated with air quality, geology and soils, hazards and hazardous materials, noise, and wildfire impacts. As detailed in analyses for air quality, geology and soils, hazards and hazardous materials, noise, and wildfire, the proposed project would not result, either directly or indirectly, in adverse hazards related to air quality, hazardous materials, noise, or wildfire that require mitigation. In the case of a wildfire, which could have adverse effects related to inadequate site access for fire protection services and evacuation of residents alike, Burma Road would provide an alternative means of access in the event that the primary access road is determined to be unsafe. As discussed in Section 7, *Geology and Soils*, Mitigation Measure GEO-1 is required, which ensures that the City Engineer reviews and approves the final design plans and confirms that measures related to geologic stability have been included in the project design.

Compliance with applicable rules and regulations and mitigation measures would reduce potential impacts on human beings to a less than significant level.

LESS THAN SIGNIFICANT IMPACT

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References

Bibliography

- Airport Land Use Commission. 2003. Torrance Airport: Airport Influence Area. Accessed November 2022 at: http://planning.lacounty.gov/assets/upl/project/aluc_airport-torrance.pdf.
- CAL FIRE. 2022. FHSZ Viewer. Accessed November 2022 at: <https://egis.fire.ca.gov/FHSZ/>.
- California Air Resources Board (CARB). 2005. Air Quality and Land Use Handbook: A Community Health Perspective. Accessed January 2018 at: <https://www.arb.ca.gov/ch/handbook.pdf>.
- _____. 2014. First Update to the Scoping Plan. Accessed January 2018 at: <https://www.arb.ca.gov/cc/scopingplan/document/updatescopingplan2013.htm>
- _____. 2017. 2017 Scoping Plan Update. Accessed January 2018 at: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf
- California Department of Conservation (California DOC). 1994. Generalized Mineral Land Classification Map of Los Angeles County – South Half. Document.
- _____. 2015. Fault Activity Map of California. Accessed November 2022 at: <https://maps.conservation.ca.gov/cgs/fam/>
- _____. 2022. Earthquake Zones of Required Investigation. Accessed November 2022 at: <https://maps.conservation.ca.gov/cgs/EQZApp/app/>
- _____. 2016a. Important Farmland 2016. Accessed November 2022 at: <https://maps.conservation.ca.gov/DLRP/CIFF/>.
- _____. 2016b. Los Angeles County Williamson Act FY 2015/2016. Accessed November 2022 at: http://ibecproject.com/PREDEIR_0000008.pdf.
- _____. 2019. California Tsunami Maps and Data. Accessed November 2022 at: <https://www.conservation.ca.gov/cgs/tsunami/maps>
- California Department of Finance (California DOF). 2022. E-5 County/State Population and Housing Estimates. 2022. Accessed October 2022 at: <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>
- California Department of Fish and Wildlife (CDFW). 2017. Biogeographic Information and Observation System (BIOS). Accessed January 2018 at: <https://www.wildlife.ca.gov/Data/BIO>
- California Department of Transportation (Caltrans) 2017. Scenic Highways. Accessed November 2022 at: <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>.
- California Energy Commission (CEC). 2020a. 2020 Power Content Label: Southern California Edison. Accessed October 2022 at: <https://www.energy.ca.gov/filebrowser/download/3902>.
- _____. 2020b. 2020 Total Electricity System Power. Accessed October 2022 at: <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2020-total-system-electric-generation/2020>.

- _____. 2021a. Electricity Consumption by County. Accessed November 2022 at:
<https://ecdms.energy.ca.gov/elecbycounty.aspx>.
- _____. 2021b. Natural Gas Consumption by Entity. Accessed November 2022 at:
<https://ecdms.energy.ca.gov/gasbycounty.aspx>.
- _____. 2022. California Gasoline Data, Facts, and Statistics. Accessed October 2022 at:
<https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-gasoline-data-facts-and-statistics>.
- California Governor's Office of Emergency Services (Cal OES). 2015. MyHazards. Accessed January 2018 at: <http://myhazards.caloes.ca.gov/>.
- California Public Utilities Commission (CPUC). 2015. General Order NO. 112-F. State of California Rules Governing Design, Construction, Testing, Operation, and Maintenance of Gas Gathering, Transmission, and Distribution Piping Systems. Accessed November 2022 at:
<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M163/K327/163327660.PDF>.
- California Water Service (Cal Water). 2021. 2020 Urban Water Management Plan: Palos Verdes District. Accessed November 2022 at:
https://www.calwater.com/docs/uwmp2020/PV_2020_UWMP_FINAL.pdf.
- California Air Pollution Control Officers Association (CAPCOA). 2018. CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act. January 2008. Accessed October 2022 at:
https://www.counties.org/sites/main/files/file-attachments/capcoa_white_paper_ceqa_and_climate_change_final.pdf?1344472764.
- CalRecycle. 2015. AB 341 Report to the Legislature. August 2015. Accessed September 2020 at:
<https://www2.calrecycle.ca.gov/Publications/Download/1168>
- _____. 2019. Estimated Solid Waste Generation Rates. Accessed July 2020 at:
<https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates>.
- Captain Chris Benoit, Los Angeles County Fire Department Station 56, conversation with the City of Rolling Hills on October 31st 2022.
- Coast Geotechnical, Inc. 2012. Preliminary Geologic Investigation of Proposed Residence at 77 Portuguese Bend Road, Rolling Hills, California. May 5, 2012. Document.
- _____. 2013. Report of Percolation Feasibility for New Residence, 77 Portuguese Bend Road, Rolling Hills, County of Los Angeles, California. October 31, 2013. Document.
- _____. 2015a. Addendum Report to a Percolation Feasibility for New Residence, 77 Portuguese Bend Road, Rolling Hills, County of Los Angeles, California. March 10, 2015. Document.
- _____. 2015b. Geotechnical Review of Proposed Grading Plan and Acceptance of Geotechnical Responsibility for 77 Portuguese Bend Road, Rolling Hills, California. June 10, 2015. Document.
- _____. 2016. Geological Assessment of Proposed Offsite Access Drive for 77 Portuguese Bend Road, Rolling Hills, California. December 31, 2016. Document.
- _____. 2017. Response to Geotechnical Comments Concerning Proposed Offsite Driveway Construction at 77 Portuguese Bend Road, Rolling Hills, California. October 20, 2017. Document.

- _____. 2020. Response to Geotechnical Peer Review, 77 Portuguese Bend Road, Rolling Hills, California. August 6, 2020. Document.
- _____. 2021a. Request for Additional Information from Outside Reviewer for 77 Portuguese Bend Road, Rolling Hills, California. March 31, 2021. Document.
- _____. 2021b. Second Request for Additional Information from Outside Reviewer for 77 Portuguese Bend Road, Rolling Hills, California. November 18, 2021. Document.
- County of Los Angeles, Department of Public Works. 2014. Low Impact Development Standards Manual. Accessed June 2018 at:
<http://www.dpw.lacounty.gov/ldd/lib/fp/Hydrology/Low%20Impact%20Development%20Standards%20Manual.pdf>.
- Department of Toxic Substances Control (DTSC). 2018. EnviroStor Database. Accessed January 2018 at: http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=60002419.
- Department of Water Resources. 2020. *CA Bulletin 118 Groundwater Resources*. Accessed September 2020 at: <https://data.cnra.ca.gov/dataset/ca-bulletin-118-groundwater-basins>.
- Federal Emergency Management Agency (FEMA) 2008. Flood Map Service Center: Search By Address. Accessed December 2017 at:
<http://fema.maps.arcgis.com/home/webmap/viewer.html?webmap=cbe088e7c8704464aa0fc34eb99e7f30&extent=-118.41520205322259,33.72938323529597,-118.33211794677736,33.75293631369162>.
- Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. Accessed October 2022 at:
https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/researchinnovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf.
- Governor's Office of Planning and Research. 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. Accessed March 2020 at: http://www.opr.ca.gov/docs/20180416-743_Technical_Advisory_4.16.18.pdf.
- GMU. 2019. Geotechnical Peer Review, 77 Portuguese Bend Road, City of Rolling Hills, California. December 13, 2019. Document.
- Los Angeles County. 2019. Countywide Integrated Waste Management Plan. Accessed November 2022 at: <https://pw.lacounty.gov/epd/swims/ShowDoc.aspx?id=14372&hp=yes&type=PDF>
- _____. 2021 Forestry Fuel Modification. Accessed June 2021 at: <https://fire.lacounty.gov/forestry-fuel-modification/>.
- P. A. Arca Engineering, Inc. 2016. Hydrology/Water Quality Plan. Document.
- Palos Verdes Peninsula Unified School District (PVPUSD). About the District. Accessed January 2018 at:
https://www.pvpusd.net/apps/pages/index.jsp?uREC_ID=361418&type=d&pREC_ID=787353.
- Rolling Hills, City of. 1990a. General Plan Introduction. Accessed November 2022 at:
<https://cms5.revize.com/revize/rollinghillsca/Government/Planning%20And%20Community%20Services/General%20Plan/2%20-%20Introduction.pdf>.

- _____. 1990b. General Plan Circulation Element. Accessed November 2022 at:
<https://cms5.revize.com/revize/rollinghillsca/Government/Planning%20And%20Community%20Services/General%20Plan/5%20-%20Circulation%20Element.pdf5>
- _____. 1990c. General Plan Land Use Element. Accessed November 2022 at:
https://cms5.revize.com/revize/rollinghillsca/Government/Planning%20And%20Community%20Services/General%20Plan/3%20-%20Land%20Use%20Element_201611071054065793.pdf.
- _____. 1990d. General Plan Open Space and Conservation Element. Accessed November 2022 at:
<https://cms5.revize.com/revize/rollinghillsca/Government/Planning%20And%20Community%20Services/General%20Plan/6%20-%20Open%20Space%20and%20Conservation%20Element.pdf>
- _____. 1990e. General Plan Noise Element. Accessed January 2018 at:
<https://cms5.revize.com/revize/rollinghillsca/Government/Planning%20And%20Community%20Services/General%20Plan/8%20-%20Noise%20Element.pdf> .
- _____. 2022. General Plan Safety Element. Accessed November 2022 at:
https://cms5.revize.com/revize/rollinghillsca/Government/Planning%20And%20Community%20Services/General%20Plan/SafetyElement/Safety%20Element_Final_March%202022.pdf.
- _____. 2019a. Silhouette Construction Guidelines. Accessed November 2022 at:
<https://cms5.revize.com/revize/rollinghillsca/Government/Planning%20And%20Community%20Services/Forms/City%20of%20Rolling%20Hills%20Silhouette%20Guidelines.pdf>.
- _____. 2019b. Hazard Mitigation Plan. January 16, 2019. Accessed October 2022 at:
https://cms5.revize.com/revize/rollinghillsca/Government/Planning%20And%20Community%20Services/RH%20HazMit%20Plan_FINAL%201.16.19%20.pdf.
- _____. 2020. Rolling Hills Community Wildfire Protection Plan. Accessed October 2022 at:
https://cms5.revize.com/revize/rollinghillsca/CWPP_final_2020-09-10_v2020.1.pdf.
- Rolling Hills Community Association (RHCA). 2022a. Bridle Trails. Accessed November 2022 at:
<https://www.rhca.org/bridle-trails-tennis-courts>.
- _____. 2022b. Tennis Courts. Accessed November 2022 at: <https://www.rhca.org/tennis-courts>.
- South Coast Air Quality Management District (SCAQMD). 2003. Final Localized Significance Threshold Methodology. Accessed January 2018 at:
https://files.ceqanet.opr.ca.gov/221458-6/attachment/IYyvf68wNpGarRrLHNSzz_xz7gO9sTaqpe5bHys2hnVR2VBM_dUA2HOBiY5ejHkQM7yz_XunHm9WBdnB0
- _____. 2008. Final Localized Significance Threshold Methodology. Accessed November 2022 at:
<http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2>
- _____. 2009. Appendix C: Mass Rate Look-up Tables. Accessed November 2022 at:
<http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2>.

- _____. 2010. Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group Meeting #15: “Proposed Tier 3 Quantitative Thresholds – Option 1”. Accessed January 2018 at: [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf).
- _____. 2017. 2016 AQMP. Accessed November 2022 at: <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf>
- Southern California Gas Company (SoCalGas). 2022. Accessed November 2022 at: <https://www.socalgas.com/sustainability/reliable-natural-gas-for-the-future>.
- South Bay Cities Council of Governments (SBCCOG). 2018. City of Rolling Hills Climate Action Plan. Accessed November 2022 at: https://www.ca-ilg.org/sites/main/files/file-attachments/rh_cap.pdf?1591223119.
- Southern California Association of Governments (SCAG). 2016. 2016 RTP/SCS. Accessed November 2022 at: <https://planning.lacity.org/eir/CrossroadsHwd/deir/files/references/B28.pdf>
- _____. SoCal Connected. 2020-2045 RTP/SCS. Accessed November 2020 at: <https://www.connectsocal.org/Pages/default.aspx>.
- State of California. 2018. California’s Fourth Climate Change Assessment Statewide Summary Report. August 27, 2018. Accessed October 2022 at: <http://www.climateassessment.ca.gov/state/>.
- State Water Resources Control Board (SWRCB). 1999. General Waste Discharge Requirements for Bio solids Land Application Draft Statewide Program EIR – Appendix G. Background Information on Acoustics. Document.
- _____. 2015. Geotracker Database. Accessed January 2018 at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603705391
- SWN Soiltech Consultants, Inc. 2012. Report of Preliminary Soils Engineering Investigation. May 10, 2012. Document.
- United States Environmental Protection Agency (USEPA) 2018. Superfund Enterprise Management System (SEMS) Database. Accessed November 2022 at: <https://cumulis.epa.gov/supercpad/CurSites/srchrslt.cfm?start=1>
- _____. 2022. Climate Change Indicators: Climate Forcing. Accessed October 2022 at: <https://www.epa.gov/climate-indicators/climate-change-indicators-climate-forcing#:~:text=Greenhouse%20gases%20produced%20by%20human%20activities%20have%20caused,carbon%20dioxide%2C%20followed%20by%20methane%20and%20black%20carbon..>
- United States Fish and Wildlife Service (USFWS). 2017a. ECOS Critical Habitat Mapper. Accessed November 2022 at: <https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77>
- _____. 2017b. National Wetlands Inventory Wetlands Mapper. Accessed November 2022 at: <https://www.fws.gov/wetlands/Data/Mapper.html>

Willdan Geotechnical (Willdan). 2018. Geotechnical Review: Proposed Offsite Driveway Construction, Planning Review Stage, Residential Development, 77 Portuguese Bend Road, Rolling Hills, California. July 18, 2018. Document.

List of Preparers

Rincon Consultants, Inc. prepared this IS/MND under contract with the project sponsor. Persons involved in data gathering analysis, project management, and quality control are listed below.

RINCON CONSULTANTS, INC.

Joe Power, AICP CEP, Principal-In-Charge
Susanne Huerta, AICP, Project Manager
Steven Hongola, Principal – Natural Resources
Christopher Duran, Principal – Cultural Resources
Brenna Vredevelde, Supervising Biologist
Breana Campbell-King, Supervising Archaeologist
Vanessa Villanueva, Senior Planner
Amy Trost, Associate Biologist
Samantha Kehr, Associate Biologist
Mark Strother, Associate Archaeologist
Nik Kilpelainen, Associate Planner
Jenna Shaw, Associate Planner
Destiny Brenneisen, Associate Planner
Aaron Rojas, Associate Planner