PORTUGESE BEND LANDSLIDE MITIGATION PROJECT

RANCHO PALOS VERDES, CALIFORNIA

Prepared for:

CITY OF RANCHO PALOS VERDES

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SECTION 1.0 - PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING

1.1 PROJECT BACKGROUND AND PURPOSE

The Portuguese Bend Landslide began moving in 1956, and continued land movement has resulted in significant infrastructure damage to homes, utilities, and roadways. The City of Rancho Palos Verdes (City) and its citizens are seeking to control the landslide to preserve infrastructures, open lands, preserve natural vegetation and recreational features of the Palos Verdes Nature Preserve, reduce soil erosion loses, and reduce health and safety concerns related to the integrity of the surrounding road system, sewer system and other infrastructure (proposed Project).

1.2 PROJECT LOCATION AND SITE CHARACTERISTICS

The Portuguese Bend Landslide Complex (PBLC) is located along the south section of the Palos Verdes Peninsula within the City (Project Site). The terminus of the active landslide complex, and generally the southwest boundary of the PBLC is the Pacific Ocean as seen in **Figure 1**, **Project Site Location**. The PBLC area is approximately 285 acres, however the area of land which contributes to the landslide instability is much larger, and approximately 750 acres. The Project Site also includes approximately 96 acres of preserve land associated with the Palos Verdes Peninsula Land Conservancy, Portuguese Bend and Abalone Cove conservancy areas as shown in **Figure 2**, **Palos Verdes Peninsula Land Conservancy Areas**.

Several residences exist on the northwestern side of the Project Site while a series of trail networks are located on the eastern side of the Project Site and south of Palos Verdes Drive South. Vegetation consist of mostly native coastal vegetation. Due to the land sliding, surface fractures exist throughout the site. As previously mentioned, the Pacific Ocean is located south of the Project Site which contains several coastal bluffs.

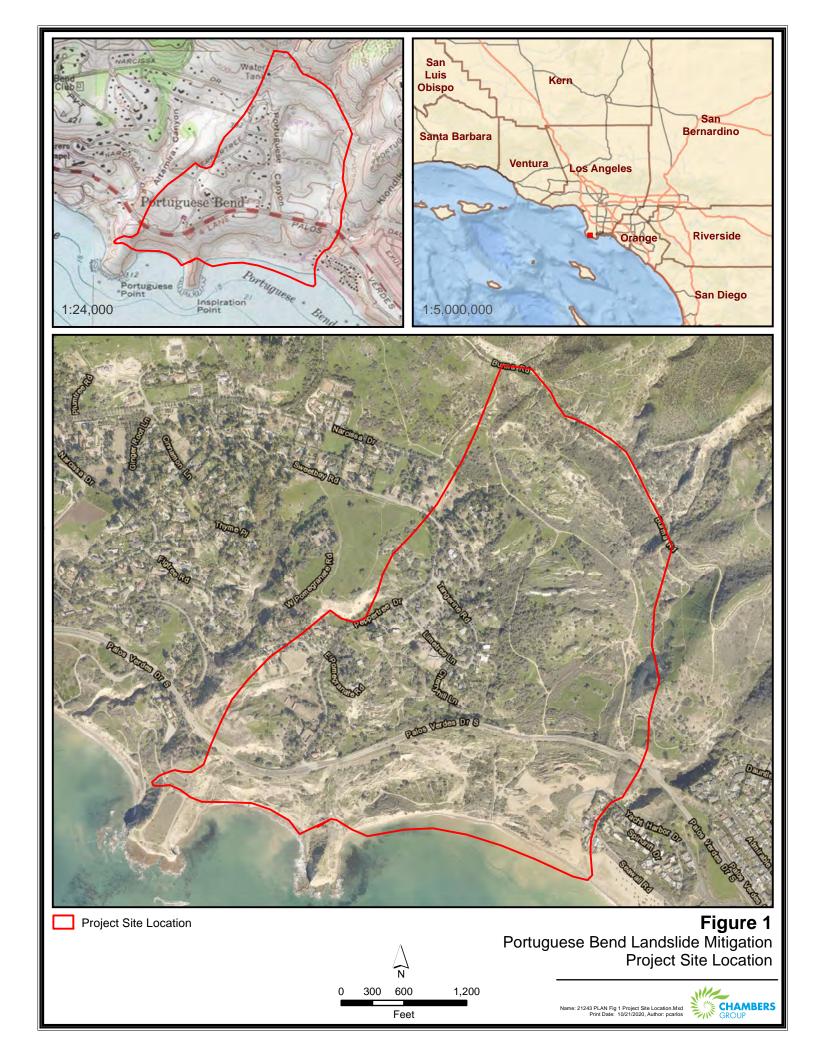
Two parks exist within the Project Site boundaries; the Abalone Cove Shoreline Park which features two beach areas (Abalone Cove and Sacred Cove) and Founders Park which is approximately 5.5 acres located within the northern portion of the site.

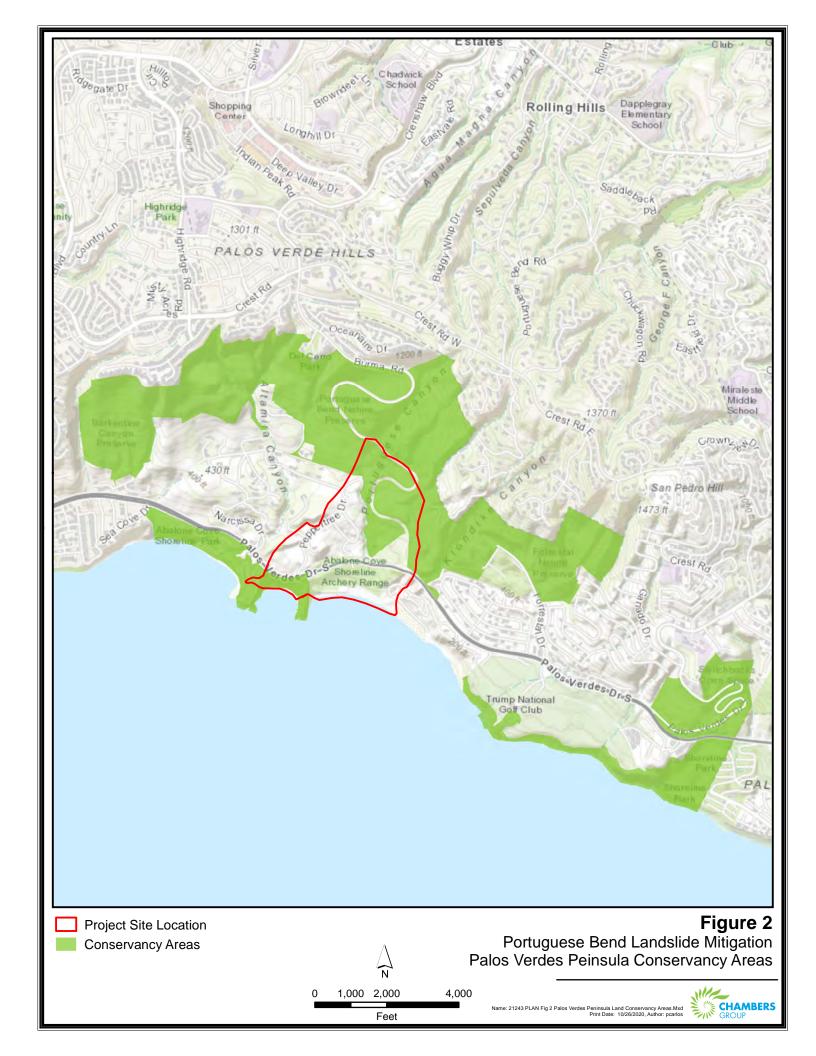
1.2.1 General Plan Designation/Zoning

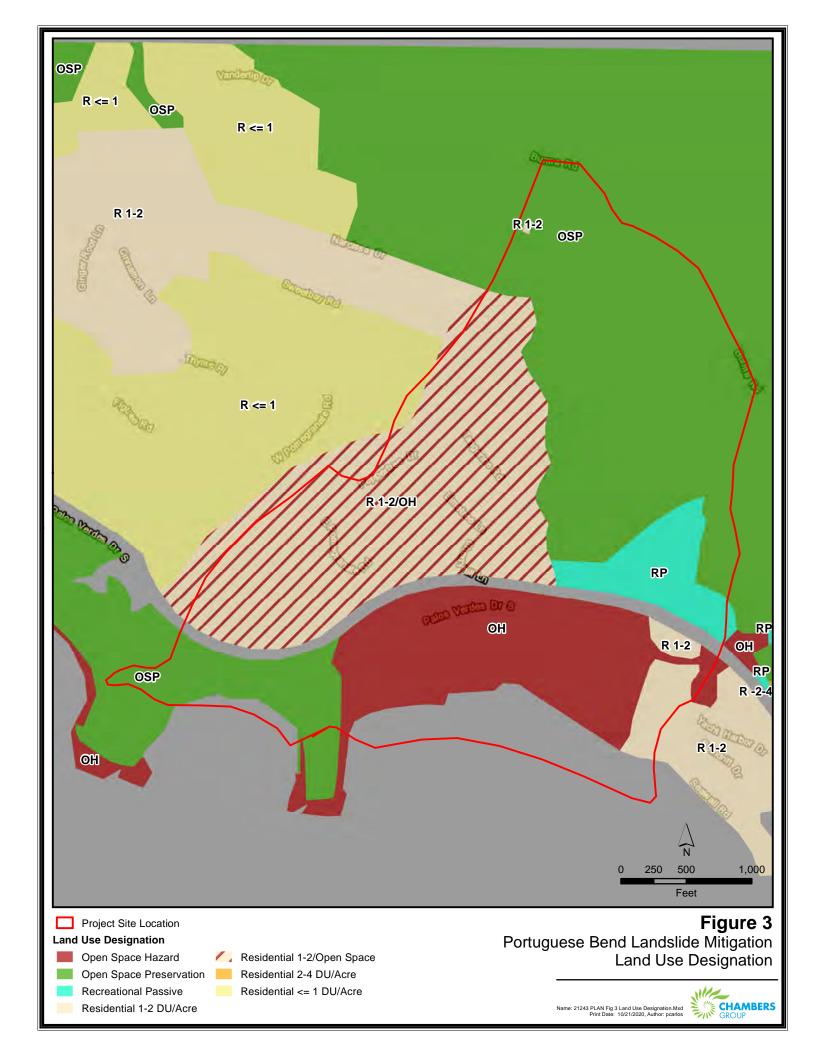
The General Plan Land Use Element designates the site as agricultural/socio-cultural and agricultural/residential (≤1 dwelling unit per acre) (General Plan Land Use Map 1975) as shown in **Figure 3, Land Use Designation**. The Project Site is zoned as open space – hazard (oh) (City of Rancho Palos Verdes 2012) as shown in **Figure 4, Zoning**. Additionally, a portion of the Project Site is located within the Coastal Specific Plan Area designated as mostly hazard area and partially as agricultural area (City of Rancho Palos Verdes 1978) as shown in **Figure 5, Coastal Specific Plan**. Portions of the Project Site are also located in the City's OC-3 Urban Appearance Overlay Control District.

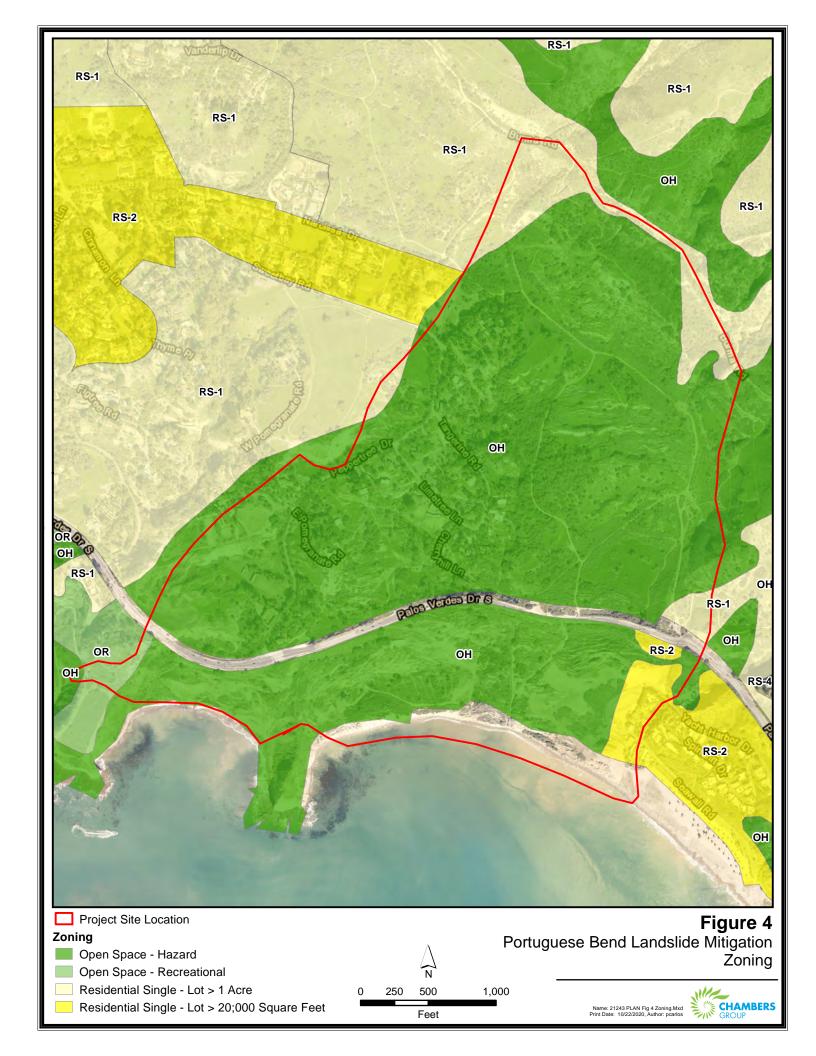
1.2.2 <u>Surrounding Land Uses</u>

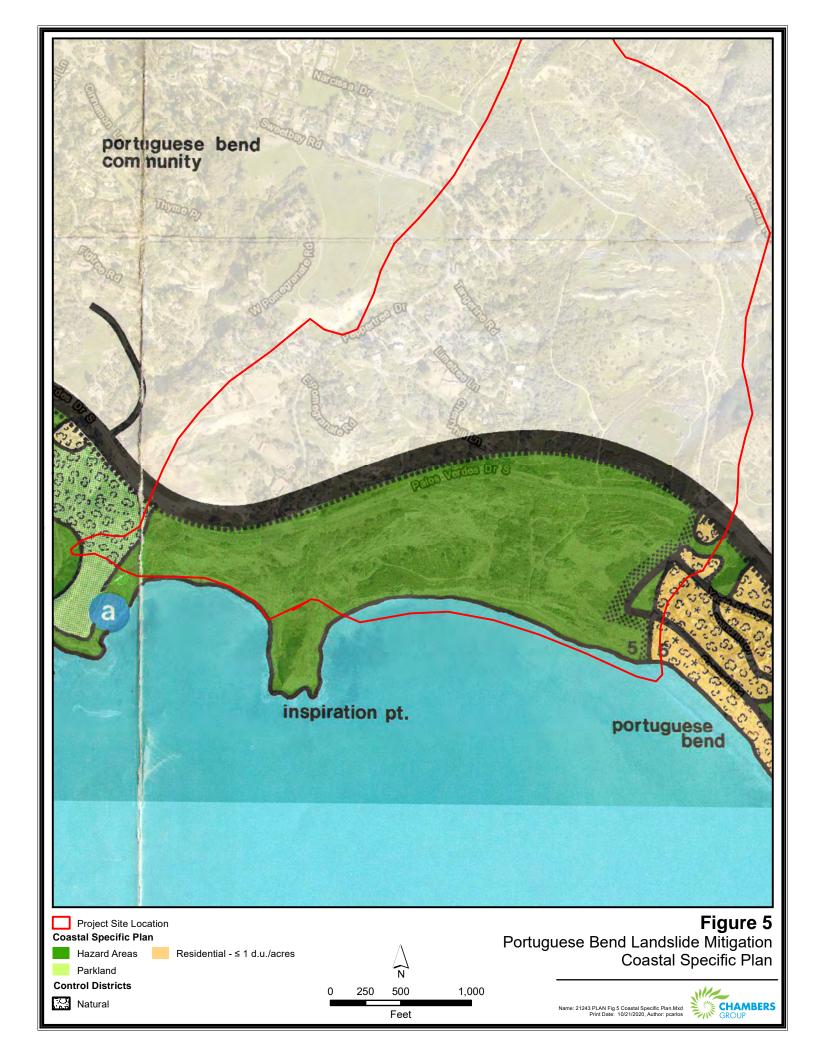
Surrounding the Project Site are residential uses to the east and west. Directly north of the Project Site is more of the Portuguese Bend Preserve followed by additional residential uses. The Pacific Ocean is located to the south of the Project Site.











1.3 PROJECT DESCRIPTION

The Portuguese Bend Landslide Mitigation Project (Project) would control the existing landslide area. The proposed Project involves a series of recommended mitigation measures which follow a phased-approach to construction and installation. The construction is likely to be implemented in stages, which may occur separately. The anticipated construction phasing as follows: (i) surface fracture infilling; (ii) surface water improvements; and (iii) groundwater mitigation improvements. Periodic field observation should be performed during construction under the supervision of the appropriate California registered Engineer. Post-construction items are anticipated to include long-term maintenance, landslide monitoring, and possible future construction phases.

1.4 PROJECT CONSTRUCTION

The construction of the Project would last up to approximately 14 months for Phase I and Phase II. The time required for Phase III will rely on the outcome of these two phases. Construction would occur between the hours of Monday through Friday 7:00 a.m. and 6:00 p.m. and Saturday 9:00 am and 5:00 pm with the exception of Sundays and federal holidays in accordance with City noise standards.

Two separate staging areas will be utilized for construction equipment as shown in **Figure 6**, **Staging Areas**.

Construction activities would be expected to include site preparation, fencing, mowing, grading, drilling, etc. Site preparation would involve access paths, working platforms, staging areas, and other temporary site features as needed to perform the construction. These items would be established in the field during the construction mobilization. Site preparation and construction of the Project would be in accordance with all federal, state, and City zoning codes and requirements. Noise-generating construction activities would be limited to the construction hours noted above. All stationary equipment and machines with the potential to generate a significant increase in noise or vibration levels would be located away from noise receptors to the extent practicable. The contractor would conduct construction activities in such a manner that the maximum noise levels at the affected buildings would not exceed established noise levels.

1.4.1 Construction Phase I - Surface Fracture Infilling

Surface fracture infilling will be performed during the first phase of construction. These existing fractures are a few feet wide and some are as deep as 15 feet. The fractures intercept stormwater runoff where this water discharges into the ground. The identified fractures should be infilled with a controlled low strength flowable/pumpable fly ash-based slurry conforming to the Standard Specification Section 201-6, Controlled low strength material and the associated mix design. This is intended to eliminate storm runoff from easily becoming part of the groundwater and is an important component in efforts to minimize landslide-related ground movement.

After the initial fracture infilling event, the City will perform periodic observation to identify fractures which may open in the future due to ongoing landslide movement. Fractures identified during periodic observation should be infilled as part of post-construction maintenance.

1.4.2 Construction Phase II – Surface Water Improvements

Surface water improvements will be installed, which include the following:

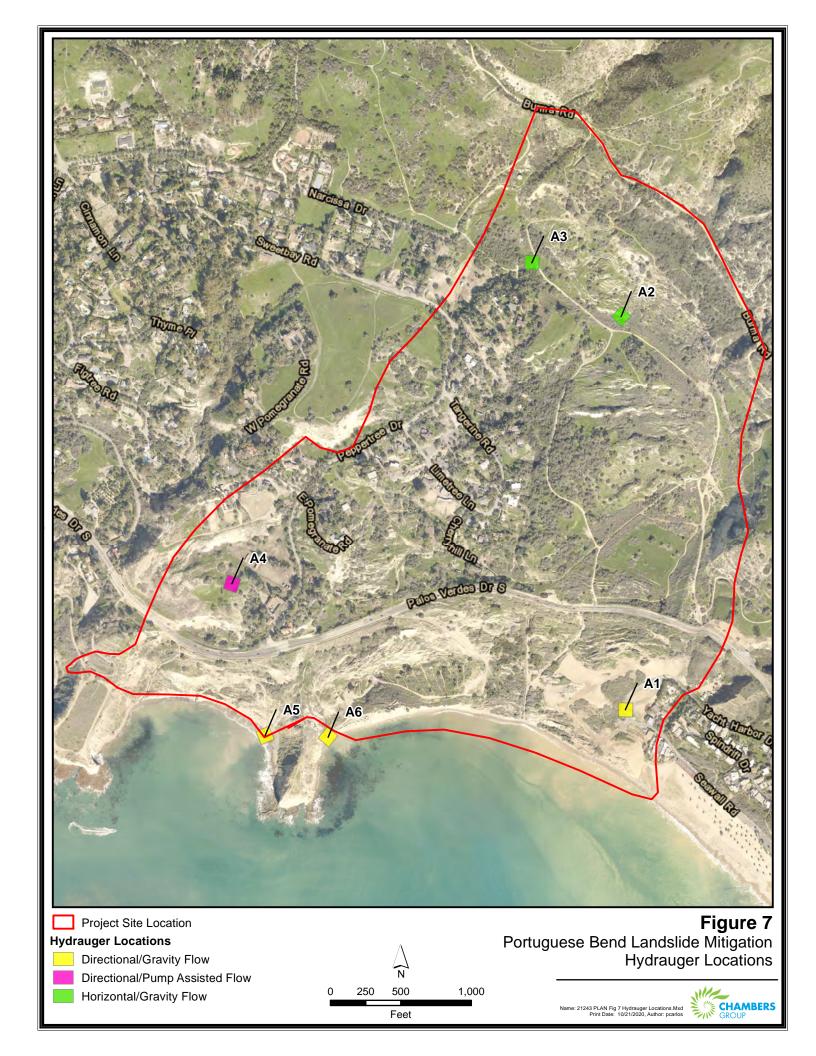
- Engineered swales;
- Flow reduction area (approximately 8 acres);

- Installation of new 36-inch-diameter pipe below Burma Road using trenchless techniques;
- Removal and disposal of existing 36-inch-diameter plastic pipe south of Palos Verdes Drive South and replacement with thick-walled fusion-welded plastic pipe;
- Refurbishment (i.e., cleanout, lining with smooth polymeric material, and structural retrofit if needed) of existing 60-inch-diameter pipe below Palos Verdes Drive South.

1.4.3 Construction Phase III – Groundwater Mitigation Drains (Hydraugers)

Hydraugers will be constructed below grade and designed to alleviate artesian water pressure underground in the landslide area. These will be installed horizontally, beneath the active movement zone of the landslide. Approximate locations of the hydraugers are shown in **Figure 7**, **Hydrauger Locations**. The groundwater mitigation program is planned to be implemented in three sub-phases. The sub-phases generally consist of: (i) preparatory work and instrumentation; (ii) installation of up-gradient drains using horizontal drilling; and (iii) installation of down-gradient drains using directional drilling. The pace and sequence of construction within each sub-phase is likely to require adjustment based on field observations.





1.5 REQUIRED PERMITS AND APPROVALS

As required by the *CEQA Guidelines*, this section provides, to the extent the information is known, a list of the agencies that are expected to use this Initial Study (IS) in their decision making and a list of permits and other approvals required to implement the project. The project will obtain or comply with the following permits:

- Clean Water Act Section 404 Permit
- Clean Water Act Section 401 Water Quality Certification
- California Department of Fish and Game Code Section 1602 (Streambed Alteration Notification)
- Construction General Permit Order 2009-0009-DWQ
- Potential local or county permits, as applicable

1.5.1 <u>Lead Agency Approval</u>

The Environmental Analysis or Environmental Impact Report must be certified by the City Council (Council) as to its adequacy in complying with the requirements of the California Environmental Quality Act (CEQA) before taking any action on the proposed Project. The Council will consider the information contained in the EIR in making a decision to approve or deny the proposed Project. The analysis in the EIR is intended to provide environmental review for the whole of the proposed Project, including the project planning, site clearance, site excavation, and installation of project improvements in accordance with CEQA requirements.

The lead agency for the proposed Project would be the City of Rancho Palos Verdes.

1.5.2 Reviewing Agencies

Reviewing Agencies include those agencies that do not have discretionary powers but that may review the Environmental Analysis or EIR for adequacy and accuracy. Potential Reviewing Agencies include the following:

State Agencies

- California Coastal Commission
- California Department of Fish and Wildlife
- United States Army Corps of Engineers
- California Department of Water Resources

Regional Agencies

- Palos Verdes Peninsula Land Conservancy
- Portuguese Bend Sewer District
- Abalone Cove Landslide Abatement District
- Los Angeles County Fire Department
- Los Angeles County Sheriff's Department
- South Coast Air Quality Management District
- Los Angeles County Flood Control District
- Sanitation District of Los Angeles County

SECTION 2.0 – ENVIRONMENTAL DETERMINATION

2.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would potentially be affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklists on the following pages. For each of the potentially affected factors, mitigation measures are recommended that would reduce the impacts to less than significant levels.

	Aesthetics Biological Resources Geology /Soils Hydrology /Water Quality Noise Recreation Utilities /Service Systems		Agriculture and Forestry Reso Cultural Resources Greenhouse Gas Emissions Land Use / Planning Population / Housing Transportation Wildfire	[] [[Air Quality Energy Hazards & Hazardous Materials Mineral Resources Public Services Tribal Cultural Resources Mandatory Findings of Significa	
2.2	DETERMINATION	l					
On th	ne basis of this initial ev	aluatio	on:				
1.	NEGATIVE DECLARAT	TION w	ill be prepared.			the environment, and a	
2.	environment, there v	will not nade b	be a significant effect by or agreed to by the	in this c	ase l	gnificant effect on the because revisions in the oponent. A MITIGATED	
3.		-		effect o	on th	ne environment, and an	\boxtimes
4.	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.						
5.	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or Negative Declaration pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or Negative Declaration, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.						
Signa	iture		Da	ate			
Name	e		Tit	tle			

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SECTION 3.0 – EVALUATION OF ENVIRONMENTAL IMPACTS

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

- 7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8. The explanation of each issue should identify:
 - a. the significance criteria or threshold, if any, used to evaluate each question; and
 - b. the mitigation measure identified, if any, to reduce the impact to less than significant.

*Note: Instructions may be omitted from final document.

SECTION 4.0 - CHECKLIST OF ENVIRONMENTAL ISSUES

4.1 **AESTHETICS**

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

Impact Analysis

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

Potentially Significant Impact. The Project Site is located partially within the Coastal Zone with views of the Pacific Ocean in an area containing scenic and visual qualities. The proposed Project would close some existing fissures on the site and may have the potential to impact a scenic vista. A detailed analysis of the potential impacts on visual resources, including those to scenic vistas, will be included in the EIR.

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

No Impact. The Project Site does not contain scenic trees, rock outcroppings, historic buildings or other known scenic resources. Further, the nearest scenic highway is located over 13 miles northeast of the Project Site (Caltrans 2020) For these reasons, there would be no impact in this regard and no further discussion is required.

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

Less than Significant Impact. The Project is largely undeveloped land within an urbanized area. The repair of the Rancho Palos Verdes Landslide Complex would further prevent the hillside from eroding into the ocean which would long term improve the aesthetic of the area. Construction of the Project

would temporarily impact the scenic quality of the site due to construction equipment as discussed in (a) above; however, the project is considered necessary for erosion mitigation. Therefore, there would be no conflict with applicable zoning or other regulations governing scenic quality. Impacts would be less than significant, and no further discussion is required.

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

Less than Significant Impact. Construction of the proposed Project would be required to adhere to Rancho Palos Verdes Municipal Code (RPVMC) §17.56.020 which allows construction from 7:00 AM to 6:00 PM Monday through Friday and 9:00 AM to 5:00 PM on Saturdays therefore lighting would not be required during construction. Construction the proposed Project would require construction equipment which may result in temporary glare impacts. However, these glare impacts would be temporary and would cease upon completion of the Project.

Operation of the proposed Project would not construct any structures or buildings that would result in permanent increases to lighting or glare. Impacts would be less than significant and no further discussion is required.

4.2 AGRICULTURE & FORESTRY RESOURCES

2.	AGRICULTURE & FOREST 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 Department 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, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				\boxtimes
(b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				

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

Impact Analysis

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The General Plan notes that the Portuguese Bend slide area is the first major agricultural area (City of Rancho Palos Verdes 1975). The General Plan Land Use Element designates the site as agricultural/socio-cultural and agricultural/residential (≤1 dwelling unit per acre) (City of Rancho Palos Verdes 1975). The Project Site is zoned as open space − hazard (oh) (City of Rancho Palos Verdes 2012) and is not currently used for agricultural uses. The Project Site is listed as an area which falls outside of the Natural Resources Conservation Service (NRCS) soils survey area, not mapped by the Farmland Mapping and Monitoring Program (FMMP) (DOC 2016). This site is not identified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, there would be no impacts to important farmland and no further discussion is required.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. As previously mentioned, the Project Site is zoned as oh and is not under a Williamson Act Contract (DOC 2019). No impact to land zoned for agricultural use or subject to a Williamson Act Contract would occur and no further discussion is required.

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(q))?

No Impact. The Project Site is zoned as oh. No impact to land zoned as forestland, timberland, or Timberland Production land would occur and no further discussion is required.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The Project Site is not forest land, therefore no impact to forest land would occur and no further discussion is required.

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 or the conversion of forest land to non-forest use?

No Impact. Agricultural uses and forest land are not located in the immediate vicinity or on the Project Site. The Project Site is surrounded by residential uses to the east and west, and open space uses to the north. No impact would occur and no further discussion is required.

4.3 AIR QUALITY

3.	AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Conflict with or obstruct implementation of the applicable air quality plan?	\boxtimes			
(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?	\boxtimes			
(c)	Expose sensitive receptors to substantial pollutant concentrations?	\boxtimes			
(d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	\boxtimes			

Impact Analysis

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

Potentially Significant Impact. The South Coast Air Quality Management District (SCAQMD) monitors air quality within the South Coast Air Basin, which includes the portion of Los Angeles County containing the Project Site. The proposed Project would control the Rancho Palos Verdes Landslide Complex to prevent further sliding in the area. It is not anticipated that a substantial number of new vehicle trips would be created. Thus, long-term air quality impacts during the operational phase are not anticipated. An air quality and greenhouse gases technical report will be prepared for the proposed Project to determine whether short-term construction emissions would exceed the emissions budgeted for the Project Site in the applicable air quality management plan. Further analysis is required and will be included in the EIR.

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?

Potentially Significant Impact. The SCAQMD recommends that a project's potential contribution to cumulative impacts should be assessed utilizing the same significance criteria as those for project specific impacts. The air quality technical report prepared for the proposed Project will

evaluate the potential for cumulative air quality impacts. Further analysis is required and will be included in the EIR.

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

Potentially Significant Impact. The SCAQMD indicates that sensitive receptors include residences, schools, playgrounds, child care centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Operation of the proposed Project would not be anticipated to generate substantial new sources of pollutant concentrations. The air quality technical report prepared for the proposed Project will evaluate the potential for individual receptors to be exposed to unhealthful pollutant concentrations during construction. Further analysis is required and will be included in the EIR.

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

Potentially Significant Impact. Construction activities may result in short-term fugitive dust or other potential emissions. Further evaluation of the significance of this impact is required and will be included in the EIR.

4.4 BIOLOGICAL RESOURCES

4.	BIOLOGICAL RESOURCES. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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 Game or U.S. Fish and Wildlife Service?	\boxtimes			
(b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	\boxtimes			
(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?	\boxtimes			
(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?	\boxtimes			
(e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	\boxtimes			

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4.	BIOLOGICAL RESOURCES. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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?	\boxtimes			

Impact Analysis

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

Potentially Significant Impact. The proposed Project area is undisturbed open space. There is a potential for the site to contain habitat that is potentially suitable for sensitive and/or special status plant and wildlife species. However, a natural community conservation plan (NCCP)/habitat conservation plan (HCP) was prepared to maximize benefits to wildlife and vegetation communities and provide for the comprehensive management and conservation of various listed and/or sensitive species. The Rancho Palos Verdes NCCP and HCP that was adopted in 2019. Project conformance with the NCCP will be required, and mitigation measures will be incorporated. A biological resources technical report will be prepared to evaluate potential impacts to sensitive and/or special status species. Further analysis is required and will be included in the EIR.

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?

Potentially Significant Impact. According to the U.S. Fish and Wildlife (USFWS) National Wetlands Inventory there are two dry rivers that run through the Project Site classified as Riverine habitat (USFWS 2020). The biological resources technical report prepared for the proposed Project will identify any potential impacts on riparian habitat. Further analysis is required and will be included in the EIR.

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?

Potentially Significant Impact. As previously mentioned, there are two USFWS riverine designated streams on the Project Site. Additionally, runoff from the Project Site travels directly into the Pacific Ocean identified as USFWS as estuarine and marine wetland. The biological resources technical report prepared for the proposed Project will identify any potential impacts to wetlands. Further analysis is required and will be included in the EIR.

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?

Potentially Significant Impact. As previously mentioned, the Project Site may contain habitat suitable to support a sensitive natural community and wildlife corridors. The biological resources technical report prepared for the proposed Project will evaluate potential impacts to sensitive habitat and wildlife corridors. While the Project does not propose development of structures that would impeded wildlife movement or migration, further analysis is warranted.

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

Potentially Significant Impact. The biological resources technical report prepared for the proposed Project will identify protected biological resources on the Project Site (if any), as well as potential impacts to policies or ordinances protecting such resources. Further analysis is required and will be included in the EIR.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservancy Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Potentially Significant Impact. The City's General Plan designates portions of the Project Site as wildlife habitat area for preservation (City of Rancho Palos Verdes 1975). The biological resources technical report prepared for the proposed Project will assess the any potential impacts to such conservation and habitat plans. Further analysis is required and will be included in the EIR.

4.5 CULTURAL RESOURCES

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

Impact Analysis

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Potentially Significant Impact. A detailed cultural resources technical report will be prepared for the proposed Project, which will identify any significant historical resources in the Project area, and will assess any potential impacts to such resources. Further analysis is required and will be included in the EIR.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Potentially Significant Impact. The cultural resources technical report prepared for the proposed Project will identify any archaeological resources in the Project area, and will assess potential impacts to such resources. Further analysis is required and will be included in the EIR.

c) Would the project disturb any human remains, including those interred outside of formal cemeteries?

Potentially Significant Impact. No known burial sites are located within the Project Site, however, the cultural resources technical report will assess potential impacts related to disturbance of unknown human remains. Further analysis is required and will be included in the EIR.

4.6 ENERGY

6.	ENERGY Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				
(b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	\boxtimes			

Impact Analysis

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?

Potentially Significant Impact. The proposed Project would control the Rancho Palos Verdes Landslide Complex to prevent further sliding in the area. Energy for the project would only be required during construction and would not require additional capacity on a local or regional scale. An energy technical report will be prepared for the proposed Project to determine whether short-term construction emissions would result in wasteful, inefficient, or unnecessary consumption of energy resources. Further analysis is required and will be included in the EIR.

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

Potentially Significant Impact. It is not expected that the proposed Project would conflict or obstruct the goals and policies of the City's Emissions Reduction Action Plan. However, the energy technical

report would address consistency with applicable plans. Further analysis is required and will be included in the EIR.

4.7 GEOLOGY AND SOILS

7.	GEOLOGY AND SOILS. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				\boxtimes
	ii) Strong seismic ground shaking?				\boxtimes
	iii) Seismic-related ground failure, including liquefaction?				\boxtimes
	iv) Landslides?	\boxtimes			
(b)	Result in substantial soil erosion or the loss of topsoil?	\boxtimes			
(c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	\boxtimes			
(d)	Be located on expansive soil, as defined in Table 18- 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	\boxtimes			
(e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				\boxtimes
(f)	Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	\boxtimes			

Impact Analysis

a) i) Would the project 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? Refer to Division of Mines and Geology Special Publication 42.

No Impact. The nearest fault is the Cabrillo Fault located over one mile north of the Project Site (USGS 2020). The Cabrillo Fault is not designated as an Alquist-Priolo Fault and therefore no impacts would occur. No further analysis is required.

ii)Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

No Impact. As previously mentioned, the nearest fault is the Cabrillo Fault located over one mile away from the Project Site. The proposed Project would not construct any buildings or structures and therefore would not risk loss, injury, or death from strong seismic ground shaking. No impacts would occur and no further analysis is required.

iii) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

No Impact. According to the Department of Conservation, no portion of the Project Site is located within a liquefaction zone (DOC 2020). Additionally, the proposed Project would not construct any buildings or structures and therefore would not risk loss, injury, or death from strong seismic ground shaking. No impacts would occur and no further analysis is required.

iv) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

Potentially Significant Impact. The Project Site is located in the PBLC which is an active landslide area. The proposed Project would control the current landslide to prevent further issues. Further analysis of land sliding potential is required and will be provided in the EIR.

- b) Would the project result in substantial soil erosion or the loss of topsoil?
 - **Potentially Significant Impact.** Construction activities would result in ground surface disruption that could result in the potential for erosion to occur. A geotechnical report will be prepared for the proposed Project that will include an analysis of potential erosion. Further analysis is required and will be provided in the EIR.
- c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?
 - **Potentially Significant Impact.** Construction activities would result in ground surface disruption that could result in the potential for the soil to become unstable. A geotechnical report will be prepared for the proposed Project that will include an analysis of the soil stability. Further analysis is required and will be provided in the EIR.
- d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?
 - **Potentially Significant Impact.** The geotechnical investigation report prepared for the proposed Project will address soil conditions in the Project vicinity with respect to expansion potential. Further analysis is required and will be provided in the EIR.

- e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?
 - **No Impact.** The proposed Project would not include the construction of any structures or buildings that would result in additional wastewater generation. Septic tanks are not proposed and therefore no impacts would occur. No further analysis is required.
- f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

Less than Significant Impact. A detailed cultural paleontological resources technical report is being prepared for the proposed Project. The field results indicate that Monterey formations and Quaternary Terrace deposits are located withing the project area and have yielded fossil recoveries. Observations from a recent field survey indicate that these formations have been impacted by the landslide and have little possibility to have significant cultural resources. As such, less than significant impacts would occur. No further analysis is required.

4.8 GREENHOUSE GAS EMISSIONS

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

Impact Analysis

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

Potentially Significant Impact. As the proposed Project is intended to control the landslide, it is not anticipated that a substantial net increase in greenhouse gas emissions would be generated during operation. However, construction of the proposed Project would generate greenhouse gas emissions. Construction-related emissions would be generated from off-road construction equipment and onroad vehicle exhaust. A greenhouse gases technical report will be prepared for the proposed Project to determine if any potentially significant impacts related to greenhouse gas emissions would occur. A detailed analysis of this issue will be included in the EIR. Further analysis is required and will be included in the EIR.

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

Potentially Significant Impact. As discussed in Section 4.8a above, the proposed Project would generate greenhouse gas emissions during construction. In addition to analyzing impacts related to such emissions, the EIR will also include a detailed analysis of the Project's compliance with applicable plans policies, and regulations adopted for the purposes of reducing greenhouse gas emissions. Further analysis is required and will be included in the EIR.

4.9 HAZARDS AND HAZARDOUS MATERIALS

9.	HAZARDS AND HAZARDOUS MATERIALS. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			\boxtimes	
(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?			\boxtimes	
(c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
(d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			\boxtimes	
(e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				
(f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	\boxtimes			
(g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	\boxtimes			

Impact Analysis

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

Less than Significant Impact. Construction of the proposed Project would use hazardous materials typical of construction (i.e., fuel for construction equipment, materials for road construction). However, the transport, use, and disposal of construction-related hazardous materials would comply with applicable laws and regulations for such activities, such as the Hazardous Materials

Transportation Act, Resource Conservation and Recovery Act, the California Hazardous Material Management Act, and the California Code of Regulations, Title 22. Operation of the proposed Project would not require the routine transport, use, or disposal of hazardous materials. Therefore, impacts related to the routine transport, use, or disposal of hazardous materials would be less than significant, and no further analysis is required.

- 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?
 - Less than Significant Impact. Construction activities for the proposed Project would involve the limited transport, storage, use, or disposal of hazardous materials, such as fuel for construction equipment and materials for road construction. These types of materials, however, are not acutely hazardous, and all storage, handling, and disposal of these materials would comply with existing regulations. Compliance with regulations would ensure a less than significant impact related to creating a significant hazard to the public through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment with regard to construction of the proposed Project. No further analysis is required.
- c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
 - **No Impact.** The nearest school is Chadwick School located at 26800 South Academy Drive, which is over 1.8 miles north of the Project Site. There are no schools with in a one-quarter mile radius and therefore no impacts would occur.
- d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
 - Less than Significant Impact. A review of Geotracker (SWRCB 2020) and Envirostor (Department of Toxic Substances 2020) was completed. The review of the databases determined that there is one closed case of a Leaking Underground Storage Tank (LUST) Cleanup Site located within the Project Site boundaries on the northern portion of the site. However, this case was cleaned up and closed as of December 3, 1996. Construction activities would occur approximately 300 feet northeast of this clean up location and this site would not be disturbed. There are no other hazardous materials sites on the Project Site or within a one quarter mile radius. Impacts would be less than significant, and no further analysis is required.
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?
 - **No Impact.** The nearest airport to the Project Site is over 3.5 miles north. The Torrance Municipal Airport Zamperini Field serves as a general aviation airport, but is mostly home to private aircraft.

The Project Site is not within 2 miles of airport or within an airport land use plan. No impacts would occur and no further analysis is required.

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

Potentially Significant Impact. Palos Verdes Drive is designated by the General Plan as a disaster route (City of Rancho Palos Verdes 1975). As previously mentioned, there is a potential that portions of Palos Verdes Drive may be affected temporarily during construction. For this reason, further analysis is required and will be included in the EIR.

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

Potentially Significant Impact. The proposed Project would control the existing Rancho Palos Verdes Landslide Complex area and would not construct any buildings or structures. However, construction would occur within an area designated as a Local Responsibility Area (LRA) Very High Fire Hazard Zone (VHFHSZ) (CalFire 2011). Further analysis is required and will be included in the EIR.

4.10 HYDROLOGY AND WATER QUALITY

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

10.	HYDROLOGY AND WATER QUALITY. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	\boxtimes			

Impact Analysis

a) Would the project violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or ground water quality?

Potentially Significant Impact. Construction activities have the potential to degrade water quality through the exposure of surface runoff to exposed soils, dust, and other debris, as well as from runoff from construction equipment. As the proposed Project would control the roadway to prevent further sliding in the area, it is not anticipated that a substantial net increase in runoff would be generated at the Project Site during operation. A hydrology and water quality analysis will be prepared for the proposed Project to assess potential impacts to water quality. Further analysis is required and will be included in the EIR.

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?

Potentially Significant Impact. The Project Site is underlain by the West Basin operated by the West Basin Municipal District. The Project would change the existing stormwater drainage which may alter how the groundwater basin is recharged. The hydrology and water quality analysis prepared for the proposed Project will assess potential impacts to groundwater supply and recharge. Further analysis is required and will be included in the EIR.

- 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;

Potentially Significant Impact. No streams or rivers cross the Project Site. However, implementation of the proposed Project may have the potential to alter drainage patterns. The hydrology and water quality analysis prepared for the proposed Project will evaluate potential impacts to the alteration of drainage patterns. Further analysis is required and will be included in the EIR.

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

Potentially Significant Impact. As discussed in Section 4.10 c.i. above, the hydrology and water quality analysis prepared for the proposed Project will evaluate potential impacts to the alteration of drainage patterns. Further analysis is required and will be included in the EIR.

iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources or polluted runoff; or

Potentially Significant Impact. The proposed Project may have the potential to change runoff volumes. The hydrology and water quality analysis prepared for the proposed Project will evaluate potential impacts to the storm drain system due to changes in runoff volumes. Further analysis is required and will be included in the EIR.

iv) impede or redirect flood flows?

Potentially Significant Impact. As discussed in Section 4.10 c.i. above, the hydrology and water quality analysis prepared for the proposed Project will evaluate potential impacts to the alteration of drainage patterns. Further analysis is required and will be included in the EIR.

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

Less than Significant Impact. The Project Site is not located in proximity to a closed body of water (e.g., lake or reservoir) or storage tank and would not be subject to hazards associated with inundation from a seiche and would not risk release of pollutants. However, the Project Site is located on a bluff above the Pacific Ocean coastline. A small portion of the Project Site is located within a tsunami inundation hazard area mapped by the California Geological Survey (DOC 2020). However, the landslide mitigation Project does not involve the construction of any structures that could be affected by a tsunami. nor does the project involve the long-term use or storage of hazardous materials that would result in a release of pollutants due to inundation. Conditions under the proposed project would be similar to the existing conditions and would not increase the potential of site inundation. For these reasons, impacts would be less than significant and no further discussion is required.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Potentially Significant Impact. As previously mentioned, the Project would change the existing stormwater drainage which may alter how the groundwater basin is recharged. The hydrology and water quality analysis prepared for the proposed Project will assess potential impacts to groundwater supply and recharge. Further analysis is required and will be included in the EIR.

4.11 LAND USE AND PLANNING

11.	LAND USE/PLANNING Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Physically divide an established community?				\boxtimes
(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?	\boxtimes			

Impact Analysis

a) Would the project physically divide an established community?

No Impact. The proposed Project would control the existing Rancho Palos Verdes Landslide Complex area and would not construct any buildings or structures. The Project would not physically divide an established community. No impacts would occur and no further analysis is required.

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?

Potentially Significant Impact. The General Plan Land Use Element designated the site as agricultural/socio-cultural and agricultural/residential (≤1 dwelling unit per acre) (General Plan Land Use Map 1975). The Project Site is zoned as open space — hazard (oh) (City of Rancho Palos Verdes 2012). Additionally, a portion of the site is located within Coastal Zone. Further analysis of the Project's consistency with applicable plans, policies and regulations is required and will be included in the EIR.

4.12 MINERAL RESOURCES

12.	MINERAL RESOURCES Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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?				\boxtimes
(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?				

Impact Analysis

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?

No Impact. The General Plan does not specifically designate the Project Site as an area with known mineral resources (City of Rancho Palos Verdes 1975). Additionally, the Department of Conservation

notes that there are no active mines operations, no land designated with soils known to contain mineral resources, and no land classified as MRZ-2 within the entire City of Rancho Palos Verdes (California Geological Survey 2010). There are no active or abandoned wells within or near the Project Site (DOC 2020). Therefore, no impact to the loss of a known mineral resource would occur and no further discussion is required.

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?

No Impact. As noted in response 4.12a above, the Project Site does not contain any mineral resources and therefore no impacts would occur and no further discussion is required.

4.13 NOISE

13.	NOISE Would the project result in:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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?	\boxtimes			
(b)	Generation of excessive groundborne vibration or groundborne noise levels?	\boxtimes			
(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?				\boxtimes

Impact Analysis

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?

Potentially Significant Impact. The proposed Project may generate increased noise levels during construction activities. A technical noise analysis will be prepared for the proposed Project that will assess the potential for short and long-term increases in noise levels and any associated impacts. Further analysis is required and will be included in the EIR.

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Potentially Significant Impact. Construction activities associated with the proposed Project may generate ground-borne vibration from use of heavy equipment. The technical noise analysis prepared

for the proposed Project will evaluate the potential for groundborne noise and vibration, as well as any associated impacts. Further analysis is required and will be included in the EIR.

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 us airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The nearest airport to the Project Site is over 3.5 miles north. The Torrance Municipal Airport – Zamperini Field serves as a general aviation airport, but is mostly home to private aircraft. The Project Site is not within 2 miles of airport or within an airport land use plan. No impacts would occur and no further analysis is required.

4.14 POPULATION AND HOUSING

14.	POPULATION AND HOUSING. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				\boxtimes
(b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				

Impact Analysis

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)?

No Impact. The proposed Project would control the existing Rancho Palos Verdes Landslide Complex area. Construction would require employees that would likely come from the existing employment population. The proposed Project would not directly or indirectly induce population growth. No impact would occur and no further discussion is required.

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

No Impact. The Project Site contains several single family residences however, the proposed Project involves controlling the existing slopes and would not demolish or displace any of these houses. No impacts would occur and no further analysis is required.

4.15 PUBLIC SERVICES

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, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
	i) Fire Protection?			\boxtimes	
	ii) Police Protection?				
	iii) Schools?				oximes
	iv) Parks?				\boxtimes
	v) Other public facilities?				oximes

Impact Analysis

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

Less than Significant Impact. The proposed Project would not result in an increase in population, and thus, would not generate a need for new or altered fire protection facilities. The proposed Project would be constructed in accordance with all applicable fire codes set forth by the State Fire Marshall and Los Angeles Fire Department. Therefore, the proposed Project would not be considered a fire hazard and would not exceed the capacity of the Los Angeles Fire Department to serve the site or other areas with existing fire protection services. The nearest local fire responders, Station 53 located at 6124 Palos Verdes Drive South, would be notified as appropriate, of traffic control plans during construction so as to coordinate emergency response routing during construction work. The impact would be less than significant and no further discussion is required.

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

Less than Significant Impact. The proposed Project would not require additional police protection beyond what is currently provided. The nearest local police station, Palos Verdes Estates Police Department located at 340 Palos Verdes Drive West, would be notified as appropriate, of traffic control plans during construction so as to coordinate emergency response routing during construction work. The impact would be less than significant and no further discussion is required.

- c) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools?
 - **No Impact.** The proposed Project would not induce employment or population growth, either directly or indirectly, and would therefore not increase the demand for schools in the area. No impact would occur and no further discussion is required.
- d) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks?
 - **No Impact.** The proposed Project would not generate residents that would increase the demand for park facilities. No impact would occur and no further discussion is required.
- e) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities?

No Impact. The proposed Project would not generate residents that would increase the demand for other public facilities. No impact would occur and no further discussion is required.

4.16 RECREATION

16.	RECREATION. Would the project:	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?				
(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?				\boxtimes

Impact Analysis

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?

Potentially Significant Impact. The proposed Project would not result in an increase in population that would increase the use of existing recreational facilities. However, the Project Site contains a

series of trail networks that may require closure during construction. Further analysis is required and will be included in the EIR.

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?

No Impact. As mentioned in Section 4.16d above, the proposed Project would not generate residents that would increase the demand for park facilities. The proposed Project does not include the construction of any additional recreational facilities. No impact would occur and no further discussion is required.

4.17 TRANSPORTATION

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

Impact Analysis

a) Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?

Potentially Significant Impact. The proposed Project is intended to control the Rancho Palos Verdes Landslide Complex, and is not anticipated to create a substantial amount of new vehicle trips during operation. Traffic may be affected temporarily due to construction activities, including the potential closing of portions of Palos Verdes Drive. Additionally, the Project Site contains a number of trail networks that may need to be closed temporarily during construction. A traffic study will be prepared for the proposed Project, including an analysis of construction traffic impacts. Further analysis is required and will be included in the EIR.

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

Potentially Significant Impact. CEQA Guidelines Section 15064.3(c) creates a process to change the way that transportation impacts are analyzed under the California Environmental Quality Act (CEQA). Specifically, SB 743 requires the Governor's Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to LOS for evaluating transportation impacts. Vehicle Miles

Travelled (VMT) is a key measure of effectiveness with regard to various initiatives intended to reduce emissions, including Green House Gas (GHG) emissions. The traffic study will address any potential impacts to VMT. Further analysis is required and will be included in the EIR.

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

Potentially Significant Impact. The proposed Project would control the Rancho Palos Verdes Landslide Complex and would not alter the existing roadway long term. However, with the potential for roadway closures along portions of Palos Verdes Drive, may result in a temporary increase to hazards. The traffic study will address any potential hazards. Further analysis is required and will be included in the EIR.

d) Would the project result in inadequate emergency access?

Potentially Significant Impact. Palos Verdes Drive is designated by the General Plan as a disaster route (City of Rancho Palos Verdes 1975). As previously mentioned, there is a potential that portions of Palos Verdes Drive may be affected temporarily during construction. For this reason, further analysis is required and will be included in the EIR.

4.18 TRIBAL CULTURAL RESOURCES

18.	TRIBAL CULTURAL RESOURCES. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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	\boxtimes			
(b)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

Impact Analysis

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

California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

Potentially Significant Impact. As noted in Section 4.5a above, a detailed cultural resources technical report will be prepared for the proposed Project, which will identify any significant historical resources in the Project area, and will assess any potential impacts to such resources. Further analysis is required and will be included in the EIR.

b) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Potentially Significant Impact. Public Resources Code Section 21080.3.1 establishes a formal process for Lead Agencies to consult with California Native American Tribes to identify potentially significant impacts to Tribal Cultural Resources, as defined in Public Resources Code Section 21074. Letters were sent to each representative of seven tribes Native American groups and individuals who may have knowledge of cultural resources in the Project area on August 6, 2020. The Project Applicant is required to comply with existing regulations, including California Public Resources Code Section 21083.2, that specifies a protocol if archaeological resources are discovered during excavation, grading, or construction activities. As the Project would construct on a mostly undisturbed site, impacts to buried Tribal Cultural Resources could be potentially significant. Further analysis is required.

4.19 UTILITIES AND SERVICE SYSTEMS

19.	UTILITIES/SERVICE SYSTEMS. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				
(b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				\boxtimes

19.	UTILITIES/SERVICE SYSTEMS. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(c)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				\boxtimes
(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?				\boxtimes
(e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid wastes?				\boxtimes

Impact Analysis

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or expansion of which could cause significant environmental effects?

Potentially Significant Impact. The proposed Project would not develop any buildings or structures or result in an increase in population that would require additional water, wastewater, electrical, natural gas or telecommunications facilities. The proposed Project would require small amounts of water, which may result in wastewater for construction activities. However, these activities would be temporary.

The proposed Project involves controlling an existing landslide by utilizing several different methods. One of these methods involves diverting stormwater under the slope so that the water would not cause further erosion. Impacts related to stormwater drainage require further analysis and will be included in the EIR.

- 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?
 - **Less than Significant Impact.** The proposed Project would require small amounts of water for construction activities. Operation of the Project would not develop any buildings or structures or result in an increase in population that would increase water demand. The proposed Project would not use additional water that would exceed existing capacity. Impacts would be considered less than significant and no further discussion is required.
- 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?

Less than Significant Impact. The proposed Project may generate small amounts of wastewater during construction activities. Operation of the Project would not develop any buildings or structures or result in an increase in population that would increase wastewater generation. The proposed Project would not generate wastewater that would exceed existing capacity. Impacts would be considered less than significant and no further discussion is required.

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

Less than Significant Impact. Construction activities associated with the Project may generate solid wastes requiring disposal at area landfills. Waste generated during Project construction would be limited to vegetation debris. Waste generation would be temporary during construction and would not reduce available capacities at existing landfills. Operation of the Project would not result in an increase to solid waste. The impact would be less than significant, and no further discussion is required.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less than Significant Impact. The proposed Project would be constructed following all applicable laws, regulations, ordinances, and formally adopted City standards regarding solid waste disposal. Operation of the Project would not result in an increase to solid waste. The impact would be less than significant, and no further discussion is required.

WILDFIRE 4.20

20.	WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?	\boxtimes			
(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?	\boxtimes			
(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?			\boxtimes	
(d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	\boxtimes			

Impact Analysis

- a) Would the project impair an adopted emergency response plan or emergency evacuation plan?
 - **Potentially Significant Impact.** Palos Verdes Drive is designated by the General Plan as a disaster route (City of Rancho Palos Verdes 1975). As previously mentioned, the Project Site is designated as a Local Responsibility Area (LRA) Very High Fire Hazard Zone (VHFHSZ). For this reason, further evaluation of potential impacts from fire events is needed to determine the significance of any potential impacts and will be included in the EIR.
- b) 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?
 - **Potentially Significant Impact.** The Project Site is surrounded by ridgelines and slopes, which may have the potential to contribute to exacerbating wildfire risks. Further evaluation of potential impacts from fire events is needed to determine the significance of any potential impacts and will be included in the EIR
- c) 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?
 - **Less than Significant Impact.** The Project involves the control of a failing landslide area. The Project would not require the installation of infrastructure that might exacerbate fire risk. Impacts would be less than significant and no further discussion is required.
- d) Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability or drainage changes?
 - **Potentially Significant Impact.** As previously mentioned, landslide areas have been mapped along the borders of the Project Site. Additionally, the Project Site is located within a Very High Fire Hazard Severity Zone. Potential impacts due to fire related flooding impacts requires further evaluation to determine the significance of any potential impacts and will be included in the EIR.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

21.	MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
(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?)				
(c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	\boxtimes			

Impact Analysis

- a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?
 - **Potentially Significant Impact.** As mentioned above, the Project would further review biological and cultural resources in the EIR. The Project may have a potentially significant effect and further evaluation is required to determine if any significant impacts would result from the Project.
- 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?)
 - **Potentially Significant Impact.** As mentioned in the analysis above, further evaluation is required to state the level of significance for several impacts. In order to discuss cumulatively considerable impacts, further evaluation is required.
- c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Potentially Significant Impact. As mentioned in the analysis above, further evaluation is required to state the level of significance for several impacts. In order to discuss substantial adverse effects on human beings, further evaluation is required.

SECTION 5.0 – REFERENCES

The following is a list of references used in the preparation of this document.

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