

County of San Mateo  
Planning and Building Department

**REVISED INITIAL STUDY**  
**ENVIRONMENTAL EVALUATION CHECKLIST**  
(To Be Completed by Planning Department)

1. **Project Title:** Four Residences on Vallemar @ Julianna, Moss Beach
2. **County File Number:** PLN 2015-00380
3. **Lead Agency Name and Address:**  
  
San Mateo County Planning and Building Department  
455 County Center, 2nd Floor  
Redwood City, CA 94063
4. **Contact Person and Phone Number:**  
  
David Holbrook, Senior Planner  
650/363-1837  
[dholbrook@smcgov.org](mailto:dholbrook@smcgov.org)
5. **Project Location:** Vallemar Street @ Julianna Avenue (west of Cabrillo Highway),  
Unincorporated Moss Beach
6. **Assessor's Parcel Numbers and Size of Parcels:** 037-086-230, -240, -250, -260, -270, -280,  
and -290; 2.48 acres (combined parcels)
7. **Project Sponsor's Name and Address:**  
  
Owen Lawlor  
Moss Beach Associates, LLC  
612 Spring Street  
Santa Cruz, CA 95060
8. **General Plan Designation:** Open Space (Urban)
9. **Zoning:** Resource Management-Coastal Zone (RM-CZ)
10. **Description of the Project:**

Four new single-family residences (as specifically described below) are proposed on a 2.48-acre property (comprised of the seven APNs cited above; the "project site"). The houses represent the primary development of an application process consisting of a Coastal Development Permit (CDP), Resource Management-Coastal Zone (RM-CZ) permit, Grading Permit and Lot Line Adjustment (LLA). The houses are proposed on what would be four reconfigured parcels (via the LLA) from the seven legal parcels that current exist.

**Lot 1:** Construction of a new two-story<sup>1</sup>, 3,997 sq. ft., single-family residence (with a 239 sq. ft. “catwalk” area providing access to a roof deck), with an attached (by covered walkway) two-car 576 sq. ft. garage, including 510 sq. ft. of covered decks and 949 sq. ft. of exterior uncovered decks, located on a 23,473 sq. ft. parcel<sup>2</sup>. This specific case includes the removal of one (1) significant (Monterey cypress) tree and associated grading (250 cubic yards (cu/yds) of cut and 400 cu/yds of fill; net import 150 cu/yds).

**Lot 2:** Construction of a new two-story<sup>1</sup>, 3,994 sq. ft. single-family residence (with a 461 sq. ft. “catwalk”/conditioned floor area providing access to a roof deck and storage area above the garage), with a 586 sq. ft. attached two-car garage, including 403 sq. ft. of covered decks and 420 sq. ft. of exterior uncovered decks, located on a 22,220 sq. ft. parcel<sup>2</sup>. This specific case includes the removal of nine (9) significant and two (2) non-significant (Monterey cypress) trees and associated grading (300 cu/yds of cut and 500 cu/yds of fill; net import 200 cu/yds).

**Lot 3:** Construction of a new two-story<sup>1</sup>, 3,997 sq. ft. single-family residence (with a 239 sq. ft. “catwalk” providing access to a roof deck), with an attached (by covered walkway) 576 sq. ft. two-car garage, including 519 sq. ft. of covered decks and 1,047 sq. ft. of exterior uncovered decks, located on a 24,211 sq. ft. parcel<sup>2</sup>. This specific case includes the removal of nine (9) significant (Monterey cypress) trees and associated grading (0 cu/yds of cut and 1,100 cu/yds of fill; net import 1,100 cu/yds).

**Lot 4:** Construction of a new two-story<sup>1</sup>, 3,997 sq. ft. single-family residence (includes a 239 sq. ft. “catwalk” providing access to a roof deck), with a 576 sq. ft. attached (by covered walkway) two-car garage, including 476 sq. ft. of covered decks and 1,049 sq. ft. of exterior uncovered decks, located on a 32,324 sq. ft. parcel<sup>2</sup>. This specific case includes the removal of eleven (11) significant (Monterey cypress) trees and associated grading (50 cu/yds of cut and 1,100 cu/yds of fill; net import 1,050 cu/yds).

<sup>1</sup> With no roof dormers and the roof deck only accessible from the house interior, staff considers this a two-story residence.

<sup>2</sup> Via a proposed LLA which will adjust the existing seven legal lots down to four lots of sizes indicated.

Of the total 2.48-acre site, 1.43 acres (61%) on its eastern portion would be developed with the four residences; the remaining 0.92 acres (39% of the site) would be permanently protected via a Conservation and Open Space Easement (Easement). Together with a final “Habitat Management Plan” developed from the “Valleamar Bluffs Conservation and Development Project Management Planning Framework” document (Management Plan) and “Valleamar Bluffs Declaration of Covenants, Conditions and Restrictions” (CC&Rs), all documents would be recorded along with and as part of the Lot Line Adjustment Map across and affecting all four lots. The Easement area would be located between the west-facing sides of the houses (including their outside patio areas) and the site’s westerly property boundary, beyond which lies a coastal trail running along the ocean bluffs and the beach down below. The Easement’s primary purpose would be to protect the Coastal Prairie Grassland prominent on the project site, to preserve and protect three rare plant species (Johnny nip, harlequin lotus and Blasdale’s bent grass) also located on the site, as well as to reduce future impacts to the endangered coast yellow leptosiphon located just off the project site to the west, on the County Parks-managed Fitzgerald Marine Reserve property. The Easement’s purpose is also to provide a critical scenic buffer between the beach area below and bluff top trail above and the four proposed residences on the project site’s eastern-most portion. The Easement would preclude future subdivision or development of the encumbered area, include specific restrictions of its use by the owners/residents of the proposed four homes, and provide for its use in perpetuity only as open space.

11. **Surrounding Land Uses and Setting:** The undeveloped project site is zoned RM-CZ, surrounded to the north, east and south by single-family residential zoning (R-1/S-17/DR) where the minimum parcel size is 5,000 square feet. The project site is bordered to the east by Vallemar Street (with Cabrillo Highway parallel and just east of that), to the south by Julianna Avenue (Vallemar and Julianna are County-maintained roadways), to the west by the Fitzgerald Marine Reserve (encompassing the coastal bluff tops to the beach below the bluffs), and to the north by R-1/S-17 zoned and developed parcels. The property lies within the Cabrillo Highway County Scenic Corridor. The project site topography slopes to the southwest at an average of approximately 10%, ranging from about 26% near Vallemar to about 3% closer to the coastal bluffs.

A long-established and well-used trail runs along and close to the coastal bluff-top, with most of the trail located within the eastern half of the abandoned The Strand road right-of-way (whose title legally resides with the project owner), with some brief trail portions extending within the The Strand's westerly half (whose title legally resides with the County as part of the Reserve. The trail extends from Julianna to the bluff north of the project site. From the westerly half of The Strand across a breadth of coastal bluff top area (ranging from 20 to 50 feet to bluffs' edge) toward the ocean is the Fitzgerald Marine Reserve (FMR), a 402-acre, 3-mile long natural resource area owned by San Mateo County and managed by the County Parks Department for conservation, recreation, and public education purposes, in accordance with their adopted (2002) Fitzgerald Marine Reserve Master Plan.

Along the property's easterly side (closest to and generally parallel with Vallemar) is a dense grove of non-native Monterey cypress trees. The area in between the bluff-tops and trees is generally comprised of coastal prairie grasslands and other native plants (including some special status plant species and a recently identified endangered plant), as well as non-native and invasive species of groundcover. The only development that has ever been approved on the property was that of a domestic well approved and drilled in 1999 (Case No. CDP97-0016/RMD97-0013); that well has subsequently been capped (but not yet formally abandoned) pursuant to the standards of the County Environmental Health Services (EHS). It cannot be reactivated and used for either domestic or landscaping water purposes, and will be permanently abandoned to the satisfaction and requirements of EHS, as a condition of this project.

12. **Other Public Agencies Whose Approval is Required:** County Building Inspection, County Department of Public Works, County Environmental Health Services, Montara Water and Sanitary District, and Coastside Fire Protection District.
13. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, has consultation begun?:** No. *(NOTE: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process (see Public Resources Code Section 21083.3.2.). Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality).*

## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” or “Significant Unless Mitigated” as indicated by the checklist on the following pages.

X	Aesthetics		Hazards and Hazardous Materials		Recreation
	Agricultural and Forest Resources	X	Hydrology/Water Quality		Transportation/Traffic
X	Air Quality	X	Land Use/Planning		Tribal Cultural Resources
X	Biological Resources		Mineral Resources	X	Utilities/Service Systems
X	Cultural Resources		Noise	X	Mandatory Findings of Significance
X	Geology/Soils		Population/Housing		
X	Climate Change		Public Services		

## 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 off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
4. “Negative Declaration: Less Than Significant with Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analyses,” as described in 5. below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:
  - a. Earlier Analysis Used. Identify and state where they are available for review.
  - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such 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. Sources used or individuals contacted should be cited in the discussion.

1. <b>AESTHETICS.</b> Would the project:				
	<i>Potentially Significant Impacts</i>	<i>Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a. Have a significant adverse effect on a scenic vista, views from existing residential areas, public lands, water bodies, or roads?			X	
<p><b>Discussion:</b> The project site includes an existing and publically utilized coastal bluff-top trail on its west side; the four houses will be prominently visible from this trail as viewed from it looking in an easterly direction. Additionally, portions of the four houses would be visible from the residential area fronting onto Julianna Avenue to the south. From Cabrillo Highway and the residential areas to the east, portions of the four houses would be visible.</p> <p>While the garages of all four houses would be set back 50 feet from Vallemar Street, the primary houses themselves are setback at distances ranging from about 120 feet (Lot 1) to 140 feet (Lot 4) from Vallemar. That said, the project would be partially visible (e.g., the upper story and roof portions of the houses and upper roof portions of the garages) as viewed from Vallemar, looking westerly toward the ocean, as well as from residential areas east of Cabrillo Highway, which are located at a higher elevation.</p> <p>The four houses will be fully visible from the bluff-top trail looking easterly; the houses range in distance (set back easterly) from the established coastal trail from approximately 112 feet (Lot 1)</p>				

to 185 feet (Lot 4). Residential development fronting onto the bluff tops to the north and south is generally far closer to the bluffs than these four house are proposed.

On October 12, 2017, the Coastsides Design Review Committee (CDRC) recommended approval of the four houses, based on findings that included project conformance with several applicable Design Review (DR) standards. One such standard (Site Planning and Structure Placement; pursuant to Section 6565.20 (C),d., “Ridgelines, Skylines and View Corridors”) considers how the new homes will appear as viewed from adjacent designated open space areas (e.g., the public bluff-top trail), “where structure placement and design shall harmonize with the natural setting with regard to massing and materials.” Throughout the three Design Review meetings where the CDRC reviewed this project, the applicant responded to their concerns with improved massing, articulation, slightly reduced height and exterior materials/colors, including changes to proposed landscaping. As a result, the CDRC was able to make the findings that the project complied with this and other applicable Design Review standards.

From all these viewpoints, the visual impact will not be significant pursuant to the plans submitted in response to the CDRC’s last recommendation comments, which would include changes affecting massing, articulation, exterior material/color changes, exterior lighting, tree preservation and additional tree planting.

Additionally, the proposed biotic easement will preserve a significant share of each lot, both for views and protection of the prairie grassland and other special plant species existing on the property. As a result, it is concluded that if the four residences are designed as the CDRC approved – with their recommended modifications - the project’s visual impact would be less than significant.

**Source:** Project Plans and Location; Coastsides Design Review Recommendation Letter (of the October 12, 2017 meeting)

b. Significantly damage or destroy scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
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**Discussion:** The project is not located within a County – not State – scenic corridor. That said, and addition to the discussion provided to Question 1.a. above, the project would result in the removal of 30 significant sized Monterey cypress trees (and trimming of many others) within a dense hedge of Monterey cypress trees located on the project site’s easterly side along Vallemar. This hedge of trees is most visible from along Vallemar looking westerly, from Julianna looking northerly and towards the ocean and from along the bluff-top trail looking easterly. However, many of the trees will be preserved with others replanted.

**Source:** Project Plans; Project Location; County General Plan Scenic Corridors Map; County GIS Resource Maps; Coastsides Design Review Recommendation Letter (of the October 12, 2017 meeting)

c. Significantly degrade the existing visual character or quality of the site and its surroundings, including significant change in topography or ground surface relief features, and/or development on a ridgeline?			X	
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**Discussion:** In addition to the discussion to Question 1.a., the four residences will each incur grading as cited in the project description above. While the total grading amounts for the entire

project is approximately 600 cu/yds of cut and 3,100 cu/yds of fill, this amount of grading is mostly to accommodate the driveways from Vallemar down to all four houses along with their respective driveway/back-up areas, up to the east facing sides of the main houses, which fall within those portions of the respective (proposed) lots that represent the greatest topographical drop. The following table describes this:

	<b>Lot Average Depth (generally from east to west)</b>	<b>Average slope (approximate) Measured from Eastern Boundary to Vallemar-facing Main House Side</b>	<b>Average Slope (approximate) Measured from Main House to Lot's Westernmost Boundary</b>	<b>Average Depth of Conservation/Open Space Easement and Approximate % of Total Lot Depth Placed within Easement</b>
<b>Lot 1</b>	210 ft.	15%	8%	97 ft./ 46%
<b>Lot 2</b>	200 ft.	17%	9%	115 ft./ 57%
<b>Lot 3</b>	220 ft.	21%	5%	110 ft./ 50%
<b>Lot 4</b>	262 ft.	17%	4%	173 ft./ 66%

Most of the grading (for each of all four lots) occurs within the greater sloping areas as cited in the above middle column. This area is generally located within the dense grove of Monterey cypress trees (even though there will be tree removal within this area, both due to the grading and construction of the four residences). However, such grading will not represent a significant change in the topography of the property. And no grading will occur beyond the footprint of the four houses within the proposed conservation easement to protect and restore the coastal prairie grassland (see detailed discussion of this in Question 4.a.). As seen from the bluff-top trail looking easterly, the grading will not represent a significant change in topography as seen from that view point or as seen from Julianna. Finally, as a result of the project design, its associated grading as discussed, and the extent of the proposed biotic easement (where no project disturbance can occur) as cited in the table above, the project will not pose a significant impact to the site's visual character.

As a result, it is concluded that with the following mitigation measures, the project's visual impact would be less than significant.

**Source:** Project Plans and Location; Coastsides Design Review Recommendation Letter (of the October 12, 2017 meeting)

d. Create a new source of significant light or glare that would adversely affect day or nighttime views in the area?			X	
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**Discussion:** The plans recommended for approval by the CDRC included exterior lighting as associated with all four houses, both their respective location on the four residences and fixture design. The CDRC's decision acknowledged the project's compliance with the Design Review standards (6565.20(E)4, as regards exterior lighting, which state: "All exterior, landscape and site lighting shall be designed and located so that light and glare are directed away from neighbors and confined to the site," "Exterior lighting should be minimized and designed with a specific activity in mind so that outdoor areas will be illuminated no more than is necessary to support the activity designed for that area," and "Minimize light and glare as viewed from scenic corridors and other public view corridors." The proposed location, purposes and design of all such lighting will not

create a new source of significant light or glare that would adversely affect day or nighttime views in the area.

**Source:** Project Plans and Location; Coastsides Design Review Recommendation Letter (of the October 12, 2017 meeting)

e. Be adjacent to a designated Scenic Highway or within a State or County Scenic Corridor?			X	
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**Discussion:** The project site is located within the Cabrillo Highway County Scenic Corridor. Based on the discussion provided to Questions 1.a. and b., the project poses no significant impacts due to its location alongside and within the County Scenic Corridor.

**Source:** Project Plans and Location; County General Plan Scenic Corridors Map; County GIS Resource Maps

f. If within a Design Review District, conflict with applicable General Plan or Zoning Ordinance provisions?		X		
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**Discussion:** The project site’s RM-CZ zoning includes the Design Review (DR) Overlay District. Based on the discussion provided to Questions 1.a., c. and d., the project is in compliance with all applicable Design Review standards. Additionally, the RM-CZ Zoning District requires that development comply with the County Zoning Regulations, Chapter 20A.2. (Development Review Criteria). Most applicable to the project are the “Environmental Quality (EQ),” “Site Design (SD),” “Utilities (U),” “Cultural Resources (CR),” “Primary Scenic Resources Areas (PSRA)” and “Primary Natural Vegetative Areas (PNVA)” criteria.

While the Design Review standards (as discussed previously and pursuant to the CDRC’s recommendation) generally cover the criteria required under the SD and PSRA criteria, the EQ criteria requires that “all development should be designed and located to conserve energy resources...Such efforts might include the clustering or location of development top reduce paving, grading, runoff...and structural designs which maximize use of solar energy...” The project located all four residences toward the far eastern third or more of the respective lots, with all access driveways coming off Vallemar. As cited in the table in the discussion to 1.c., the grading is also confined to this general area. Further, all four houses are positioned and designed to be able to take advantage of solar energy. Regarding the U criteria, all utilities to all four residences will be undergrounded. Regarding the CR criteria, the project is compliant, with mitigation measures added as discussed in Question 5.a. Regarding the PNVA criteria, the project is compliant, with mitigation measures added as discussed in Question 4.a. below.

Being located within the Coastal Zone, the project requires a CDP and would comply with the policies of several applicable Local Coastal Program (LCP) components, most specifically (in this case) with the “Visual Resources” component. For development within the Midcoast communities (including Moss Beach), that policy primarily defers to compliance with the Design Review standards, which have previously been discussed in this section. As a result, and with the following mitigation measures (taken from the CDRC’s October 12, 2017 decision letter as they affect design only), the project’s impact would be less than significant.

**Mitigation Measure 1:** All development on all four proposed lots shall comply with the last plans approved by the Coastsides Design Review Committee on October 12, 2017, whose recommendation included that the following minor revisions occur on the submitted building plans and that other Design Review-related conditions occur:

- a. Revise the variable color scheme to be neutral so as to blend with the immediate landscape so that the structures' exteriors weather naturally. Weathered (pickled) wood, stucco or cementitious hardy sidings are acceptable options. Any such changes shall require the submittal of material samples for review by the Community Development Director.
- b. Submit revised plans to show modified deck specifications to include the floor area of the mezzanine decks (for all houses that include such decks) pursuant to the second revision plans presented [to the DRC] on October 12, 2017 (definitive deck square footage was delineated only for entry, rear, and garage decks in all versions of previously submitted plans).
- c. Any additional exterior lighting (in addition to the single fixture shown at the entry and garage locations) shall be dark sky compliant fixtures, which shall be mounted or recessed under the soffits at other openings and allowed only as required by building code (for safety). No additional site, building, or landscape lighting is proposed.
- d. All paved pathways and patios shall be shown as dimensioned, on the plans, with identified materials [which shall be of a pervious nature].
- e. The applicant shall provide "finished floor elevation verification" to certify that the structure is actually constructed at the height shown on the submitted plans. The applicant shall have a licensed land surveyor or engineer establish a baseline elevation datum point in the vicinity of the [four] construction sites.
  - (1) The applicant shall maintain the datum point so that it will not be disturbed by the proposed construction activities until final approval of the building permit.
  - (2) This datum point and its elevation shall be shown on the submitted site plan. This datum point shall be used during construction to verify the elevation of the finished floors relative to the existing natural or to the grade of the site (finished grade).
  - (3) Prior to Planning approval of the building permit application, the applicant shall also have the licensed land surveyor or engineer indicate on the construction plans: (a) the natural grade elevations at the significant corners (at least four) of the footprint of the proposed structure on the submitted site plan, and (b) the elevations of proposed finished grades.
  - (4) In addition, (a) the natural grade elevations at the significant corners of the proposed structure, (b) the finished floor elevations, (c) the topmost elevation of the roof, and (d) the garage slab elevation must be shown on the plan, elevations, and cross-section (if one is provided).
  - (5) Once the building is under construction, prior to the below floor framing inspection or the pouring of the concrete slab (as the case may be) for the lowest floor(s), the applicant shall provide to the Building Inspection Section a letter from the licensed land surveyor or engineer certifying that the lowest floor height, as constructed, is equal to the elevation specified for that floor in the approved plans. Similarly, certifications on the garage slab and the topmost elevation of the roof are required.
  - (6) If the actual floor height, garage slab, or roof height, as constructed, is different than the elevation specified in the plans, then the applicant shall cease all construction and no additional inspections shall be approved until a revised set of plans is submitted to and subsequently approved by both the Building Official and the Community Development Director.
- f. All new power and telephone utility lines from the street or nearest existing utility pole to the project structures on the property shall be placed underground.

**Source:** Project Plans and Location; County Zoning Regulations; Coastside Design Review Recommendation Letter (of the October 12, 2017 meeting)

g. Visually intrude into an area having natural scenic qualities?			X	
<p><b>Discussion:</b> The project site is located is an undeveloped property that includes the cited coastal bluff trail on tis western edge, affording unobstructed views of both the ocean as well as view to existing Monterey cypress tree grove to the east. While the four residences will impact the Monterey cypress trees, their location to site’s eastern side, together with the proposed conservation easement, will ensure that the site’s primary scenic quality (ocean views) will be preserved. With additional discussion of this issue provided to Question 1.a. above, the project’s impact would be less than significant.</p> <p><b>Source:</b> Project Plans and Location; Coastside Design Review Recommendation Letter (of the October 12, 2017 meeting)</p>				

<p><b>2. AGRICULTURAL AND FORESTRY RESOURCES.</b> 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:</p>				
	<i>Potentially Significant Impacts</i>	<i>Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a. For lands outside the Coastal Zone, 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?				X
<p><b>Discussion:</b> The project site is located <u>within</u> the Coastal Zone. Thus, the question is not relevant to this project at this site. That said, the parcel is not mapped or designated as Prime or Unique Farmland or Farmland of Statewide Importance. Thus, the project poses no impact.</p> <p><b>Source:</b> California Department of Conservation Farmland Mapping and Monitoring Program</p>				
b. Conflict with existing zoning for agricultural use, an existing Open Space Easement, or a Williamson Act contract?				X

<p><b>Discussion:</b> While the project parcel is zoned RM-CZ, there is not presently any ongoing agriculture on the project site. Nor does there exist an Open Space Easement or Williamson Act contract on the parcel. Thus, the project poses no impact.</p> <p><b>Source:</b> San Mateo County Zoning Regulations and Maps; County Agricultural Preserves Map</p>					
c.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?				X
<p><b>Discussion:</b> In addition to the discussion provided to Questions 2.a. and b., the project site does not represent nor is designated as “Farmland.” Thus, the project poses no impact.</p> <p><b>Source:</b> Project Location; California Department of Conservation Farmland Mapping and Monitoring Program</p>					
d.	For lands within the Coastal Zone, convert or divide lands identified as Class I or Class II Agriculture Soils and Class III Soils rated good or very good for artichokes or Brussels sprouts?				X
<p><b>Discussion:</b> While the project site is located within the Coastal Zone (and in addition to the discussion provided to Questions 2.a. and b.), there are no Class I, II or II soils on the site. Thus, the question is not relevant to this project at this site and the project poses no impact.</p> <p><b>Source:</b> Project Location; Natural Resources Conservation Service; County GIS Resource Maps</p>					
e.	Result in damage to soil capability or loss of agricultural land?				X
<p><b>Discussion:</b> As previously stated in this section, there is no designated “agricultural” soils on the project site. Thus, the project poses no impact.</p> <p><b>Source:</b> Project Location; Natural Resources Conservation Service; County GIS Resource Maps</p>					
f.	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))?  Note to reader: This question seeks to address the economic impact of converting forest land to a non-timber harvesting use.				X

**Discussion:** The subject parcel is RM-CZ, not TPZ-CZ. There is also no “forest land” on the parcel. Thus, the question is not relevant to this project at this site and poses no impact.

**Source:** County Zoning Regulations and Maps; County GIS Resource Maps; State Public Resources Code Section 12220(g)

**3. AIR QUALITY.** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

	<i>Potentially Significant Impacts</i>	<i>Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a. Conflict with or obstruct implementation of the applicable air quality plan?			X	

**Discussion:** The Bay Area 2010 Clean Air Plan (CAP), developed by the Bay Area Air Quality Management District (BAAQMD), is the applicable air quality plan for San Mateo County. The CAP was created to improve Bay Area air quality and to protect public health and the climate.

The project will not conflict with or obstruct the implementation of the BAAQMD’s 2010 CAP. Once constructed, ongoing use of the four residences would have minimal impacts to the air quality standards set forth for the region by the BAAQMD. Also see the discussion to Question 7.1. (Climate Change; Greenhouse Gas Emissions), relative to the project’s compliance with the County Energy Efficiency Climate Action Plan. Thus the project impact is expected to be less than significant. That said, The following mitigation measure will ensure that the project impact is less than significant.

**Source:** Project Plans; BAAQMD 2010 Clean Air Plan

b. Violate any air quality standard or contribute significantly to an existing or projected air quality violation?		X		
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**Discussion:** During project construction, air emissions will be generated from site grading, construction equipment, and construction worker vehicles. However, any such construction-related emissions will be temporary and localized.

The BAAQMD has established thresholds of significance for construction emissions and operational emissions. As defined in the BAAQMD’s 1999 California Environmental Quality Act (CEQA) Guidelines, the BAAQMD does not require quantification of construction emissions due to the number of variables that can impact the calculation of construction emissions. Instead, the BAAQMD emphasizes implementation of all feasible control measures to minimize emissions from construction activities. The BAAQMD provides a list of construction-related control measures that they have determined when fully implemented would significantly reduce construction-related air emissions to a less than significant level. These control measures have been combined into Mitigation Measure 1 below. Furthermore, Section 2-1-113 (Exemption, Sources and Operations) of the BAAQMD General Requirements exempts sources of air pollution associated with the construction of a single-family residence used solely for residential purposes, as well as road construction, from obtaining an Authority to Construct or Permit to Operate.

**Mitigation Measure 2:** The applicant shall submit an Air Quality Best Management Practices Plan to the Planning and Building Department prior to the issuance of any grading “hard card” or building permit that, at a minimum, includes the “Basic Construction Mitigation Measures” as listed in Table 8-1 of the BAAQMD California Environmental Quality Act (CEQA) Guidelines (May 2011). These measures shall be implemented prior to beginning any grading and/or construction activities and shall be maintained for the duration of the project grading and/or construction activities:

- a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access road) shall be watered two times per day.
- b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- c. All visible mud or dirt track-out onto adjacent paved roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- d. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
- e. Roadways and building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- f. Idling times shall be minimized either by shutting equipment or vehicles off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
- g. All construction equipment shall be maintained and properly tuned in accordance with manufacturer’s specifications.
- h. Minimize the idling time of diesel powered construction equipment to two minutes.

**Source:** Project Plans; BAAQMD CEQA Guidelines, December 1999; BAAQMD CEQA Guidelines, May 2011; BAAQMD Regulation 2, Rule 1

c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?		X		
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**Discussion:** The Bay Area Air Basin is designated as non-attainment for Ozone, Particulate Matter (PM10), and Particulate Matter – Fine (PM<sub>2.5</sub>), according to the BAAQMD. Therefore, any increase in these criteria pollutants is significant. Implementation of the project will generate temporary increases in these criteria pollutants due to construction vehicle emissions and dust generated from earthwork activities. Mitigation Measure 1 will minimize increases in non-attainment criteria pollutants generated from project construction to a less than significant level. Furthermore, the California Air Resources Board (CARB) provides regulation over vehicles of residents in the State of California, including the operation of any vehicles that would be associated with the proposed single-family residence, to ensure vehicle operating emissions are minimized in the effort toward reaching attainment for Ozone, among other goals.

**Source:** Project Plans; BAAQMD Air Quality Standards and Attainment Status, URL (2017)

d. Expose sensitive receptors to significant pollutant concentrations, as defined by BAAQMD?		X		
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**Discussion:** Any pollutant emissions generated from the project will primarily be temporary in nature. The project site is in a rural area with few sensitive receptors (i.e., single-family residences) located within the nearby project vicinity. Additionally, the surrounding tree canopy and vegetation will help to insulate the project area from nearby sensitive receptors. Furthermore, Mitigation Measure 1 will minimize any potential significant exposure to nearby sensitive receptors to a less than significant level.

**Source:** Project Plans; Project Location

e. Create objectionable odors affecting a significant number of people?		X		
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**Discussion:** The project proposes development of four residences, on lots ranging from 22,220 sq. ft. to 32,324 sq. ft. in an urbanized area of the Midcoast. Once constructed, their daily use as residences will not generate objectionable odors that could affect a significant number of people. Furthermore, Mitigation Measure 1 will minimize any construction-related odors affecting nearby residents to a less than significant level.

**Source:** Project Plans

f. Generate pollutants (hydrocarbon, thermal odor, dust or smoke particulates, radiation, etc.) that will violate existing standards of air quality on-site or in the surrounding area?		X		
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**Discussion:** The project would involve minimal hydrocarbon (carbon monoxide; CO<sub>2</sub>) air emissions and dust, whose source would be: (a) from vehicles and equipment (whose primary fuel source is gasoline) during the construction phase of the four residences, and (b) from vehicles (post-construction) of those living in and visiting the four residences. See staff's discussion and recommended Mitigation Measure 1, in Questions 3.b. and 3.c. above. Additionally, the following mitigation measure will ensure that any such pollutants during project construction will be to a less than significant level.

**Mitigation Measure 3:** The applicant shall submit a dust control plan to the Planning Department for review and approval prior to the issuance of a building permit for the project. The approved plan shall be implemented for the duration of any grading, demolition, and construction activities that generate dust and other airborne particles. The plan shall include the following control measures:

- a. Water all active construction areas at least twice daily.
- b. Water or cover stockpiles of debris, soil, sand, or other materials that can be blown by the wind.
- c. Cover all trucks hauling soil, sand and other loose materials or require all trucks to maintain at least 2 feet of freeboard.
- d. Apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking and staging areas at construction sites. Also, hydroseed or apply non-toxic soil stabilizers to inactive construction areas.
- e. Sweep daily (preferably with water sweepers) all paved access roads, parking and staging areas at construction sites.
- f. Sweep adjacent public streets daily (preferably with water sweepers) if visible soil material is carried onto them.

- g. Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.).
- h. Limit traffic speeds on unpaved roads within the project parcel to 15 miles per hour (mph).
- i. Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- j. Replant vegetation in disturbed areas as quickly as possible.

**Source:** Project Plans; BAAQMD Air Quality Standards and Attainment Status, URL (2017)

**4. BIOLOGICAL RESOURCES.** Would the project:

	<i>Potentially Significant Impacts</i>	<i>Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
4.a. Have a significant adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		

**Discussion:** The project site is located adjacent to and just east of the County Fitzgerald Marine Reserve (Reserve). The Reserve’s consideration as an Area of Special Biological Significance (ASBS), together with the project site’s location adjacent to and within the watershed of the Preserve, triggers the need for adequate erosion control during the period of project construction and any related site disturbance. . With regard to the question of special status species,, the applicant’s initial biological report ( Zander Associates; 2015), as well as the 2016 observations by Corelli in 2016, confirmed the occurrence of rare coast yellow leptosiphon (CYL) located on the coastal bluff promontory just west of the project site’s westernmost property line and several feet west of the coastal bluff trail, in an area located within the limits of the Reserve., CYL is listed by the California Native Plant Society as seriously threatened in California. However, since that initial survey, the California Department of Fish and Wildlife (in its June 6, 2017 letter; Attachment T) petitioned the California Fish and Game Commission (Attachment T.1) to designate this species as “endangered” under the California Endangered Species Act (CESA). On April 3, 2018, the Commission voted to list the plant as endangered (although they still need to issue findings, a procedural step, before the listing goes into effect). In the meantime, the species is technically still considered a candidate.

Because there is only one known population of CYL, protecting it is critical for the continued existence of the species, where County efforts, together with mitigation measures as presented with this project, will be critical to ensure preservation of this plant.

In response to the County’s first circulation of this Initial Study/Mitigated Negative Declaration (IS/MND), the California Department of Fish and Wildlife (CDFW) provided comments that specifically stated that the prior vegetation survey mapping study (Zander Associates 2015), was not implemented using a systematic survey methodology necessary to evaluate whether the project site supports the CYL, as well as providing a broader and more accurate survey for three other rare plant species.

The following represents a summary of CDFW's comments to the initial circulation of this document (letter dated February 7, 2018; Attachment T.2), with discussion and proposed mitigations as noted:

1. *An updated survey of the Project site by the applicant's biologist, Jodie McGraw, to thoroughly assess the presence and potential to accommodate future distribution of the CYL and/or other special-status species on the project site, based on systematic survey methodologies, with reference to the CDFW's (2009) "Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities." The revised survey should discuss why areas proposed for development are unsuitable for the CYL and native plant communities. The survey shall also assess special-status species known to occur on the Project site and vicinity, including Blasdale's bent grass (classified as rare and endangered on the California Native Plant Society Rare Plant Inventory), Johnny nip and Harlequin lotus (both on the Society's 'watch list').*
2. *An assessment of (within the new survey) the thresholds and characteristics used to distinguish between "disturbed" habitat and coastal prairie grassland habitat, which merits Environmentally Sensitive Habitat Area (EHSa) protection under the California Coastal Act and the County Local Coastal Program. Where proposed development may even impact a minimal area of coastal prairie grassland – which is also habitat that can support the CYL – might any such loss of acreage affect this species' survival, in conflict with ESHA protection requirements?*

**Response:** In response to the above comments and issues, the applicant's biologist (Jodi McGraw, Ph.D., of Jodi McGraw Consulting) submitted the "Valleamar Bluffs Botanical Survey," dated August 2018 (2018 Survey), Attachment S. The objectives of the Survey were to:

- a. From a survey of natural communities and plants conducted in spring and early summer 2018, compile a list of all plants within the study area (including the project site and the adjacent Reserve area where the CYL population exists);
- b. Map the distribution and estimate the abundance of all rare plants within the study area; and
- c. Classify and map the natural plant communities within the study area.
- d. Analyze the potential positive and negative potential impacts of the proposed conservation and development elements, on native plants and natural communities.

The 2018 McGraw Survey generally concurred with the 2015 Zander Associates survey relative to the characterization of two main vegetative types on the project site: remnant coastal prairie on the western portion, and disturbed/ruderal grounds, mostly under the Monterey cypress canopy on the site's southwest corner. That report mapped the vegetation in three categories:

- Coastal Prairie Grassland: Areas dominated (>75% cover) by native perennial bunchgrasses and native forbs found in coastal grasslands;
- Non-Native Areas: the areas beneath the Monterey cypress canopy, which features largely non-native understory species including ornamental plants and areas with dense patches of ice plant and other invasive plants;
- Transitional Area: Areas featuring mostly sparse occurrences (5%) of native species but that are otherwise dominated by exotic plants and ice plant. Smaller areas dominated by coastal terrace prairie species were also mapped in this area.

While the 2018 Survey does not disagree with these general vegetative categories, the Survey renames the Transitional Zones as "Degraded Coastal Terrace Prairie" (CTP) using the presence of any native perennial grasses or native forbs characteristic of the CTP as sufficient to call it CTP, even if they are at very low abundance or subdominant to exotic plant species.

With some limited intrusions of CTP from the Easement into the building site areas of all four lots, the building site area was otherwise found to be primarily comprised of ruderal and planted vegetation, including ornamental or planted areas comprised of the Monterey cypress grove, with an understory that features a mix of ornamental species and naturalized exotic plants.

Through the rare plant survey together with the approved field methodology (pursuant Section 2, "Study Methods", 2018 Survey), McGraw mapped the following throughout the Study Area:

**Coastal Terrace Prairie:** The Coastal Terrace Prairie in the Study Area is dominated by a mix of native and exotic plant species. It is dominant within the Easement area (where CTP groups ranged from "Native dominated" to "Exotic dominated - natives present;" Figure 5 of the 2018 Survey), with portions of CTP extending into the westerly portions of the Project Site's proposed lots as follows:

Lot 1 - Nearly 28 feet, species comprised of "Exotic dominated - natives subdominant", and "Exotic dominated - natives present";

Lot 2 - Nearly 15 feet, species comprised of "Native-Exotic - co-dominated", "Exotic dominated - natives subdominant", and "Exotic dominated - natives present;"

Lot 3 - Nearly 25 feet, species comprised of "exotic dominated - native present" and "Native dominated;"

Lot 4 - Nearly 18 feet, species comprised of "exotic dominated - natives subdominant;"

Coastal Bluff (Reserve) Area - Besides species of "Exotic dominated-natives present," this area was primarily populated with all species categories of CTP.

**Blasdale's Bent Grass, Johnny Nip, Harlequin Lotus:** The 2018 McGraw Survey mapped these three rare-listed native plants as to their locations throughout the Study Area. Blasdale's bent grass (221 plants counted) was mapped in five locations, with four near the CYL patch on the Coastal Bluff (Reserve) area and the fifth occurring within the Easement area crossing Lot 4, near the trail. Johnny nip (1,703 plants counted) was mapped in 16 locations, with 55% occurring within the Project site's Easement area and 45% occurring within the FMR area. Harlequin lotus (133 plants counted) was mapped in 31 locations near entirely on the Project site's Easement area across all four lots, with a slight intrusion on Lot 4 (nearly 15 feet) into the building site area.

**Coast Yellow Leptosiphon (CYL):** The only known location of the endangered CYL was located on the Coastal Bluff (Reserve) area, just west of the coastal bluff trail. The Survey stated that the CYL occurred within a 746 sq. ft. patch with one "disjunct point occurrence" 6 feet southeast, which featured six plants within a very narrow area (see Figure 6 of 2018 Survey, Attachment T). The estimated abundance of CYL in 2018 was significantly greater than that estimated by Corelli in 2015; this change is likely and largely attributable to the different estimation methods. The Survey concluded this discussion on abundance, stating: "Refining the methods to estimate the abundance of CYL accurately yet without impacting individual plants or their habitat, will help track changes in the population over time and relate them to changes in habitat conditions and inter-annual variation in weather (e.g., precipitation), herbivory, or other factors that could influence individual demographics performance and thus population density".

The assessment of the Project's direct impacts to the subject rare plants and natural vegetative communities located within the Study Area boundaries, occurred relative to: (1) the proposed orientation of the four proposed lots, (2) the proposed Conservation Easement, (3) the limits of project-related grading and site disturbance, and (4) the proposed extension – into the Easement area – of the infiltration spreader area, where perforated pipes would be installed in trenches below grade to prevent concentrated stormwater runoff.

The assessment of the Project's indirect effects was analyzed by evaluating potential impacts of the Project on the rare plants and natural communities that could occur, over time, after all immediate

development activity (grading, drainage installation, tree removal/trimming, house construction).

3. *Greater details regarding stormwater, landscaping, irrigation, fencing, site occupancy and use (including within the proposed Conservation and Open Space Easement area), construction staging and access are necessary to ensure there is no adverse impact to the CYL. Such plans shall include protective measures (i.e., fencing) to be in place during all construction and grading activities to avoid impacts to the CYL.*

**Response:** Stormwater and erosion control measures are critical to prevent water runoff from adversely affecting both the CYL and the Fitzgerald Marine Reserve (including the bluff top area) immediately adjacent to and east of the Project site.

While the Project includes an Erosion Control Plan, the 2018 Survey recommended several such measures that would augment the Project plans to be implemented prior to and during all grading and construction activity to limit impact to both the CYL and CTP on the FMR property, as well as the CTP and other special-status plants within the Easement area. Additionally, the submitted Stormwater Drainage Report (Attachment O), proposes extensive drainage measures to ensure that all new post-construction drainage measures will adequately capture and contain stormwater from all new impervious surfaces (resulting from development on each of the four lots), ensuring that no such drainage will create erosion or otherwise adversely impact the coastal bluffs to the west of the four lots, nor to the plant resources within the Easement area. Those measures have been incorporated as Mitigation Measures at the end of this section.

4. *An assessment on how the Project may contribute (due to the CYL's diminishing habitat on the Vallemar bluff area) to habitat stresses on the CYL as associated with bluff erosion and the invasive iceplant. While the CYL's existing habitat is off the project site, would the Project prevent recolonization of previously occupied habitat areas, precluding habitat and species recovery?*
5. *An assessment of both the County's and Project applicant's plans (both off and on the Project site, and specifically within the proposed Conservation and Open Space Easement area) for measures to protect the CYL, including how such mechanisms would be funded, monitored and enforced.*

**Response:** As previously discussed, the Project includes the designation of a Conservation and Open Space Easement (Easement) that extends from the west-facing sides of the development footprints of all four lots to the Project's westernmost property boundary (see Attachments F and S.2).

While the 2018 Survey concluded that the soil conditions within the Easement area were not likely conducive to supporting population of the CYL, the protection, restoration and management measures that will be implemented with the Easement area could result in an environment that may support migration of the CYL from its current location on the FMR property. Additionally, the Project stormwater drainage plans and use of permeable pavers on the four building sites - together with the infiltration trenches with overflow spreader to be located within the Easement area - should be adequate to limit any adverse impacts to the CYL from project related drainage. Finally, mitigation measures are also recommended to limit any adverse impacts to the CYL from all Project construction and grading activities.

The primary purpose of the "Vallemar Bluffs Conservation and Development Project Management Planning Framework" (Attachment S.1), besides being the framework for a final Habitat Management Plan, is restoration and management within the 0.92-acre Conservation Easement area in such a manner as to protect, restore and manage the area's native biodiversity in the CTP, including the promotion of existing rare plant populations, while allowing for compatible access.

With regard to access into this area, the Framework document cites goals that would:

- 1) Facilitate passive recreation that is compatible with restoration and management of the coastal terrace prairie community and rare plants both in the conservation area, including public access on the Bluff Trail that is largely within the FMR;
- 2) Provide access for scientific research, to increase understanding of the natural systems and inform their effective conservation and management; and
- 3) Develop and maintain the infrastructure necessary to manage compatible access, including fences and interpretive signage, using approaches that limit impacts to biodiversity and the scenic values of the conservation area.

Its associated objectives (to be incorporated as mitigation measures) include:

- 1) Install symbolic fencing along the perimeter of the conservation area, to clearly delimit the boundary between it and the adjacent development areas and Fitzgerald Marine Reserve land;
- 2) Install signs that provide information about the conservation area including the rationale for its protection, to promote compliance with access restrictions;
- 3) Record in the CC&Rs for the parcels as well as the conservation easement, prohibitions against access to the conservation area that is not compatible with conservation, restoration, and management of natural community structure and species composition in the coastal terrace prairie and populations of rare native plants. Examples of prohibited activities include: installation of permanent or semi-permanent infrastructure or equipment such as outdoor furniture (e.g., patio furniture, picnic tables, umbrellas), play equipment (trampolines, play structures, etc.) or other items that intensify use or otherwise modify the structure and species composition of the grassland;
- 4) Work with the County of San Mateo, to coordinate on management of the Bluff Trail, which is largely within the Fitzgerald Marine Reserve but also occurs within a small portion of the conservation easement area, and that provides public access along the bluff edge. Ensure that the recreational use there is managed to be compatible with the restoration and management of the coastal terrace prairie and rare plants in the conservation area; and
- 5) Monitor the effects of access and compliance with the measures to prevent trampling associated with recreational use and taking steps to increase compliance when/if negative impacts are observed.

The addition of four new homes is unlikely to increase the frequency or intensity of recreation on the FMR, which already receives high public use. Recreation management, as outlined in the Habitat Management Plan, together with enforcement of the recreation activities within the Easement area, should also reduce any potential impacts. Finally, low-profile, interpretive signs could be placed at the southwesterly corner of the Easement area (near the bluff-top trail heading northerly at the bottom of Julianna) informing public trail users of the CYL located up ahead just west of the trail.

6. *An assessment of the Project's potential to intensify the current recreational use in the immediate vicinity of the CYL population, including within the proposed Conservation and Open Space Easement area. What measures affecting pedestrian and recreational use within the Easement area be and how would they be effectively regulated and enforced to ensure protection of coastal prairie habitat?*

**Response:** The Project's potential to increase the current recreational use in the vicinity of the CYL's population falls into two areas: (a) an increase of people using the bluff-top trail (to which the currently existing CYL population is located several feet east of the trail on FMR property) during construction and after the four proposed residences are completed and occupied, and (b) an increase of people using what is currently the large open field area west of the bluff-top trail (part of the Project site) during construction and after the four residences are completed and occupied.

With regard to the former, staff doesn't conclude that the additional visitors/trail users associated by four new residences alone will result in a significant increase of activity along the trail. That said, County Parks is willing to work together with CDFW and the Project applicant to collaborate on the plant's management and preservation (at its current location), provided the Project applicant (or as could be stipulated in the Project's Draft CC&Rs; Attachment S.3.) fund the development of a recovery plan and long-term funding for implementation of such a plan.

With regard to the latter, the activity currently occurring within the open field area will be greatly restricted relative to its use and activity, pursuant to the constraints specified in the Project's proposed Easement as previously cited). The Easement (together with the CC&Rs and pursuant to the Habitat Management Plan) specifies prohibited uses within the Easement and ensures proper oversight and management of the native plant populations within the Easement area.

7. *A better description and assessment of the Project's proposed hydrological impacts, such as infiltration and detention features to prevent a net increase in surface water run-off from the Project site, and soil saturation effects of increased subsurface flows on erosive processes.*

**Response:** The Project includes a Stormwater Drainage Plan (Attachment O) that will capture, detain and perk all post-construction drainage from new impermeable areas created from the construction of four residences, garages, and associated driveways, walkways and patios.

Increased or channelized runoff could also hasten coastal bluff erosion, which has occurred at an average rate of 0.45 feet per year since 1908 and may have reduced the amount of coastal blufftop habitat available for CYL, Blasdale's bent grass, and Johnny nip, as well as perhaps Harlequin lotus, though that species occurs further inland.

To minimize these potential indirect effects of altered drainage, the drainage plan features the following design elements: (1) infiltration trenches with overflow spreaders, that disperse the runoff over wide areas and maintain the existing hydrology and soil moisture distribution within the site; (2) pervious pavers for driveways and parking areas, to minimize the impervious area on the site to just 10,850 sq. ft. (0.25 acres); and (3) connections to the existing two-foot deep drainage channel on Juliana Street. These measures are anticipated to minimize alterations to soil moisture conditions within the site.

### **Assessment of Potential Project Impacts and Benefits**

The 2018 Survey summarized the project's design and implementation measures that would limit impact to the special-status plants and sensitive natural communities in such a manner that:

- Locates the four project building sites primarily within the degraded habitat, including mostly the ruderal and planted/ornamental vegetation towards the east side of the property.
- Minimizes alteration of the site's hydrology, including use of permeable pavers (driveways/patios/walkways) to increase infiltration of stormwater, and installing overflow spreaders in trenches (into the Easement area) to further diffuse runoff
- Landscape with plant species native to the San Mateo Coast, to limit the potential for the spread of non-native plants into the adjacent habitat, and limit the need for irrigation and pesticide use.

Table 9 of the 2018 Survey documents negative direct and indirect effects of the project, as well as the benefits of the Conservation Easement and added mitigation measures on the CTP, the CYL, and the Blasdale's bent grass, Harlequin Lotus and Johnny Nip plants. Project impacts and benefits are summarized as follows:

### **Summary of Net Effects of the Project**

The 2018 Survey summarized the net effects of the project as follows:

- Project impacts are largely avoided through project design: Locating the residential development on the eastern portion of the Project site (east of the Easement's easterly boundary), in planted/ornamental and ruderal plant communities, avoids most direct impacts to the special-status species and sensitive natural communities. The project will protect 89% of the 0.97 acres classified as CTP within the entire Project site. Regarding rare plants, the Project will protect 100% of the 78 sq. ft. area occupied by Blasdale's bent grass, 100% of the 0.105-acre area occupied by Johnny nip, and 83% of the total 2,050 sq. ft. area occupied by Harlequin lotus. The CYL was not observed or found on the Project site, and instead, its entire 746 sq. ft. patch is protected within the adjacent FMR area, under the management of the County Parks Department.
- The project compensates for its limited impacts to degraded coastal terrace prairie and also harlequin lotus at high mitigation ratios, while avoiding direct impact to all other sensitive resources in the Study Area. The proposed 0.92-acre on-site conservation area will be protected through the Conservation and Open Space Easement dedicated to a 501(c)(3) land trust (identified as Golden State Land Conservancy).
- The Easement area will protect 0.874 acres of CTP, thus limiting the Project's direct impacts to just 0.075 acres of exotic-dominated CTP at a ratio of more than 11:1. Likewise, the Easement area will protect Harlequin lotus habitat at a ratio of 5:1 (for every one of the 339 sq. ft. impacted by development, 5 sq. ft. of its habitat will protected; this ratio could be increased through the salvage of seed, sod, and/or topsoil prior to development form use in off-site restoration). The project will not directly impact Blasdale's bent grass and Johnny-nip, with their entire respective populations protected within the Easement area.

The proposed Easement (Attachment S.3) would be conveyed by the Grantor (current property owner: Moss Beach Associates, LLC) to the grantee (Golden Gate Land Conservancy, Inc.).

The Golden State Land Conservancy (GSLC) is a statewide California land trust incorporated in 1999. It is a member of the Land Trust Alliance and adheres to its Standards and Practices. GSLC has applied for and is expecting their certification from the Land Trust Accreditation Commission in 2019; they are currently certified by CDFW. GSLC helps landowners conserve their property for the future, by meeting regulatory and professional requirements. To date, their work has resulted in 57 conservation easements (donated or required by public agencies) covering over 35,000 acres throughout the State of California.

The Easement specifies prohibited uses and restrictions within its boundaries, including (a) unseasonable watering and use of fertilizers/herbicides, (b) restriction on construction/development and uses (i.e., excluding even placement and use of temporary lawn furniture, BBQs, and other related outdoor furniture and items), (c) any activity that might cause soil erosion or degradation, (d) dumping, (e) planting or introduction of exotic plant/animal species, and (f) motor vehicle/equipment storage. The Easement specifies the Easement holder as the Golden State Land Conservancy, which will take on the responsibilities of protecting, storing and managing the Easement area, pursuant to the goals and objectives (as evaluated against specific success criteria) stipulated in the "Vallemar Bluffs Conservation and Development Project Management Planning Framework" document (Attachment S.1). From this framework, a final Conservation Habitat Management Plan will be developed. The Easement, final Habitat Management Plan and associated CC&Rs will be recorded together with the Project Lot Line Adjustment/Parcel Map.

The Easement ranges in average depth from 97 feet (Lot 1; covering approximately 46% of lot) to 173 feet (Lot 4; covering approximately 66% of lot). Besides functioning as a visual buffer between the proposed residential development and visitors walking down along the beach or along the bluff-top trail (as previously discussed in the "Aesthetics" Section of this document), the Easement will also serve to preserve and protect CTP and other native and special-status plant communities

located within the Easement area.

\* A combination of avoidance and minimization Measures will further limit impacts: Elements of the project design, together with the measures identified in the 2018 Survey, will further limit the impacts if the project on the sensitive natural community and specials-status species, including any indirect effects, included in this document, such as (1) salvaging top soil sod, and individual plants for use in restoration prior to the commencement of any project-related disturbance on the Project site; (2) implementing species protection measures and best management practices during such activities, including installation of fencing and signage and conducting trainings and monitoring by a biologist, to prevent the area of disturbance from expanding beyond the designated impact areas (limits of project-related grading and infiltration spreader areas); and (3) installing permeable pavers and infiltration spreaders to avoid altering the hydrology in ways that could negatively affect the sensitive community and special-status species directly or indirectly, by altering plant species composition or causing bluff erosion.

\* Restoration and management of the Conservation Easement area will buffer and expand habitat protected within the FMR and enhance habitat condition within the CTP community atop Vallemar Bluffs: Protecting the 0.874 acres of CTP will more than triple the current 0.427-acre area of CTP protected in the FMR portion of the Study Area. Restoration of 0.56 acres within the Easement area, by restoring planted/ornamental areas to prairie and reducing the dominance of exotic plant species such as ice plant, will promote the diversity and abundance of native plants within the Project site. Increasing their populations can enhance those within protected habitat in the FMR, which is also expected to benefit from active management and monitoring of the 0.92-acre Easement area pursuant to a habitat management plan (as cited above) which will address exotic plants and prevent recreation that is not compatible with the CTP and the rare plants that it supports. Aside from protection fencing to be in place during all grading and construction activities, a permanent, non-solid fence (i.e., wire or split rail; not to exceed three feet in height) will be placed around the full perimeter of the Easement area, including the Easement’s eastern boundary adjacent to the four home sites (allowing for their respective access into the Easement area).

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As a result of the 2018 Survey data and recommendations, the project impact to sensitive and special status plant species located on and adjacent to the Project site will be reduced to less than significant with the following mitigation measures:

**Mitigation Measure 4:** The “Conservation and Open Space Easement Declaration” (Easement), together with the final Habitat Management Plan and associated “Vallemar Bluffs Declaration of Covenants, Conditions and Restrictions” (CC&Rs), shall be submitted for final review by the Community Development Director and, upon approval, recorded with the Final Lot Line Adjustment/Parcel Map associated with the Project. The Easement shall be conveyed from the Project owner to the Golden State Land Conservancy, to be operated, managed and maintained by the Vallemar Bluffs Maintenance Association (Association); (comprised of the future property owners of the four lots), pursuant to the provisions of the CC&Rs. Funding needs for long-term management of the Easement area will be calculated using a Property Analysis Record (PAR) or PAR-like analysis, and the funding will be provided on an annual basis through fees assessed by the Vallemar Bluffs Homeowners Association.

**Mitigation Measure 5:** Prior to the final building inspection approval of all four residences, a permanent fence – not to exceed three (3) feet in height and of a construction and non-solid design (i.e. wood split-rail) as approved by the Community Development Director – shall be placed along all the boundaries of the Easement area, to include respective access points on its eastern boundaries adjacent to the west-facing building site areas for each of the four lots. The purpose of this fencing – together with the specific use constraints to be included in the Easement language and CC&Rs – will be to not only prevent the public from accessing the Easement area, but to clearly demarcate all

boundaries for both the public and the residences of the four new homes. Such fencing shall include the installation of signs (not to exceed 3 feet in height) that provide information about the conservation area including the rationale for its protection and to promote compliance with access restrictions.

**Mitigation Measure 6:** Include in the CC&Rs for the parcels as well as in the Conservation Easement, prohibitions against access to the Easement area that are not compatible with conservation, restoration, and management of its natural community structure and species composition in the coastal terrace prairie and populations of rare native plants. Examples of prohibited activities include: installation of permanent or semi-permanent infrastructure or equipment such as outdoor furniture (e.g., patio furniture, picnic tables, umbrellas), play equipment (trampolines, play structures, etc.) or other items that intensify use or otherwise modify the structure and species composition of the grassland.

**Mitigation Measure 7:** Work with the County of San Mateo, to coordinate on management of the bluff trail, whose northerly portion is largely within the Fitzgerald Marine Reserve (nearest to the surveyed CYL population) but primarily is located within the easterly half of The Strand (adjacent to the Easement's western boundary), and that provides public access along the bluff edge. Ensure that the recreational use along the entire length of bluff trail at the Project site is managed to be compatible with the restoration and management of the coastal terrace prairie and rare plants in the conservation area. Monitor the effects of access and compliance with the measures to prevent trampling associated with recreational use and taking steps to increase compliance when/if negative impacts are observed.

**Mitigation Measure 8:** The respective building plans for each of the four residences shall include a landscape plan that identifies tree removal, new trees, shrubs and other landscaping, and (if applicable) irrigation. Landscaping shall be with plant species native to the San Mateo Coast, to limit the potential for the spread of non-native species into the adjacent habitat, and limit the need for irrigation and pesticide use, which could influence nearby natural communities, upon recommendation and review by the applicant's biologist. (This mitigation measure is also referenced and required as part of the "Conservation and Open Space Easement" (Easement), and associated "Draft Covenants, Conditions and Restrictions" (CC&Rs), pursuant to the goals and objectives cited in the "Valleamar Bluffs Conservation and Development Project Management Planning Framework" (to be revised into the final "Habitat Management Plan").

**Mitigation Measure 9:** Prior to the issuance of any respective building permit for the four residences, the applicant shall submit to the Planning Department for review and approval an erosion control plan (to be included in each respective set of building plans for the four residences) that shows how the transport and discharge of soil and pollutants from and within the project site shall be minimized on each respective lot, as tailored to the approved development on that lot. The plan shall generally follow the Erosion Control Plan as included and shown on Page C6.0, C7.0 of the Project Plans, and shall be designed to minimize potential sources of sediment, control the amount of runoff and its ability to carry sediment by diverting incoming flows and impeding internally generated flows, and retain sediment that is picked up on the project site through the use of sediment-capturing devices. The plan shall minimize impacts from stormwater and urban runoff on the biological integrity of the natural drainage systems leading to and within the adjacent Fitzgerald Marine Reserve. The plan shall also limit application, generation and migration of toxic substances, ensure the proper storage and disposal of toxic materials, and apply nutrients at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to surface waters. Such measures shall be confirmed to have been implemented (by a qualified contractor and under the supervision of the project's civil engineer) prior to the issuance of the respective building permits for the four residences, to the satisfaction of the Planning and Building Department. The County will monitor compliance of this mitigation measure by conducting weekly construction inspections during the rainy season (October 1 through May 1) for the period covering all land disturbance activities, as

required by the State Water Board's Special Protections. Such measures shall be kept in place for each of the lots through the duration of the construction activities on that lot, up to the final inspection approval of the respective building permit for development on that lot. Said plan shall adhere to the San Mateo Countywide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including:

- a. Sequence construction to install sediment-capturing devices first, followed by runoff control measures and runoff conveyances. No construction activities shall begin until after all proposed measures are in place.
- b. Minimize the area of bare soil exposed at one time (phased grading).
- c. Clear only areas essential for construction.
- d. Within five (5) days of clearing or inactivity in construction, stabilize bare soils through either non-vegetative best management practices (BMPs), such as mulching, or vegetative erosion control methods, such as seeding. Vegetative erosion control shall be established within two (2) weeks of seeding/planting.
- e. Construction entrances shall be stabilized immediately after grading and frequently maintained to prevent erosion and control dust.
- f. Control wind-born dust through the installation of wind barriers such as hay bales and/or sprinkling.
- g. Soil and/or other construction-related material stockpiled on-site shall be placed a minimum of 200 feet from all wetlands and drain courses. Stockpiled soils shall be covered with tarps at all times of the year.
- h. Intercept runoff above disturbed slopes and convey it to a permanent channel or storm drains by using earth dikes, perimeter dikes or swales, or diversions. Use check dams where appropriate.
- i. Provide protection for runoff conveyance outlets by reducing flow velocity and dissipating flow energy.
- j. Use silt fence and/or vegetated filter strips to trap sediment contained in sheet flow. The maximum drainage area to the fence should be 0.5-acre or less per 100 feet of fence. Silt fences shall be inspected regularly and sediment removed when it reaches 1/3 the fence height. Vegetated filter strips should have relatively flat slopes and be vegetated with erosion resistant species.

**Mitigation Measure 10:** Prior to commencement of any project-related site disturbance, grading/clearing, tree removal/trimming or construction activities, and in conjunction with an approved Erosion Control Plan, the applicant shall place adequate temporary construction fencing along all boundaries of the proposed Conservation Easement and surrounding all limits of the four building sites. No such activity shall extend beyond that fenced perimeter. All environmentally sensitive areas shall be clearly flagged. Additional measures shall also be included in the plan narrative and implemented as follows:

- a. Entrance and exit from the construction site by construction equipment and other vehicles shall occur from Vallemar Street, and the point of access shall be clearly identified.
- b. An excavator with a swivel bucket shall be used during construction. The excavator will have "street" tracks to minimize site disturbance.
- c. Construction lay down areas shall be located on the building envelopes not under active construction or within other portions of the construction footprint.
- d. Spoil material that will be hauled away may first be stored either on the building envelopes not

in active construction or on the paved parking area on Vallemar Street, subject to an encroachment permit from San Mateo County Public Works.

- e. A biological monitor will be present during ground disturbing activities to ensure that encroachment into the flagged environmentally sensitive areas does not occur. The biological monitor will have the authority to stop work in the event construction activities are encroaching into environmentally sensitive areas.

**Mitigation Measure 11:** The erosion control plan for the project shall include the following best management practices (BMPs) and shall be implemented and maintained (under the supervision of the project civil engineer) as described:

- a. Control and prevent the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, washwater or sediments, rinse water from architectural copper, and non-stormwater discharges to storm drains and watercourses.
- b. Store, handle, and dispose of construction materials/wastes properly to prevent contact with storm water.
- c. Do not clean, fuel, or maintain vehicles on-site, except in a designated area where wash water is contained and treated.
- d. Train and provide instruction to all employees/subcontractors RE: construction BMPs.
- e. Protect all storm drain inlets in vicinity of site using sediment controls such as berms, fiber rolls, or filters.
- f. Limit construction access routes and stabilize designated access points.
- g. Perform clearing and earthmoving activities only during dry weather.
- h. Use sediment controls or filtration to remove sediment when dewatering and obtain all necessary permits.
- i. Trap sediment on site, using BMPs such as sediment basins or traps, earthen dikes or berms, silt fences, check dams, soil blankets or mats, covers for soil stockpiles, etc.
- j. Divert on-site runoff around exposed areas; divert off-site runoff around the site (e.g. swells and dikes).
- k. Protect adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.
- l. No land clearing operations where grading operations may take place between October 15 and April 15 unless a separate winter erosion control plan is approved prior to beginning such construction.
- m. Erosion is to be controlled at all times. The specific measures shown are to be implemented at all times. Additional measures will be required for construction between October 15 and April 15.

**Mitigation Measure 12:** Site all construction materials and staging areas in converted (i.e., paved), ruderal, or planted, areas within the portion of the property proposed for development, to avoid impacts to special-status communities and species.

**Mitigation Measure 13:** Implement measures to prevent indirect effects of the development project on the adjacent coastal terrace prairie community and rare species during construction, including:

- a. Fence the project disturbance envelop during construction using ESA fencing to clearly delimit the area of work;
- b. Erect signs on the fences and in other areas to prevent workers from entering them during

construction;

- c. Conduct worker awareness training to educate construction personnel about the sensitive communities and special-status species, as well as the measures that must be implemented to protect them;
- d. Prevent erosion and manage drainage during construction to prevent concentrated runoff and sediment deposition in the coastal terrace prairie, including by installing, silt fences where needed;
- e. Monitor compliance with the protection measures during construction, to ensure that fences and signage remain in places, and that the areas outside of the disturbance envelope are not disturbed or otherwise utilized during construction;
- f. Monitor the site throughout construction period (and in perpetuity, per Mitigation Measure 5 below) and using early-detection/rapid response to eradicate any new occurrences of exotic plant species.

**Mitigation Measure 14:** Prior to disturbance within any portion of the project area that supports coastal terrace prairie dominated or co-dominated by native plants (2018 McGraw Survey; Figure 6), including the stormwater infiltration spreader areas and limits of grading, salvage the sod, topsoil, seed, and individual native plants, where appropriate and feasible. Use the salvaged material to restore areas of temporary disturbance; if the salvaged area is to be permanently impacted, use the material to restore other highly degraded habitat on site (e.g., ice plant mats) where appropriate.

**Mitigation Measure 15:** Minimize the potential for indirect impacts to coastal terrace prairie and rare plant species that could result from landscaping, by:

- a. Avoiding landscaping elements that could degrade adjacent habitat, including pesticides, herbicides, fertilizers, and irrigation beyond that required to establish plantings; and
- b. Installing plants native to the coastal terrace prairie, coastal strand, and coastal scrub communities in San Mateo County. For plant species found in the native communities in the study area, use container stock from local (coastal San Mateo County) sources to avoid disrupting locally adapted genetic complexes (i.e., causing genetic erosion or outbreeding depression) within the adjacent remaining habitat on-site and in the adjacent FMR.

**Mitigation Measure 16:** Compensate for the impacts of the project on coastal terrace prairie by implementing the following measures:

- a. Permanently protect 0.92 acres of coastal terrace prairie, through dedication of a perpetual conservation easement (as required in Mitigation Measure 4) to a tax-exempt nonprofit organization qualified under Section 501(c)(3) of the Internal Revenue Code and qualified to do business in California that has as its primary purpose the preservation, protection, or enhancement of land in its natural, scenic, historical, agricultural, forested, or open-space condition or use.
- b. Restore an estimated 0.71 acres within the conservation easement area that feature planted/ornamental species (i.e., Monterey cypress), are dominated by exotic plant species, and/or have been previously disturbed and feature unnatural topography or materials (e.g., wood chips). Table 9 and Figure 8 (2018 McGraw Survey) illustrate the acreages and approximate locations of restoration treatment areas. The restoration should follow a specific restoration plan that addresses the anthropogenic factors that have degrade native plant community structure and species composition. The restoration plan will also describe how the areas in the conservation easement area that were graded and installed with spreaders will be restored. It will critically evaluate and use, where appropriate, the following approaches:
  - i. Removing the planted/ornamental plant species and ice plant mats;

- ii. Removing wood chips, base rock, or other non-native material covering the soil;
  - iii. Recreating the natural topography in areas where mounds or swales were created through prior excavation;
  - iv. Controlling other invasive plants (e.g., Italian rye grass and prickly sow thistle) that outcompete native plant species;
  - v. Managing the abundance of disturbance-adapted native plants such as coastal tarweed, where they are dominant (e.g., in the southeastern corner of the property) to promote the establishment and growth of a broader diversity of native grasses and forbs;
  - vi. Establishing native plants in areas previously used as trails to access the bluff trail;
  - vii. Salvaging seed and topsoil from coastal terrace prairie and areas supporting harlequin lotus prior to any ground-disturbing activities and using the material in on-site restoration, where appropriate; and
  - viii. Increasing the cover and diversity of native coastal terrace prairie plant species by sowing native plant seed (or spreading topsoil, where available) into restoration areas.
- c. Manage and monitor, in perpetuity, the entire 0.92-acre conservation area to address anthropogenic factors that degrade native plant community structure and species composition. Management elements should be identified in a management plan developed for the conservation area based on the site conditions and the literature documenting relevant conservation and management strategies, which are anticipated to include the following:
- i. Controlling exotic plants, and preventing the invasion and spread of new exotic plant species;
  - ii. Managing recreation and access on and adjacent to the conservation area, including by:
    - (1) Installing fencing and signage to deter public access within the conservation area;
    - (2) Recording in the CC&Rs for the site and in the conservation easement, prohibitions against recreational use and access that are not compatible with conservation and management natural community structure and species composition in the coastal terrace prairie and populations of rare native plants. Installation of permanent or semi-permanent infrastructure and play equipment such as law chairs, umbrellas, trampolines, or any other items that intensify use in one area should be prohibited;
    - (3) Siting, constructing, and managing any public trails that are all or partially within the conservation area so that the recreational use is compatible with the protection of coastal terrace prairie and adjacent coastal bluff habitat;
    - (4) Monitoring compliance with the measures to prevent trampling associated with recreational use and taking steps to increase compliance when/if negative impacts are observed.
  - iii. Monitoring natural community structure and species composition and rare plant populations within coastal terrace prairie, to gauge the effectiveness of management and inform adjustments as part of the adaptive management framework.

**Mitigation Measure 17:** The erosion control plan for the project shall include the following best management practices (BMPs) and shall be implemented and maintained (under the supervision of the project civil engineer) as described:

- a. Control and prevent the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, washwater or sediments, rinse water from architectural copper, and non-stormwater discharges to storm drains and watercourses.

- b. Store, handle, and dispose of construction materials/wastes properly to prevent contact with stormwater.
- c. Do not clean, fuel, or maintain vehicles on-site, except in a designated area where wash water is contained and treated.
- d. Train and provide instruction to all employees/subcontractors regarding construction BMPs.
- e. Protect all storm drain inlets in vicinity of site using sediment controls such as berms, fiber rolls, or filters.
- f. Limit construction access routes and stabilize designated access points.
- g. Perform clearing and earthmoving activities only during dry weather.
- h. Use sediment controls or filtration to remove sediment when dewatering and obtain all necessary permits.
- i. Trap sediment on site, using BMPs such as sediment basins or traps, earthen dikes or berms, silt fences, check dams, soil blankets or mats, covers for soil stockpiles, etc.
- j. Divert on-site runoff around exposed areas; divert off-site runoff around the site (e.g. swells and dikes).
- k. Protect adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.
- l. No land clearing operations where grading operations may take place between October 15 and April 15 unless a separate winter erosion control plan is approved prior to beginning such construction.
- m. Erosion is to be controlled at all times. The specific measures shown are to be implemented at all times. Additional measures will be required for construction between October 15 and April 15.

**Mitigation Measure 18:** The applicant shall implement the drainage improvement recommendations of the Mesiti-Miller Engineering, Inc. (2017) Preliminary Storm Drainage Report to limit impacts to the Coastal Terrace Prairie grass, erosive bluff edge, and the near-shore marine environment (within the Fitzgerald Marine Reserve adjacent and just west of the project site, including the surveyed area of the endangered coast yellow leptosiphon on the coastal bluff promontory just west of the project site's westernmost property line) utilizing (within the Easement Area as shown) infiltration trenches with overflow spreaders on each lot to disperse the runoff over wide areas and maintain existing hydrology and soil moisture on the site, and using pervious pavers and detention areas to control peak runoff. The respective building permits for each of the four residences shall include a drainage plan that incorporates and implements all drainage measures cited in the report by Mesiti-Miller Engineering, Inc. The project shall minimize alteration of the site's hydrology, including by using permeable pavers (in all driveways, walkways and patio areas) to increase infiltration of rainfall, and installing overflow spreaders in trenches to diffuse runoff.

**Source:** Project Plans; California Natural Diversity Database; 2015 Zander Associates Biological Report; Amended Zander Report (dated June 6, 2017); Biological Survey Report, Jodi McGraw Consulting (August 2018); California Department of Fish and Wildlife Letter (dated June 6, 2017); 2002 Fitzgerald Marine Reserve Master Plan; Mesiti-Miller Engineering, Inc. (2017) Preliminary Storm Drainage Report; County Drainage Policy

<p>4.b. Have a significant adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?</p>		X		
<p><b>Discussion:</b> While the 2018 McGraw Survey found no riparian habitat on the Project site, discussion regarding other sensitive natural communities was provided to Question 4.a., with cited mitigation measures to ensure that the project impact is the cited sensitive natural communities is less than significant.</p> <p><b>Source:</b> Same as cited in Question 4.a</p>				
<p>4.c. Have a significant adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</p>				X
<p><b>Discussion:</b> The 2018 McGraw Survey found no wetlands on the Project site, as defined either by Section 404 or in the County Local Coastal Program. As a result, the Project poses no impact.</p> <p><b>Source:</b> Project Plans, California Natural Diversity Database; Biological Survey Report, Jodi McGraw Consulting (August 2018)</p>				
<p>4.d. Interfere significantly with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?</p>		X		
<p><b>Discussion:</b> The project site does not include any creeks or water ways, nor does it fall within any established native resident or migratory wildlife corridors or include any native wildlife nursery. However, the project site contains a significant grove of Monterey cypress trees (albeit not a native tree species to this area), which may host some species of nesting birds. Given that the site is located adjacent to and just east of the Fitzgerald Marine Reserve (discussed in greater detail in Question 4.f. below), the 2002 Fitzgerald Marine Reserve Master Plan includes discussion regarding the Monterey cypress groves located in the Reserve’s northerly areas, specifically that the upper canopy layer of these trees can provide night roost and foraging roost for ravens and American crows, hawks and possibly owls. While the Monterey cypress grove on the project site is more dense and closer to the ground than those groves cited in the Plan, it’s to be expected that the project sites Monterey cypress grove may be host to the same bird species for the same purposes. Since the project includes the removal and trimming of many of these trees (as well as noise and other construction impacts), the following mitigation measure will ensure that the impact is less than significant.</p> <p><b>Mitigation Measure 19:</b> Prior to any ground disturbing activities, including vegetation/tree removal or tree trimming, that would occur during the nesting/breeding season of native bird species</p>				

potentially nesting/roosting on the site (typically February 1 through August 31 in the project region), a survey for nesting birds shall be conducted by a qualified biologist experienced with the nesting behavior of bird species of the region. The intent of the survey would be to determine if active nests of special-status bird species or other species protected by the Migratory Bird Treaty Act and/or the California Fish and Wildlife Code are present in the construction zone or within 500 feet of the construction zone. The surveys shall be timed such that the last survey is concluded no more than 2 weeks prior to initiation of construction or tree removal work. If ground disturbance activities are delayed, then an additional pre-construction survey shall be conducted such that no more than 2 weeks will have elapsed between the last survey and the commencement of ground disturbance activities.

If active nests are found in areas that could be directly affected or subject to prolonged construction-related noise, a no-disturbance buffer zone shall be created around active nests during the breeding season or until a qualified biologist determines that all young have fledged. The size of the buffer zones and types of construction activities restricted within them will be determined through consultation with the California Department of Fish and Wildlife (CDFW), taking into account factors such as the following:

- a. Noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity;
- b. Distance and amount of vegetation or other screening between the construction site and the nest; and
- c. Sensitivity of individual nesting species and behaviors of the nesting birds.

Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or other appropriate barriers and construction personnel shall be instructed on the sensitivity of nest areas. A qualified biologist shall serve as a construction monitor during those periods when construction activities would occur near active nest areas of special-status bird species and all birds covered by the Migratory Bird Act to ensure that no impacts on these nests occur.

**Source:** Project Plans, Zander Biological Report (2015); 2002 Fitzgerald Marine Reserve Master Plan

4.e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (including the County Heritage and Significant Tree Ordinances)?		X		
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**Discussion:** As acknowledged in discussion to Question 4.a., the project site is host to a significant grove of Monterey cypress trees, many of which qualify as significant size (12" diameter or greater) trees as defined in the County Significant Tree Regulations (Section 12,012). The submitted Tree Assessment report (by Hort Science, dated May 2015; Attachments E. and U.) reviewed all trees greater than 12" in diameter, with an evaluation as to health specifically of 44 trees (41 Monterey cypress, 3 Monterey pines, neither of which are native to San Mateo County). To accommodate the proposed four residences, a total of 31 significant sized trees are to be removed due to conflict with associated building footprints, garage and driveways (leading to Vallemar), and associated grading. Of those trees, most were rated in poor condition (due to poor structure and where they'd be expected to decline regardless of management). However, 14 trees are proposed for protection and preservation. Additionally, 75 new trees will be planted, including 20 (24" box size) Monterey cypress trees and 55 other (24" box) trees. The loss of the trees due to project development is not considered a significant impact with the following mitigation measures that will ensure replanting of the additional trees (as cited) and preservation of remaining trees. Additionally, the following

mitigation measure will ensure that the impact to such resources is less than significant.

**Mitigation Measure 20:** The new trees indicated on the applicant's Tree Replacement Plan and Tree and Shrub Replanting Plan (found in the Project Plans) shall be planted prior to Planning final approval of the respective building permits for the four residences. Tree removal (identified by tree numbers), new trees and shrubs, additional landscaping, and tree preservation shall be shown on the submitted building plans for each of the four respective residences. The landscaping plan (for tree replacement and all other proposed landscaping) shall include plants that are pest- and/or disease-resistant, drought-tolerant, and attractive to beneficial insects. Upon implementation of the plan (for each of the four residences), the use of quick-release fertilizers shall be minimized. The associated irrigation system shall be designed to efficiently distribute water and minimize runoff. The planting of all new trees shall occur pursuant to the standards for such planting (depth of holes dug, fertilizing at planting and watering for respective tree types) and under the observation of a qualified, licensed arborist. The arborist shall confirm (via letter and/or email) that this has occurred for all trees prior to final inspection approval of the respective building permits for the four residences, to the satisfaction of the Community Development Director.

**Mitigation Measure 21:** Any plan modifications to the subsequent development on the four lots (assuming they are deemed "minor" by the Community Development Director) that occur post issuance of any of the respective building permits for the four residences shall be reviewed by the arborist to assess any potential impacts to existing trees, trees that are being preserved, and/or new trees to be planted affecting trees should be reviewed by the project consulting arborist (arborist) with regard to tree impacts.

**Mitigation Measure 22:** The submitted building plans for each of the four respective residences shall demarcate a Tree Protection Zone, to be established for all trees to be preserved, in which no disturbance is permitted. These plans shall indicate the method and measures of such protection (i.e., 6-foot high fencing placed at the trees' dripline) pursuant to the design and confirmed observation by the arborist. All such tree protection measures shall be reviewed and approved by the Community Development Director prior to issuance of the respective building permits for the four residences. No grading, excavation, construction or storage of materials, equipment, spoils, waste or wash-out water may be deposited, stored, or parked within the Tree Protection Zone. All underground services, including utilities, sub-drains (and other drainage features), irrigation lines, water and sewer laterals, shall be routed around the Tree Protection Zone. All tree protection measures shall be confirmed by the County to have been implemented prior to the issuance of any of the respective building permits for the four residences. All tree protection measures shall remain until all construction on each respective lot is completed.

**Mitigation Measure 23:** Any herbicides placed under paving materials must be safe for use around trees (as determined and confirmed by the arborist) and labeled for that use.

**Mitigation Measure 24:** All tree pruning shall be done by skilled tree or landscape contractors pursuant to the specific standards (adhering to the latest edition for Best Management Practices – and Tree Pruning as published by the International Society of Arboriculture), directions and under the supervision of the arborist.

**Mitigation Measure 25:** Prior to the initiation of any site disturbance activities (prior to issuance of the building permits), the project contractors working in the vicinity of trees to be preserved shall meet with the arborist at the site to review all work procedures, access routes, storage areas and tree protection measures.

**Mitigation Measure 26:** Upon issuance of the building permits, any excavation within the dripline or other work that is expected to encounter tree roots should be approved and monitored by the arborist. Any roots requiring cutting (including the type of backfill soil, compaction, fertilizing and watering) shall be the standards and under the supervision of the arborist to ensure that such root

cutting does not damage the long term health of the tree.

**Mitigation Measure 27:** Should any tree or its roots be damaged during construction, it should be evaluated as soon as possible by the arborist so that appropriate treatments can be applied.

**Mitigation Measure 28:** Any additional or unanticipated tree pruning needed for clearance during construction shall be performed to the standards and under the supervision by the arborist.

**Source:** Project Plans; Project (2015) Tree Assessment Report

4.f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, other approved local, regional, or State habitat conservation plan?		X		
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**Discussion:** The project site is adjacent to and west of the Fitzgerald Marine Reserve (FMR), a 402-acre natural resource area extending along San Mateo County’s north coast, from just above the project site running south to Pillar Point Marsh (just east of the Princeton area), and extending 1,000 feet west into the ocean from the mean high tide line. Part of the Monterey Bay National Marine Sanctuary, the Reserve includes 370 acres of intertidal and subtidal marine habitat below the high tide line and 32 acres of upland coastal bluffs. The Reserve is under joint custodianship of the County Parks Department and the California Department of Fish and Wildlife, and is operated pursuant to the policies and guidelines of the 2002 Fitzgerald Marine Reserve Master Plan. The Reserve is both a “Marine Life Refuge” and an “Area of Biological Significance (ASBS)”, designated by the State of California.

The FMR boundary extends up to and includes the bluff top trail cited previously (the project sites’ westernmost boundary is adjacent to the County owned Reserve boundary). The project’s proposed Open Space and Conservation Easement is located between the project site’s western property boundary (near the bluff top trail) and the west-facing fronts of the four residences (ranging is distance of approximately 97 to 173 feet). With the purpose of the easement being to: (1) prohibit project disturbance and residential use, (2) preserve the coastal prairie grass and other biotic species, and (3) to set back the four houses from the trail to reduce visual impacts, the project will not be encumbered by the FMR. However, it is understood that during construction of the four residences (which includes grading activities, construction vehicles, equipment and associated personnel), there could be adverse impact to the FMR area if adequate construction barriers and erosion measures are not implemented. Also, once all such construction is completed, the project shall include a permanent fence (as discussed in Question 4.a) to be erected to limit and reduce the impact to the area protected by the Easement from both those living in the four residences as well as those walking along the bluff top trail.

An additional potential impact to the FMR would be stormwater runoff and erosion during: (1) all site disturbance and construction activities, and (2) post-construction, permanent drainage runoff not properly mitigated such that all such runoff is contained on each of the respective lots and none drains towards or onto the FMR area. Besides the previously cited mitigation measures to ensure erosion control during construction activities, , the submitted Preliminary Storm Drainage Report (dated April 26, 2017), prepared by Mesiti-Miller Engineering, Inc.), proposes a drainage strategy comprised of permanent drainage measures to collect and control all post-construction stormwater flows (cited under Mitigation Measure 10). The report acknowledged that runoff from the project site currently flows over the coastal bluffs to the southwest. An earlier version of the project (comprised of five residences, some of which were located closer to the bluff top with no yet proposed conservation area) presented problems with such drainage measures, with the potential for stormwater runoff and associated development drainage to saturate and possibly further erode the

coastal bluffs. However, with the project as currently proposed, and based on recommendations from the project biologist (Jodi McGraw), the 2017 drainage plan calls for infiltration trenches with overflow spreaders (extending into the Easement area) to disperse the stormwater runoff over wide areas and maintain existing hydrology and soil moisture distribution on the site. This will also help to prevent concentrated runoff from flowing over the bluffs and reduce the potential for soil erosion.

Preliminary hydrologic calculations for the drainage areas for each of the four lots were done for both pre- and post-development conditions. With the mitigation provided, runoff rates will be controlled to pre-development levels per County requirements. The plan included preparation of a detailed hydrologic and hydraulic model to examine proposed drainage conditions and determine the infiltration and detention facility details required to cause no net increase in runoff flow off the site due to the project. Based on those results, the net runoff from the site will decrease with the proposed drainage improvements. The Low Impact Design (LID) objectives of the drainage plan were to slow down and filter stormwater to reduce the impact of development on water resources. LID drainage techniques recommended for the project (as applied to each lot) include the use of pervious pavers for driveways and parking areas, infiltration trenches with overflow spreaders to disperse runoff, and detention facilities, all intended to mitigate runoff from the impervious surfaces (where proposed impervious area for entire 2.48-acre site is reduced to about 10,850 sf (0.25 acres of the total Project site area). The project has been reviewed and preliminarily approved by the Department of Public Works for compliance with all County drainage policies, the County's Municipal Stormwater Regional Permit, and the Ocean Plan regulating drainage within the watershed of the James Fitzgerald Area of Special Biological Significance (ASBS).

The applicable Mitigation Measures cited in Question 4.a. and above will ensure that those impacts are reduced to less than significant.

**Source:** Project Plans, Final Draft (2002) of Fitzgerald Marine Reserve Master Plan; Mesiti-Miller Engineering, Inc., (April 26, 2017) Preliminary Storm Drainage Report; County Drainage Policy; San Mateo Countywide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines"

4.g. Be located inside or within 200 feet of a marine or wildlife reserve?		X		
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**Discussion:** As acknowledged in discussion to Question 4.f., the project site is located adjacent to and just east of the Fitzgerald Marine Reserve (FMR). Again, the mitigation measures cited there (from Question 4.a.) will ensure that the project's impact is less than significant.

**Source:** Project Plans, Final Draft (2002) of Fitzgerald Marine Reserve Master Plan

4.h. Result in loss of oak woodlands or other non-timber woodlands?				X
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**Discussion:** The project parcel includes no oak woodlands or other timber woodlands. Thus, the project poses no impact.

**Source:** Project Plans; 2015 Zander Biological Report

<b>5. CULTURAL RESOURCES.</b> Would the project:				
	<i>Potentially Significant Impacts</i>	<i>Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a. Cause a significant adverse change in the significance of a historical resource as defined in CEQA Section 15064.5?				X
<p><b>Discussion:</b> Neither the project parcel nor the project site hosts any known historical resources, neither by County, State or Federal listings. Thus, the project poses no impact.</p> <p><b>Source:</b> Project Plans; County General Plan Historical and Archaeological Resources Element; Sonoma State Northwest Information Center</p>				
b. Cause a significant adverse change in the significance of an archaeological resource pursuant to CEQA Section 15064.5?		X		
<p><b>Discussion:</b> Upon referral and review, the Sonoma State Northwest Information Center responded that while an earlier study had indicated no presence of archaeological resources on the project site, they recommended that care be taken upon all project activity related excavation. Thus, the following mitigation measure is recommended to ensure that the impact is less than significant:</p> <p><b>Mitigation Measure 29:</b> Prior to building permit issuance for construction of residences on all or any of the respective lots, the applicant shall incorporate, via a note on the first page of the building construction plans, that in the event that archaeological resources are inadvertently discovered during construction, work in the immediate vicinity (within 25 feet) of the find must stop until a qualified archaeologist can evaluate the significance of the find. Construction activities may continue in other areas beyond the 25-foot stop work area. A qualified archaeologist is defined as someone who meets the Secretary of the Interior's Professional Qualifications Standards in archaeology. The Community Development Director shall be notified of such findings, and no additional work shall be done in the stop work area until the archaeologist has recommended appropriate measures, and those measures have been approved by the Current Planning Section and implemented. Disposition of Native American remains shall comply with CEQA Guidelines Section 15064.5(e).</p> <p><b>Source:</b> County General Plan Historical and Archaeological Resources Element; Sonoma State Northwest Information Center</p>				
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		
<p><b>Discussion:</b> The project site does not consist of any known paleontological resources, sites or geologic features. Due to earthwork associated with the project, the project may have the potential to impact any unknown paleontological resources. Therefore, the following mitigation measure is recommended to minimize any potential unearthing and impact to any such resources in the project area.</p> <p><b>Mitigation Measure 30:</b> In the event that paleontological resources are inadvertently discovered during construction, work in the immediate vicinity (within 25 feet) of the find must stop until a qualified paleontologist can evaluate the significance of the find. The Community Development</p>				

Director shall be notified of such findings, and no additional work shall be done in the stop work area until the paleontologist has recommended appropriate measures, and those measures have been approved by the Current Planning Section and implemented.

**Source:** County General Plan Historical and Archaeological Resources Element; Sonoma State Northwest Information Center

d. Disturb any human remains, including those interred outside of formal cemeteries?		X		
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**Discussion:** The project site does not contain any known human remains, including those interred outside of formal cemeteries. However, there is a possibility for the discovery of human remains during project-related ground disturbance and/or construction activities. Therefore, the following mitigation measure is recommended to ensure the project impact is less than significant:

**Mitigation Measure 31:** Should any human remains be discovered during construction, all ground disturbing work shall cease and the County Coroner be immediately notified, pursuant to Section 7050.5 of the State of California Health and Safety Code. Work must stop until the County Coroner can make a determination of origin and disposition of the remains pursuant to California Public Resources Code Section 5097.98. If the County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within 24 hours. A qualified archaeologist, in consultation with the Native American Heritage Commission, shall recommend subsequent measures for disposition of the remains.

**Source:** County General Plan Historical and Archaeological Resources Element; Sonoma State Northwest Information Center

**6. GEOLOGY AND SOILS.** Would the project:

	<i>Potentially Significant Impacts</i>	<i>Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a. Expose people or structures to potential significant adverse effects, including the risk of loss, injury, or death involving the following, or create a situation that results in:				
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 significant evidence of a known fault?  <i>Note: Refer to Division of Mines and Geology Special Publication 42 and the County Geotechnical Hazards Synthesis Map.</i>		X		

**Discussion:** The project site is located approximately 6.75 miles due east of the San Andreas Fault, about 4.5 miles east of the Pilarcitos Fault, and generally surrounded (but not including) fault

lines from the Seal Cover Fault system (which reaches from the northerly part of coastline in Montara south to the Princeton Harbor. The project's submitted Geotechnical Investigation (August 2016, by Haro, Kasunich and Associates, Inc. (HKA)). While the report investigation found no on-site fault traces from any of the cited fault zones, the report acknowledged that the primary geotechnical considerations at the project site would include strong seismic shaking, the need for adequate foundation support of the proposed four residences, temporary cut slopes during construction, the presence of expansion clay soil in the foundation zones, subsurface seepage, coastal bluff erosion, and the need to control concentrated surface runoff (during and after construction activities).

With a change of County Geotechnical staff since this project was initially reviewed, the current County Geotechnical Engineer (GE) reviewed the report and plans submitted by HKA in February 2018. In response to the County GE's comments, HKA submitted a "Geotechnical and Geologic Response to Project Comments" (dated April 18, 2018). From that document, the County GE continued to discuss issues and review data with HKA's representative engineer, which resulted in HKA's final "Geotechnical Investigation Update (dated June 13, 2018; Attachment R.1). To the satisfaction of the County GE (particularly with regard to potential geologic hazards contributed to by liquefaction and slope stability affecting Lot 4), this updated report adequately responded to and offered acceptable mitigations to ensure that future development of all lots at this site - and specifically of Lot 4 - comply with applicable engineering standards pursuant to County geotechnical comments and requirements. Therefore, based on the proximity of the subject site to nearby faults, the planned improvements are anticipated to experience strong seismic ground shaking in an earthquake, the following mitigation measure is recommended to ensure that the level of risk is not beyond what is considered ordinary, and that such impacts are less than significant:

**Mitigation Measure 32:** The project design for the development of each of the four lots (at the time of the submitted respective building permits), shall each include lot-specific geotechnical reports and shall carefully follow the geotechnical recommendations presented in the subject Haro, Kasunich and Associates (HKA) geotechnical report (pages 25 through 46, except where such recommendations affect Lot 4), covering the following categories: General Site Grading (including Cut and Fill Slopes); Foundations (including Conventional Spread and Skin Friction Pier Foundations); Perched Groundwater Drainage (including Concrete Slab-On-Ground); Retaining Walls (including Lateral Pressures and use of Tie-Backs); Utility Trenches; Surface Drainage (including use of Curtain Drains); Pavement Design; and Plan Review, Construction Observation and Testing. Additionally, and more specifically, the project design for the development on Lot 4 shall carefully follow the recommendations presented in the HKA Geotechnical Investigation Update, dated June 13, 2018. Specifically, the proposed residence and other structures on Lot 4 are recommended to be supported by shallow stiffened grid foundations or structural mat foundations, either of which is capable of withstanding the estimated liquefaction induced vertical ground settlement (from an earthquake) and capable of being re-leveled after such an event. Shallow stiffened foundations are recommended by geotechnical consultants for single-family dwelling construction on sites with potentially liquefiable soils as an alternative to ground improvements (i.e., stone columns, compaction grouting) or deep driven piles, either of which would have a much higher environmental impact to the site. Any such changes to the recommendations by the project geotechnical engineer presented in this report shall be pursuant to the review and approval of the County's geotechnical engineer.

**Source:** San Mateo County (1973) Geotechnical Synthesis Maps; Geotechnical Investigation Report (dated August 2016) by Haro, Kasunich and Associates, Inc.; Geotechnical Investigation Update by HKA (dated June 13, 2018)

ii. Strong seismic ground shaking?		X		
<p><b>Discussion:</b> While the discussion to Question 6.i. acknowledges that strong seismic ground shaking could occur, the mitigation measure previously cited will ensure that the impact is less than significant.</p> <p><b>Source:</b> Geotechnical Investigation Report (August 2016) by Haro, Kasunich and Associates, Inc.; Geotechnical Investigation Update by HKA (dated June 13, 2018)</p>				
iii. Seismic-related ground failure, including liquefaction and differential settling?		X		
<p><b>Discussion:</b> While the project geotechnical report concludes that the project parcel is not located in an area with known liquefaction potential, the mitigation measure cited in Question 6.i. and its associated mitigation measure will ensure that the impact to less than significant landslides.</p> <p><b>Source:</b> Geotechnical Investigation Report (August 2016) by Haro, Kasunich and Associates, Inc.</p>				
iv. Landslides?			X	
<p><b>Discussion:</b> The project geotechnical report concludes that the project parcel is not located in an area of known landslides. Therefore, the project impact would be less than significant.</p> <p><b>Source:</b> San Mateo County (1972) Landslide Susceptibility (MF-360) Map; Geotechnical Investigation Report (August 2016) by Haro, Kasunich and Associates, Inc.; Geotechnical Investigation Update by HKA (dated June 13, 2018)</p>				
v. Coastal cliff/bluff instability or erosion? <i>Note: This question is looking at instability under current conditions. Future, potential instability is looked at in Section 7 (Climate Change).</i>		X		
<p><b>Discussion:</b> The westerly boundaries of the project site is located adjacent to coastal cliffs/bluffs, at distances ranging from as far away as 40 feet to as close as 10 feet. As stated earlier, the County Fitzgerald Marine Reserve includes the lands from the proposed lots' westerly boundaries to and including the buff tops (and continuing down to the beach and outward). While the project's initial (September 2015) submittal located two of five proposed residences within 30 and 20 feet, respectively, from the project site's westerly boundary, the current project places the proposed residence on the southernmost Lot 4 approximately 198 to 240 feet back from the coastal bluff edge. The coastal bluffs of the project site's southern half are identified as "low" stability in both the San Mateo County LCP Hazards Map and the County Geotechnical Hazards Map. LCP Policy 9.8 requires adequate setbacks to assure stability and structural integrity of development for a minimum 50-year life. While the initial 2016 HKA Report estimated bluff retreat at 28 feet over the next 50 years, the Committee for Green Foothills had commissioned Environmental Science Associates (ESA) of San Francisco (acknowledged as experts in coastal erosion processes and consistent with California Coastal Commission guidance on this issue, and as exacerbated by rising sea level estimates), to do an independent evaluation of the projected bluff retreat in the area of then-proposed Lot D (the southernmost lot to have been developed with a house). That report concluded the proposed house on Lot D would be subject to hazards from bluff/cliff retreat, citing the existence of several year-round seeps or springs on the bluff face below that lot. Any increase in subsurface drainage or surface runoff as proposed, into the drainage ditch along Julianna, would likely contribute to accelerated erosion, which would be in violation of LCP Hazards Policies 9.8.b. (6) and</p>				

(8), as well as other adopted stormwater regulations.

As a result of this information, as well as other issues of the initially submitted project, the project was significantly revised, reducing the number of proposed lots to four, with all four residences moved to the easterly half of the project site, all taking access off Vallemar. Together with the previously cited and discussed proposed Conservation Easement to be located between the four house sites and the respective westerly lot boundaries (and coastal bluff tops beyond), the development was generally set back far enough to mitigate for the coastal erosion issues cited by ESA.

This project revision, together with proposed on-site drainage measures (discussed in Question 4.a.) and the additional data provided by HKA's June 13, 2018 Geotechnical Investigation Update as accepted by the County's GE, effectively reduces the project's impact to cliff/bluff instability or erosion. Thus the revised plans, together with the applicable Mitigation Measures cited in Question 4.a. will ensure that the project impact is less than significant.

**Source:** Project Plans; Coastal Bluff Recession Study (dated April 24, 2015) by Haro, Kasunich and Associates, Inc.; Vallemar Bluffs Coastal Hazards Assessment (October 26, 2016) by ESA; Mesiti-Miller Engineering, Inc. (2017) Preliminary Storm Drainage Report; Geotechnical Investigation Update by HKA (dated June 13, 2018)

b. Result in significant soil erosion or the loss of topsoil?		X		
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**Discussion:** Pursuant to the discussion to Questions 4.a., f. and 6.a. and associated Mitigation Measures, whose purpose will be to control erosion during both project construction activities through to permanent on-site drainage measures to capture and retain/drain stormwater, the project impact will be less than significant.

**Source:** Project Plans; Mesiti-Miller Engineering, Inc. (2017) Preliminary Storm Drainage Report

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, severe erosion, liquefaction or collapse?		X		
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**Discussion:** Pursuant to the discussion to Questions 4.a., f. and 6.a., the associated Mitigation Measures will assure that the does not result in an on- or off-site landslide, lateral spreading, subsidence, severe erosion, liquefaction or collapse. Therefore, the mitigation measures will assure that the project impact will be less than significant

**Source:** Project Plans; Coastal Bluff Recession Study (dated April 24, 2015) by Haro, Kasunich and Associates, Inc.; Mesiti-Miller Engineering, Inc. (2017) Preliminary Storm Drainage Report; Geotechnical Investigation Report (August 2016) by HKA; Geotechnical Investigation Update (dated June 13, 2018)

d. Be located on expansive soil, as noted in the 2010 California Building Code, creating significant risks to life or property?				X
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**Discussion:** The project geotechnical report, in addition to the June 13, 2018 HKA Geotechnical Investigation Update, concludes that while expansive soils the project parcel is not located on

expansive soils. Thus, the project impact poses no impact.

**Source:** Geotechnical Investigation Report (August 2016) by Haro, Kasunich and Associates, Inc.; Geotechnical Investigation Update by HKA (dated June 13, 2018)

e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
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**Discussion:** All four residences will have sanitary sewer service connections from the Montara Water and Sanitary District. Thus the project neither requires nor includes any septic tanks or wastewater disposal systems and poses no such impact.

**Source:** Project plans and Location; San Mateo County GIS (Sanitary District Service Area) Resource Data; Montara Water and Sanitary District

**7. CLIMATE CHANGE.** Would the project:

	<i>Potentially Significant Impacts</i>	<i>Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a. Generate greenhouse gas (GHG) emissions (including methane), either directly or indirectly, that may have a significant impact on the environment?		X		

**Discussion:** Greenhouse Gas Emissions (GHG) include hydrocarbon (carbon monoxide; CO<sub>2</sub>) air emissions from vehicles and machines that are fueled by gasoline. Project-related grading and construction of the four houses will result in the temporary generation of GHG emissions along travel routes and at the project site. In general, construction involves GHG emissions mainly from exhaust from vehicle trips (e.g., construction vehicles and personal vehicles of construction workers). Even assuming construction vehicles and workers are based in and traveling from urban areas, the potential project GHG emission levels from construction would be less than significant with Mitigation Measure 1 cited in Question 3.b.

The project would introduce four new residences to the area. Any increase in GHG emissions associated with new single-family residential use are not expected to be significant as residential use does not generate a high demand for traffic. Furthermore, the project is required to comply with all current California Codes, including California Building Code (as administered, reviewed and enforced through the County Building Inspection Section) and all mandatory requirements under the California Green Building Standards Code.

As previously discussed in Question 4.e., a total of 31 significant sized trees are to be removed due to conflict with associated building footprints, garage and driveways, and associated grading for the four residences. Pursuant to the number of trees remaining and to be preserved, as well as an additional 75 trees to be planted, staff concludes that, together with the mitigation measure cited above, the removal of the 31 trees will not release significant amounts of GHG emissions or significantly reduce GHG sequestering in the area, resulting in a less than significant impact.

<b>Source:</b> San Mateo County (2013) Energy Efficiency Climate Action Plan				
b. Conflict with an applicable plan (including a local climate action plan), policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?		X		
<p><b>Discussion:</b> To ensure new development projects are compliant with the County's 2013 Energy Efficiency Climate Action Plans (EECAP), the Plan provides the EECAP Development Checklist, which includes both mandatory and voluntary greenhouse gas reduction measures. While the checklist excludes supportive and non-quantifiable measures identified in the EECAP, or measures that are not universally applicable to all projects, the checklist does provide the quantitative criteria as would be applicable to a single project. County staff has the flexibility to determine on a case-by-case basis when projects nonetheless demonstrate consistency with the overall intent of the EECAP. Pursuant to the discussion provided to question 7.a., together with Mitigation Measure 1 and the following mitigation measure, the project impact would be less than significant.</p> <p><b>Mitigation Measure 33:</b> The applicant's architect shall complete and submit the County 2013 Energy Efficiency Climate Action Plans (EECAP) Development Checklist (Appendix F), and shall incorporate applicable measures and performance criteria into the submitted building plans for each of the four residences.</p> <p><b>Source:</b> San Mateo County (2013) Energy Efficiency Climate Action Plan</p>				
c. Result in the loss of forest land or conversion of forest land to non-forest use, such that it would release significant amounts of GHG emissions, or significantly reduce GHG sequestering?				X
<p><b>Discussion:</b> The project parcel is not considered forest land, nor does it host any such forest canopy. Therefore the project poses no impact.</p> <p><b>Source:</b> Project Plans; San Mateo County GIS Resource Data; County General Plan Maps</p>				
d. Expose new or existing structures and/or infrastructure (e.g., leach fields) to accelerated coastal cliff/bluff erosion due to rising sea levels?				X
<p><b>Discussion:</b> The discussion in Question 6.a. (v.) acknowledged the project relative to coastal cliff/bluff instability and erosion issues affecting the site. As cited in that discussion, the ESA report included the contributing issues around rising sea levels on the bluffs. Additionally, the County (2013) Energy Efficiency Climate Action Plan dedicates substantive discussion around the issues of rising sea levels. While the project site is located on a plateau, at an elevation ranging from 42 to 48 feet above sea level, projected rising sea levels would be expected to contribute to greater erosion to the non-hardened shoreline cliffs from higher wave activity. With the LCP's requirement that the integrity along coastal bluff sites meet a minimum of 50 years, the EECAP projects rising sea levels to increase (based on estimates from 2050 to 2100) an average of about 27" along the County's coastline. The project as it is currently described has the four residences moved an adequate distance easterly and away from the bluff tops, at distances ranging from approximately 85 to 120 feet. The project includes no leach fields or other new infrastructure within this area.</p>				

Therefore the projected sea rise and associated erosion occurring to the bluff face should not impact the project development in the cited 50 year time frame. That said, applicable Mitigation Measures cited in Question 4.a. will ensure that the project impact is less than significant.

**Source:** San Mateo County (2013) Energy Efficiency Climate Action Plan

e. Expose people or structures to a significant risk of loss, injury or death involving sea level rise?				X
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**Discussion:** Pursuant to the discussion in Question 7.d., the projected sea rise along this portion of the County coastline will not pose a significant risk the proposed four residences. Therefore, and with the recommended mitigation measures cited in that discussion, the project impact would be less than significant.

**Source:** San Mateo County (2013) Energy Efficiency Climate Action Plan

f. Place structures within an anticipated 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			X	
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**Discussion:** The subject parcel is not located in an anticipated 100-year flood hazard area as mapped by FEMA. It is located in a FEMA Flood Zone X, which is considered a minimal flood hazard (Panel No. 06081C0119F, effective October 16, 2012). These areas have a 0.2% annual chance of flooding, with areas of 1% annual chance of flooding with average depths of less than 1-foot. The FEMA flood Designation for the coast itself, just beyond the coastal bluffs, is Flood Zone VE – which covers coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones. However, as disused earlier, the project site is elevated over 40 feet above the mean sea level, with the four residences set back a considerable distance from the bluff edge. Therefore, the project impact would be less than significant.

**Source:** County GIS (FEMA) Resource Data; FEMA (Online) Map Service Center: Flood Zone Designation

g. Place within an anticipated 100-year flood hazard area structures that would impede or redirect flood flows?				X
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**Discussion:** Pursuant to the discussion provided to Question 7.f., and given the project site topography, drainage patterns and location of the four residences, the project poses no impact.

**Source:** County GIS Resource Data; Mesiti-Miller Engineering, Inc. (2017) Preliminary Storm Drainage Report

<b>8. HAZARDS AND HAZARDOUS MATERIALS.</b> Would the project:				
	<i>Potentially Significant Impacts</i>	<i>Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (e.g., pesticides, herbicides, other toxic substances, or radioactive material)?				X
<p><b>Discussion:</b> The project does not involve the use, transport, or disposal of hazardous materials.</p> <p><b>Source:</b> Project Plans</p>				
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				X
<p><b>Discussion:</b> Pursuant to the discussion provided to Question 8.a., the project poses no impact.</p> <p><b>Source:</b> Project Plans</p>				
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
<p><b>Discussion:</b> The project parcel is not located within any such distance to an existing or proposed school. Pursuant to the discussion provided to Question 8.a., the project poses no impact.</p> <p><b>Source:</b> Project Plans</p>				
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?				X
<p><b>Discussion:</b> The project site is not included on a list of hazardous materials compiled pursuant to the cited Government Code Section. Thus, the project poses no impact.</p> <p><b>Source:</b> Project Plans; San Mateo County (1992) Hazardous Waste Management Plan; California Department of Toxic Substances, Hazardous Waste and Substances Site List, URL (2017)</p>				

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, result in a safety hazard for people residing or working in the project area?				X
<p><b>Discussion:</b> The project parcel is located about 2,500 feet (0.47 miles) north of the northerly boundary of the Half Moon Bay Airport, a public airport operated by the County Department of Public Works. Development within certain proximities of the airport are regulated by applicable policies and requirements of the Final Half Moon Bay Airport Land Use Compatibility Plan (ALUCP), as adopted by the City/County Association of Governments (C/CAG) on October 9, 2014. Upon review of the provisions of the ALUCP, the project site is located in the Airport Influence Area (Runway Safety Zone 7), where aircraft accident risk level is considered low according to the ALUCP (per Exhibit 4c). Also, the project site is not within any mapped noise exposure area (per Exhibit 4B). Finally, the heights of the four residences, averaging around 30 feet, are well under the Plan's Airspace Terrain Penetration zone (which dictates height limits for structures, trees and other objects) of 216 feet.</p> <p>Therefore, staff has determined that the project complies with the safety, noise, and height limit criteria for compatibility and the project poses no impact.</p> <p><b>Source:</b> Project Plans and Location; Final (2014) Half Moon Bay Airport Land Use Compatibility Plan</p>				
f. For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area?				X
<p><b>Discussion:</b> Pursuant to the discussion in Question 8.e. above, the project poses no impact.</p> <p><b>Source:</b> Project Plans and Location; Final (2014) Half Moon Bay Airport Land Use Compatibility Plan</p>				
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
<p><b>Discussion:</b> The project will be located on a privately-owned parcel where all improvements will be located within the parcel boundaries. All four residences are proposed to have access directly from Vallemar, a public maintained street with access point to Cabrillo Highway approximately 525 feet to the south. Driveway access off Vallemar will be built to applicable driveway standards set forth by the Department of Public Works and California Department of Forestry (Cal-Fire) to ensure it will not interfere with emergency response services in the area. Thus, the project poses no impact.</p> <p><b>Source:</b> Project Plans and Location; Department of Public Works; California Department of Forestry</p>				
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X

<p><b>Discussion:</b> The project site is not located within a Fire Hazard Severity Zone (State Responsibility Area). The project was reviewed by the Cal-Fire and received conditional approval subject to compliance with Chapter 7A of the California Building Code for ignition resistant construction and materials and acceptable slope and material for the driveway, among other fire prevention requirements. No further mitigation, beyond compliance with the standards and requirements of the Fire Protection District, are necessary. Thus, the project poses no impact.</p> <p><b>Source:</b> California Department of Forestry, Fire Hazard Severity Zones Map</p>					
i.	Place housing within an existing 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
<p><b>Discussion:</b> Pursuant to the discussion in Question 7.f., the project poses no impact.</p> <p><b>Source:</b> County GIS (FEMA) Resource Data</p>					
j.	Place within an existing 100-year flood hazard area structures that would impede or redirect flood flows?				X
<p><b>Discussion:</b> Pursuant to the discussion in Question 7.f., the project poses no impact.</p> <p><b>Source:</b> San Mateo County GIS (FEMA) Resource Data</p>					
k.	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
<p><b>Discussion:</b> Aside from the discussion provided in response to Question 7.f., no dam or levee is located in any proximity near the subject parcel, nor is there risk of flooding onto this parcel due to the failure of a levee or dam. Therefore, the project poses no impact.</p> <p><b>Source:</b> Project Plans and Location; San Mateo County General Plan Hazards Map</p>					
l.	Inundation by seiche, tsunami, or mudflow?				X
<p><b>Discussion:</b> According to the San Mateo County General Plan Hazards Map and GIS (FEMA) Resource Data, the project site is not located in a tsunami or seiche inundation area. Furthermore, the project site is not located in an area of high landslide susceptibility (which could contribute to mudflow). Therefore, the project poses no impact.</p> <p><b>Source:</b> Project Plans and Location; San Mateo County General Plan Hazards Map</p>					

9. <b>HYDROLOGY AND WATER QUALITY.</b> Would the project:				
	<i>Potentially Significant Impacts</i>	<i>Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a. Violate any water quality standards or waste discharge requirements (consider water quality parameters such as temperature, dissolved oxygen, turbidity and other typical stormwater pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash)?				X
<p><b>Discussion:</b> The project has the potential to generate polluted stormwater runoff during site grading and construction-related activities. The permanent project will be required to comply with the County's Drainage Policy requiring post-construction stormwater flows to be at, or below, pre-construction flow rates. Additionally, the project must include Low Impact Development (LID) site design measures in compliance with Provision C.3.i. of the County's Municipal Regional Stormwater Permit as the project is comprised of four residences that would introduce 17,070 sq. ft. of new impervious surface (approximately 15% of the total 248-acre project site). These guiding standards will ensure that post-construction water runoff does not violate any water quality standard as the project proposes to direct roof, driveway, and patio runoff to vegetated areas. However, pursuant to the discussion in Questions 4.a. and f., these impacts would be reduced to a less than significant level with the implementation of applicable Mitigation Measures cited in Question 4.a.</p> <p><b>Source:</b> Mesiti-Miller Engineering, Inc. (2017) Preliminary Storm Drainage Report; San Mateo County Drainage Policy</p>				
b. Significantly deplete groundwater supplies or interfere significantly with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				X
<p><b>Discussion:</b> The project is not expected to deplete any groundwater supplies or interfere with groundwater recharge. Water and sanitary sewer service for the project will be provided by Montara Water and Sanitary District. Furthermore, the geotechnical investigation included soil borings to depths adequate to accommodate construction, without encountering groundwater. Therefore the project poses no impact.</p> <p><b>Source:</b> Geotechnical Investigation Report (August 2016) by Haro, Kasunich and Associates, Inc.</p>				

c. Significantly alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in significant erosion or siltation on- or off-site?		X		
<p><b>Discussion:</b> The project does not involve the alteration of the course of a stream or river. An existing drainage ditch to the south of the project site (along Julianna) will not be affected or altered by the project. Existing drainage patterns, consisting of sheet flow, will be slightly altered by proposed grading and development to accommodate residences on each of the four lots. Pursuant to the discussion in Question 4, and associated mitigation measures, the project impact to existing drainage patterns (both during and post project construction) will be less than significant.</p> <p><b>Source:</b> Mesiti-Miller Engineering, Inc. (2017) Preliminary Storm Drainage Report; San Mateo County Drainage Policy</p>				
d. Significantly alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or significantly increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?			X	
<p><b>Discussion:</b> Pursuant to the discussion provided to Question 9.c. above and cited mitigation measures, the project impact will be less than significant.</p> <p><b>Source:</b> Mesiti-Miller Engineering, Inc. (2017) Preliminary Storm Drainage Report; San Mateo County Drainage Policy</p>				
e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide significant additional sources of polluted runoff?			X	
<p><b>Discussion:</b> Pursuant to the discussion provided to Questions 4.f. and 9.c., with associated mitigation measures, the project impact will be less than significant.</p> <p><b>Source:</b> Project Plans; Mesiti-Miller Engineering, Inc. (2017) Preliminary Storm Drainage Report; San Mateo County Drainage Policy</p>				
f. Significantly degrade surface or groundwater water quality?				X
<p><b>Discussion:</b> Pursuant to the discussion provided to Question 9.b. above, the project impact will be less than significant.</p> <p><b>Source:</b> Project Plans; Mesiti-Miller Engineering, Inc. (2017) Preliminary Storm Drainage Report; San Mateo County Drainage Policy</p>				

g. Result in increased impervious surfaces and associated increased runoff?			X	
<p><b>Discussion:</b> Pursuant to the discussion provided to question 9.c. above, the project impact will be less than significant.</p> <p><b>Source:</b> Project Plans; Mesiti-Miller Engineering, Inc. (2017) Preliminary Storm Drainage Report; San Mateo County Drainage Policy</p>				

<b>10. LAND USE AND PLANNING.</b> Would the project:				
	<i>Potentially Significant Impacts</i>	<i>Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a. Physically divide an established community?			X	
<p><b>Discussion:</b> While the project is located within the Moss Beach community, the project site is located between Vallemar and, along its westerly side, the Pacific Ocean. The existing and unaffected trail along the coastal bluffs will continue to provide access along and through this area. The requirement of the proposed Conservation and Open Space Easement will also serve to preserve much of the visual and open space of the project site. Taken all together, the project does not divide the established and immediately surrounding Moss Beach community and will pose a less than significant impact.</p> <p><b>Source:</b> Project Plans and Location, Proposed Conservation and Open Space Easement</p>				
b. Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X	
<p><b>Discussion:</b> The project has been reviewed for conformance, and found to not conflict with applicable policies of the County Local Coastal Program (LCP) and applicable RM-CZ zoning regulations as discussed in Question 1.f. The project site's RM-CZ zoning includes the Design Review (DR) Overlay District. Based on the discussion provided to Questions 1.a., c. and d., the project is in compliance with all applicable Design Review standards. Additionally, the RM-CZ Zoning District requires that development comply with the County Zoning Regulations, Chapter 20A.2. (Development Review Criteria). The project has been reviewed against and found to comply with the most applicable those criteria. Therefore, with the project built pursuant to the plans approved by the CDRC, the project impact will be less than significant.</p> <p><b>Source:</b> San Mateo County LCP; County Zoning Regulations; Coastside Design Review Recommendation Letter (of the October 12, 2017 meeting)</p>				

c. Conflict with any applicable habitat conservation plan or natural communities conservation plan?		X		
<p><b>Discussion:</b> The project site is not located in an area with a habitat conservation or natural communities conservation plan. As discussed in Question 4.f., the project site is located adjacent to and just east of the County Fitzgerald Marine Reserve. However, the project as proposed, together with the intent of the proposed Conservation Easement (as discussed in the Biological Resources section of this document), and along with the mitigation measures cited in that question, will not adversely affect the Reserve, pursuant to the policies and standards of the 2002 Fitzgerald Marine Reserve Master Plan. Therefore, the project impact will be less than significant.</p> <p><b>Source:</b> 2002 Fitzgerald Marine Reserve Master Plan; Mesiti-Miller Engineering, Inc. (2017) Preliminary Storm Drainage Report</p>				
d. Result in the congregating of more than 50 people on a regular basis?				X
<p><b>Discussion:</b> With the project comprised of the construction of four new residences, it's not expected that their occupancy capacity would result in the congregating of over 50 people on a regular basis. Therefore the project poses no impact.</p> <p><b>Source:</b> Project Plans and Location</p>				
e. Result in the introduction of activities not currently found within the community?				X
<p><b>Discussion:</b> The proposal of four new residences does not result in the introduction of activities not already found within the community. The project site is surrounded by similar single-family residential development to the north, east and south. Therefore, the project poses no such impact.</p> <p><b>Source:</b> Project Plans and Location</p>				
f. Serve to encourage off-site development of presently undeveloped areas or increase development intensity of already developed areas (examples include the introduction of new or expanded public utilities, new industry, commercial facilities or recreation activities)?				X
<p><b>Discussion:</b> While there are some smaller, more standard sized (R-1-zoned) lots still undeveloped in the immediate Moss Beach Montara area, the development of four residences on the project site (within a unique "island" of RM-CZ zoning), the project will not serve to encourage additional off-site development or otherwise significantly increase intensity of already developed areas. The project does not trigger or require the construction of new or expansion of existing roadways. Therefore, the project poses no impact.</p> <p><b>Source:</b> Project Plans and Location</p>				
g. Create a significant new demand for housing?				X

**Discussion:** The project does not create any new demand for housing; it therefore poses no impact.

**Source:** Project Plans and Location

**11. MINERAL RESOURCES.** Would the project:

	<i>Potentially Significant Impacts</i>	<i>Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a. Result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State?				X

**Discussion:** The project neither involves nor results in any extraction or loss of mineral resources. Therefore, the project poses no impact.

**Source:** San Mateo County General Plan (Mineral Resources Map)

b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X
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**Discussion:** Pursuant to the discussion provided to question 11.a., the project poses no impact.

**Source:** San Mateo County General Plan (Mineral Resources Map)

**12. NOISE.** Would the project result in:

	<i>Potentially Significant Impacts</i>	<i>Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	

**Discussion:** The project will generate short term noise associated with grading and construction activities as the four residences are built. However, such noises will be temporary, where volume and hours are regulated by Section 4.88.360 (Exemptions) of the County Ordinance Code for Noise Control (which limits construction-generated noise to certain hours on specific days). Otherwise, any increased long-term project related noise impacts will be minimal as it would be limited to typical noise associated with four new single-family residences. Furthermore, the proposed development is oriented such that exterior activities associated with the residence (i.e., driveway/garage, patio areas) will be somewhat insulated from neighboring residences east of Cabrillo Highway by their sheer distance away and lower elevations below Vallemar (due to drop in topography along the

<p>easterly side of the project site). Likewise, associated noise levels from the residences once built and occupied would be minimized from residences to the north and south, by both the distances between the new residences and surrounding development and the remaining and new tree cover around the new residences. Therefore, the project impact will be less than significant.</p> <p><b>Source:</b> Project Plans and Location; County Ordinance Code, Section 4.88.360 for Noise Control</p>					
b.	Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?			X	
<p><b>Discussion:</b> Pursuant to the discussion provided to question 12.a. above, the project poses a less than significant impact.</p> <p><b>Source:</b> Project Plans and Location; County Ordinance Code, Section 4.88.360 for Noise Control</p>					
c.	A significant permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
<p><b>Discussion:</b> Pursuant to the discussion provided to question 12.a. above, the project poses a less than significant impact.</p> <p><b>Source:</b> Project Plans and Location; County Ordinance Code, Section 4.88.360 for Noise Control</p>					
d.	A significant temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
<p><b>Discussion:</b> Pursuant to the discussion provided to question 12.a. above, the project poses a less than significant impact.</p> <p><b>Source:</b> Project Plans and Location; County Ordinance Code, Section 4.88.360 for Noise Control</p>					
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, exposure to people residing or working in the project area to excessive noise levels?			X	
<p><b>Discussion:</b> The project site is located approximately 0.47 miles north of the Half Moon Bay Airport. As discussed in Question 8.e., the Half Moon Bay ALUCP showed that the project site was located well beyond the airport's cited noise exposure contours cited in its "Extremely noise-sensitive areas," e.g., in an area where the airport-generated noise levels are less than 60 CNEL (Community Noise Equivalent Level; a weighted average of noise level over time). Thus, those either associated with construction activity or residing in completed residences at the project site would not be exposed to excessive noise levels. Therefore, the project poses a less than significant impact.</p> <p><b>Source:</b> Project Plans and Location; Final (2014) Half Moon Bay Airport Land Use Compatibility Plan</p>					

f. For a project within the vicinity of a private airstrip, exposure to people residing or working in the project area to excessive noise levels?				X
<p><b>Discussion:</b> Pursuant to discussion to Question 8.e., Half Moon Bay Airport is a public-operated airport, not a private facility. Additionally, there are no known privately owned/operated airstrips within any proximity of the project site. Therefore, the project poses no impact.</p> <p><b>Source:</b> Project Plans and Location; Final (2014) Half Moon Bay Airport Land Use Compatibility Plan</p>				

<b>13. POPULATION AND HOUSING.</b> Would the project:				
	<i>Potentially Significant Impacts</i>	<i>Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a. Induce significant population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
<p><b>Discussion:</b> All improvements associated with the proposed project are completely within the subject parcel's boundaries and are only sufficient to serve the proposed four single-family residences. The additional population created by those living in the proposed four residences is not significant, nor would the development induce any significant population growth or necessitate any addition or expanded roads of other infrastructure (as also discussed in Question 10.f.). Therefore, the project poses no impact.</p> <p><b>Source:</b> Project Plans and Location</p>				
b. Displace existing housing ( <b>including low- or moderate-income housing</b> ), in an area that is substantially deficient in housing, necessitating the construction of replacement housing elsewhere?				X
<p><b>Discussion:</b> The proposed four residences on the presently undeveloped subject site will not displace any existing housing. Additionally, the Midcoast area is not an area that has been designated as substantially deficient in housing. Therefore, the project poses no impact.</p> <p><b>Source:</b> San Mateo County General Plan (2014 Housing Element)</p>				

<b>14. PUBLIC SERVICES.</b> Would the project result in significant adverse physical impacts associated with the provision of new or physically altered government facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
	<i>Potentially Significant Impacts</i>	<i>Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a. Fire protection?				X
b. Police protection?				X
c. Schools?				X
d. Parks?				X
e. Other public facilities or utilities (e.g., hospitals, or electrical/natural gas supply systems)?				X
<p><b>Discussion:</b> The project does not involve nor is it associated with the provision of new or physically altered government facilities, nor will it generate a need for an increase in any such facilities. The project will not disrupt acceptable service ratios, response times or performance objectives of fire (County Coastside Fire Authority has reviewed the plans), police, schools, parks or any other public facilities or energy supply systems. Therefore, the project poses no impact.</p> <p><b>Source:</b> Coastside Fire Authority; San Mateo County General Plan (Park and Recreation Resources Element)</p>				

<b>15. RECREATION.</b> Would the project:				
	<i>Potentially Significant Impacts</i>	<i>Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a. Increase the use of existing neighborhood or regional parks or other recreational facilities such that significant physical deterioration of the facility would occur or be accelerated?				X
<p><b>Discussion:</b> The project (future occupants of and visitors to four new residences) would not increase the use of existing parks or other recreational facilities. The current accessibility to and use of the coastal trail (located just beyond the project site's westerly boundary on Fitzgerald Marine Reserve lands) will not be affected by the project. Therefore, the project poses no impact.</p> <p><b>Source:</b> San Mateo County General Plan (Park and Recreation Resources Element); 2002 Fitzgerald Marine Reserve Master Plan</p>				

b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X
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**Discussion:** The project neither includes nor requires the construction or expansion of recreational facilities. Pursuant to the discussion provided to Question 15.a. above, the project poses no impact.

**Source:** San Mateo County General Plan (Park and Recreation Resources Element); 2002 Fitzgerald Marine Reserve Master Plan

**16. TRANSPORTATION/TRAFFIC.** Would the project:

	<i>Potentially Significant Impacts</i>	<i>Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			X	

**Discussion:** The project will not conflict with the County (2005) Traffic Congestion Management Plan, nor other traffic-related policies or regulations (e.g., as cited in County’s LCP or General Plan). The County LCP (Policy 2.52) exempts the development of single-family dwellings from the development and implementation of a traffic impact analysis and mitigation plan. The traffic trips (comprised of both owners of and guests/visitors to) generated by four completed residences will not introduce any significant increase in vehicles on Cabrillo Highway (south or northbound, at its intersection with Vallemar), and thus will pose no significant safety impact to other vehicles, pedestrians or bicycles. The adequacy of access, along Vallemar, to and from the site has been reviewed by both the County Department of Public Works and the Coastside Fire Authority, who have concluded that such access complies with their respective policies and requirements. Therefore, the project poses a less than significant impact.

**Source:** Project Plans and Location; San Mateo County (2005) Traffic Congestion Management Plan; County Local Coastal Program (Public Works Component)

b. Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the County congestion management agency for designated roads or highways?			X	
<p><b>Discussion:</b> Pursuant to the discussion provided to question 16.a. above, the project poses a less than significant impact.</p> <p><b>Source:</b> Project Plans and Location; San Mateo County (2005) Traffic Congestion Management Plan; County Local Coastal Program (Public Works Component)</p>				
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in significant safety risks?			X	
<p><b>Discussion:</b> Pursuant to the discussion provided to question 16.a. above, the project poses a less than significant impact.</p> <p><b>Source:</b> Project Plans and Location; San Mateo County (2005) Traffic Congestion Management Plan; County Local Coastal Program (Public Works Component)</p>				
d. Significantly increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
<p><b>Discussion:</b> The County Department of Public Works, upon their review of the project, have concluded that the project does not increase any road design feature (i.e., Vallemar's intersection with Cabrillo Highway). Pursuant to the discussion provided to question 16.a. above, the project poses a less than significant impact.</p> <p><b>Source:</b> Project Plans and Location; San Mateo County (2005) Traffic Congestion Management Plan; County Local Coastal Program (Public Works Component)</p>				
e. Result in inadequate emergency access?				X
<p><b>Discussion:</b> In addition to the discussion provided to question 16.a. above, the County Coastside Fire Authority has reviewed and approved the proposed access to the project site. Therefore, the project poses no impact.</p> <p><b>Source:</b> Coastside Fire Authority Requirements and Project Review</p>				
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?			X	
<p><b>Discussion:</b> The 2011 San Mateo County Comprehensive Bicycle and Pedestrian Plan was adopted by the City/County Association of Governments (C/CAG) on September 8, 2011. This plan</p>				

(as indicated on their designates Cabrillo Hwy. as a Class III Bicycle Route, which is the primary bike route extending from the north end of the Midcoast area down through Half Moon Bay. That said, bicycles (as well as pedestrians) also use Vallemar for the limited distance it provides access apart from Cabrillo Highway. While the driveways of all four new residences will connect directly to Vallemar (with distances of 60, 70 and 110 feet part from one another), such access will not impede the ability of bicycles or pedestrians their use of Vallemar, nor will it create any significant hazards to such use. Therefore, the project poses a less than significant impact.

**Source:** Project Plans and Location; San Mateo County (2005) Traffic Congestion Management Plan; County Local Coastal Program (Public Works Component); San Mateo County (2011) Comprehensive Bicycle and Pedestrian Plan

g. Cause noticeable increase in pedestrian traffic or a change in pedestrian patterns?			X	
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**Discussion:** The project will not cause a significant increase in pedestrian traffic to or from the four residences (upon completion), nor will it generally change pedestrian patterns around the project site. Therefore (and pursuant to the discussion in Question 16.f. above, the project poses a less than significant impact.

**Source:** Project Plans and Location; San Mateo County (2005) Traffic Congestion Management Plan; County Local Coastal Program (Public Works Component)

h. Result in inadequate parking capacity?				X
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**Discussion:** Each of the proposed four residences includes zoning-compliant (two-car) covered parking, as well as adequate back-up and turn-around capacity (so that vehicles can exit onto Vallemar 'nose-first') and on-site guest parking. Therefore, the project poses no impact.

**Source:** Project Plans; San Mateo County Zoning (Parking) Regulations

17. TRIBAL CULTURAL RESOURCES. Would the project:				
	<i>Potentially Significant Impacts</i>	<i>Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)				X

**Discussion:** The project site is not listed or eligible for listing in the California Register of Historical Resources. Furthermore, the project is not listed in a local register of historical resources, pursuant to any local ordinance or resolution as defined in Public Resources Code Section 5020.1(k).

**Source:** Project Location; State Parks Office of Historic Preservation (Listed California Historical Resources); County General Plan (Background, Historical and Archaeological Resources Element and Appendices)

<p>ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Subdivision (c) of Public Resources Code Section 5024.1. (In applying the criteria set forth in Subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.)</p>		X		
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**Discussion:** The project is not subject to Assembly Bill 52 for California Native American tribal consultation requirements, as no traditionally or culturally affiliated tribe has requested, in writing, to the County to be informed of proposed projects in the geographic project area. However, a “Sacred Lands File and Native American Contacts List Request” was sent to the Native American Heritage Council (NAHC), but as of the date of preparation of this document, no response has been received. Therefore, while the project is not expected to cause a substantial adverse change to any potential tribal cultural resources, the following mitigation measures are recommended to minimize any potential significant impacts to unknown tribal cultural resources:

**Mitigation Measure 34:** Should any traditionally or culturally affiliated Native American tribe respond to the County’s issued notification for consultation, such process shall be completed and any resulting agreed upon measures for avoidance and preservation of identified resources be taken prior to implementation of the project.

**Mitigation Measure 35:** In the event that tribal cultural resources are inadvertently discovered during project implementation, all work shall stop until a qualified professional can evaluate the find and recommend appropriate measures to avoid and preserve the resource in place, or minimize adverse impacts to the resource, and those measures shall be approved by the Current Planning Section prior to implementation and continuing any work associated with the project.

**Mitigation Measure 36:** Any inadvertently discovered tribal cultural resources shall be treated with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, protecting the cultural character and integrity of the resource, protecting the traditional use of the resource, and protecting the confidentiality of the resource.

**Source:** Project Plans; Native American Heritage Commission; State Assembly Bill 52

<b>18. UTILITIES AND SERVICE SYSTEMS.</b> Would the project:				
	<i>Potentially Significant Impacts</i>	<i>Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
<p><b>Discussion:</b> All four residences will be connecting to and receiving sewerage service from the Montara Water and Sanitary District. The project neither involves nor requires any water or wastewater treatment facilities that would exceed any requirements of the Regional Water Quality Control Board. Therefore, the project poses no impact.</p> <p><b>Source:</b> Montara Water and Sanitary District</p>				
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
<p><b>Discussion:</b> Pursuant to the discussion provided to Question 18.a. above, the project poses no impact.</p> <p><b>Source:</b> Montara Water and Sanitary District</p>				
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?		X		
<p><b>Discussion:</b> As discussed in Question 4.f., permanent on-site stormwater drainage measures for each of the four residences are found in the submitted Mesiti-Miller Engineering, Inc. (2017) Preliminary Storm Drainage Report. The implementation of Mitigation Measure 5 will ensure that those measures are included on each of the respective building plans for the residences, reviewed and approved by the Department of Public Works and implemented, inspected and maintained. Therefore, with such mitigation the project impact will be less than significant.</p> <p><b>Source:</b> Project Plans; Mesiti-Miller Engineering, Inc., (2017) Preliminary Storm Drainage Report</p>				
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X
<p><b>Discussion:</b> All four residences will each have adequate water service connections from the Montara Water and Sanitary District. Therefore, the project poses no impact.</p> <p><b>Source:</b> Montara Water and Sanitary District</p>				

e. Result in a determination by the waste-water treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
<p><b>Discussion:</b> The Montara Water and Sanitary District has indicated that they have adequate capacity to serve the project's sanitary sewerage demands. Therefore, the project poses no impact.</p> <p><b>Source:</b> Montara Water and Sanitary District</p>				
f. Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
<p><b>Discussion:</b> The construction of the four residences will generate some solid waste both during construction and after the four residences are completed (on an ongoing basis typical for that generated by residential uses). Similar to all other properties in the Midcoast area, the four residences will receive municipal trash and recycling pick-up service by Recology. The County's local landfill facility is the Corinda Los Trancos (Ox Mountain) Landfill, located at 12310 San Mateo Road (State Highway 92), a few miles east of Half Moon Bay. This landfill facility has permitted capacity/service life until 2034. Therefore, the project impact is less than significant.</p> <p><b>Source:</b> San Mateo County Department of Environmental Health Services</p>				
g. Comply with Federal, State, and local statutes and regulations related to solid waste?			X	
<p><b>Discussion:</b> Solid waste generated by four new single-family residences is expected to be minimal. The project site will receive solid waste service by Recology. The landfill cited in Question 18.f., is licensed and operates pursuant to all Federal, State and local statutes and regulations as overseen by the Environmental Health Department. Therefore, the project impact will be less than significant.</p> <p><b>Source:</b> San Mateo County Department of Environmental Health Services</p>				
h. Be sited, oriented, and/or designed to minimize energy consumption, including transportation energy; incorporate water conservation and solid waste reduction measures; and incorporate solar or other alternative energy sources?			X	
<p><b>Discussion:</b> The proposed residences are all cited in such a fashion such that the driveways provide vehicle access directly onto Vallemar, and that they could each accommodate solar energy components into their design. Additionally, the residences will be required to comply with all currently adopted building (where all building materials must meet minimum insulation and energy conserving requirements), electrical, plumbing (where water conservation fixtures shall be implemented), and mechanical codes. Therefore, the project impact will be less than significant.</p> <p><b>Source:</b> Project Plans</p>				

i. Generate any demands that will cause a public facility or utility to reach or exceed its capacity?				X
<p><b>Discussion:</b> Pursuant to discussion to other questions in this section, the project will not cause a public facility or utility to reach or exceed its capacity. Therefore, the project poses no impact.</p> <p><b>Source:</b> Project Plans</p>				

19. MANDATORY FINDINGS OF SIGNIFICANCE.				
	<i>Potentially Significant Impacts</i>	<i>Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a. Does the project have the potential to degrade the quality of the environment, significantly 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, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
<p><b>Discussion:</b> As discussed in the Biological Resources Section (4) of this document, the project as currently designed, together with the conclusions and recommended mitigation measures from the 2018 McGraw Survey, including the required recordation of the Conservation Easement, and accompanying and finalized Habitat Management Plan &amp; CC&amp;R's, will ensure that project impacts to the on-site coastal terrace prairie, Monterey cypress trees, the rare coast yellow leptosiphon (located on the adjacent FMR property), and other on- and off-site rare plant species are less than significant.</p> <p><b>Source:</b> All applicable sources previously cited in this document.</p>				
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)				X
<p><b>Discussion:</b> Based on the previous discussion to those questions where either the project impact was less than significant or required mitigation measures to ensure a "less than significant" impact, none of those impacts rise to the level of being cumulatively considerable.</p> <p><b>Source:</b> All applicable sources previously cited in this document.</p>				

c. Does the project have environmental effects which will cause significant adverse effects on human beings, either directly or indirectly?			X	
<p><b>Discussion:</b> Based on the previous discussion to those questions where there was no project impact, or where the project impact was less than significant or required mitigation measures to ensure a 'less than significant' impact, the project would not cause significant adverse effects on human beings, either directly or indirectly.</p> <p><b>Source:</b> All sources previously cited in this document.</p>				

**RESPONSIBLE AGENCIES.** Check what agency has permit authority or other approval for the project.

AGENCY	YES	NO	TYPE OF APPROVAL
U.S. Army Corps of Engineers (CE)		X	
State Water Resources Control Board		X	
Regional Water Quality Control Board		X	
State Department of Public Health		X	
San Francisco Bay Conservation and Development Commission (BCDC)		X	
U.S. Environmental Protection Agency (EPA)		X	
County Airport Land Use Commission (ALUC)		X	
CalTrans		X	
Bay Area Air Quality Management District		X	
U.S. Fish and Wildlife Service		X	
Coastal Commission		X	Only if local decision is appealed would have final permit authority
City (Half Moon Bay)		X	
Sewer/Water District:		X	Non-Discretionary at Building permit stage
Other: California Department of Fish & Wildlife		X	Although they have designated the Coast yellow leptosiphon as an endangered plant

<b><u>MITIGATION MEASURES</u></b>		
	<u>Yes</u>	<u>No</u>
Mitigation measures have been proposed in project application.	X	
Other mitigation measures are needed.	X	
<p>The following mitigation measures are included in the project plans or proposals pursuant to Section 15070(b)(1) of the State CEQA Guidelines:</p> <p><b><u>Mitigation Measure 1:</u></b> All development on all four proposed lots shall comply with the last plans approved by the Coastsides Design Review Committee on October 12, 2017, whose recommendation included that the following minor revisions occur on the submitted building plans and that other Design Review-related conditions occur:</p> <ol style="list-style-type: none"> <li>a. Revise the variable color scheme to be neutral so as to blend with the immediate landscape so that the structures' exteriors weather naturally. Weathered (pickled) wood, stucco or cementitious hardy sidings are acceptable options. Any such changes shall require the submittal of material samples for review by the Community Development Director.</li> <li>b. Submit revised plans to show modified deck specifications to include the floor area of the mezzanine decks (for all houses that include such decks) pursuant to the second revision plans presented [to the DRC] on October 12, 2017 (definitive deck square footage was delineated only for entry, rear, and garage decks in all versions of previously submitted plans).</li> <li>c. Any additional exterior lighting (in addition to the single fixture shown at the entry and garage locations) shall be dark sky compliant fixtures, which shall be mounted or recessed under the soffits at other openings and allowed only as required by building code (for safety). No additional site, building, or landscape lighting is proposed.</li> <li>d. All paved pathways and patios shall be shown as dimensioned, on the plans, with identified materials [which shall be of a pervious nature].</li> <li>e. The applicant shall provide "finished floor elevation verification" to certify that the structure is actually constructed at the height shown on the submitted plans. The applicant shall have a licensed land surveyor or engineer establish a baseline elevation datum point in the vicinity of the [four] construction sites. <ol style="list-style-type: none"> <li>(1) The applicant shall maintain the datum point so that it will not be disturbed by the proposed construction activities until final approval of the building permit.</li> <li>(2) This datum point and its elevation shall be shown on the submitted site plan. This datum point shall be used during construction to verify the elevation of the finished floors relative to the existing natural or to the grade of the site (finished grade).</li> <li>(3) Prior to Planning approval of the building permit application, the applicant shall also have the licensed land surveyor or engineer indicate on the construction plans: (a) the natural grade elevations at the significant corners (at least four) of the footprint of the proposed structure on the submitted site plan, and (b) the elevations of proposed finished grades.</li> <li>(4) In addition, (a) the natural grade elevations at the significant corners of the proposed structure, (b) the finished floor elevations, (c) the topmost elevation of the roof, and (d) the garage slab elevation must be shown on the plan, elevations, and cross-section (if one is provided).</li> </ol> </li> </ol>		

(5) Once the building is under construction, prior to the below floor framing inspection or the pouring of the concrete slab (as the case may be) for the lowest floor(s), the applicant shall provide to the Building Inspection Section a letter from the licensed land surveyor or engineer certifying that the lowest floor height, as constructed, is equal to the elevation specified for that floor in the approved plans. Similarly, certifications on the garage slab and the topmost elevation of the roof are required.

(6) If the actual floor height, garage slab, or roof height, as constructed, is different than the elevation specified in the plans, then the applicant shall cease all construction and no additional inspections shall be approved until a revised set of plans is submitted to and subsequently approved by both the Building Official and the Community Development Director.

f. All new power and telephone utility lines from the street or nearest existing utility pole to the project structures on the property shall be placed underground.

**Mitigation Measure 2:** The applicant shall submit an Air Quality Best Management Practices Plan to the Planning and Building Department prior to the issuance of any grading “hard card” or building permit that, at a minimum, includes the “Basic Construction Mitigation Measures” as listed in Table 8-1 of the BAAQMD California Environmental Quality Act (CEQA) Guidelines (May 2011). These measures shall be implemented prior to beginning any grading and/or construction activities and shall be maintained for the duration of the project grading and/or construction activities:

a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access road) shall be watered two times per day.

b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

c. All visible mud or dirt track-out onto adjacent paved roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

d. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).

e. Roadways and building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

f. Idling times shall be minimized either by shutting equipment or vehicles off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.

g. All construction equipment shall be maintained and properly tuned in accordance with manufacturer’s specifications.

h. Minimize the idling time of diesel powered construction equipment to two minutes.

**Mitigation Measure 3:** The applicant shall submit a dust control plan to the Planning Department for review and approval prior to the issuance of a building permit for the project. The approved plan shall be implemented for the duration of any grading, demolition, and construction activities that generate dust and other airborne particles. The plan shall include the following control measures:

a. Water all active construction areas at least twice daily.

b. Water or cover stockpiles of debris, soil, sand, or other materials that can be blown by the wind.

c. Cover all trucks hauling soil, sand and other loose materials or require all trucks to maintain at least 2 feet of freeboard.

- d. Apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking and staging areas at construction sites. Also, hydroseed or apply non-toxic soil stabilizers to inactive construction areas.
- e. Sweep daily (preferably with water sweepers) all paved access roads, parking and staging areas at construction sites.
- f. Sweep adjacent public streets daily (preferably with water sweepers) if visible soil material is carried onto them.
- g. Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.).
- h. Limit traffic speeds on unpaved roads within the project parcel to 15 miles per hour (mph).
- i. Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- j. Replant vegetation in disturbed areas as quickly as possible.

**Mitigation Measure 4:** The “Conservation and Open Space Easement Declaration” (Easement), together with the final Habitat Management Plan and associated “Valleymar Bluffs Declaration of Covenants, Conditions and Restrictions” (CC&Rs), shall be submitted for final review by the Community Development Director and, upon approval, recorded with the Final Lot Line Adjustment/Parcel Map associated with the Project. The Easement shall be conveyed from the Project owner to the Golden State Land Conservancy, to be operated, managed and maintained by the Valleymar Bluffs Maintenance Association (Association); (comprised of the future property owners of the four lots), pursuant to the provisions of the CC&Rs. Funding needs for long-term management of the Easement area will be calculated using a Property Analysis Record (PAR) or PAR-like analysis, and the funding will be provided on an annual basis through fees assessed by the Valleymar Bluffs Homeowners Association.

**Mitigation Measure 5:** Prior to the final building inspection approval of all four residences, a permanent fence – not to exceed three (3) feet in height and of a construction and non-solid design (i.e. wood split-rail) as approved by the Community Development Director – shall be placed along all the boundaries of the Easement area, to include respective access points on its eastern boundaries adjacent to the west-facing building site areas for each of the four lots. The purpose of this fencing – together with the specific use constraints to be included in the Easement language and CC&Rs – will be to not only prevent the public from accessing the Easement area, but to clearly demarcate all boundaries for both the public and the residences of the four new homes. Such fencing shall include the installation of signs (not to exceed 3 feet in height) that provide information about the conservation area including the rationale for its protection and to promote compliance with access restrictions.

**Mitigation Measure 6:** Include in the CC&Rs for the parcels as well as in the Conservation Easement, prohibitions against access to the Easement area that are not compatible with conservation, restoration, and management of its natural community structure and species composition in the coastal terrace prairie and populations of rare native plants. Examples of prohibited activities include: installation of permanent or semi-permanent infrastructure or equipment such as outdoor furniture (e.g., patio furniture, picnic tables, umbrellas), play equipment (trampolines, play structures, etc.) or other items that intensify use or otherwise modify the structure and species composition of the grassland.

**Mitigation Measure 7:** Work with the County of San Mateo, to coordinate on management of the bluff trail, whose northerly portion is largely within the Fitzgerald Marine Reserve (nearest to the surveyed CYL population) but primarily is located within the easterly half of The Strand (adjacent to the Easement’s western boundary), and that provides public access along the bluff edge. Ensure that the recreational use along the entire length of bluff trail at the Project site is managed to be

compatible with the restoration and management of the coastal terrace prairie and rare plants in the conservation area. Monitor the effects of access and compliance with the measures to prevent trampling associated with recreational use and taking steps to increase compliance when/if negative impacts are observed.

**Mitigation Measure 8:** The respective building plans for each of the four residences shall include a landscape plan that identifies tree removal, new trees, shrubs and other landscaping, and (if applicable) irrigation. Landscaping shall be with plant species native to the San Mateo Coast, to limit the potential for the spread of non-native species into the adjacent habitat, and limit the need for irrigation and pesticide use, which could influence nearby natural communities, upon recommendation and review by the applicant's biologist. (This mitigation measure is also referenced and required as part of the "Conservation and Open Space Easement" (Easement), and associated "Draft Covenants, Conditions and Restrictions" (CC&Rs), pursuant to the goals and objectives cited in the "Valleamar Bluffs Conservation and Development Project Management Planning Framework" (to be revised into the final "Habitat Management Plan").

**Mitigation Measure 9:** Prior to the issuance of any respective building permit for the four residences, the applicant shall submit to the Planning Department for review and approval an erosion control plan (to be included in each respective set of building plans for the four residences) that shows how the transport and discharge of soil and pollutants from and within the project site shall be minimized on each respective lot, as tailored to the approved development on that lot. The plan shall generally follow the Erosion Control Plan as included and shown on Page C6.0, C7.0 of the Project Plans, and shall be designed to minimize potential sources of sediment, control the amount of runoff and its ability to carry sediment by diverting incoming flows and impeding internally generated flows, and retain sediment that is picked up on the project site through the use of sediment-capturing devices. The plan shall minimize impacts from stormwater and urban runoff on the biological integrity of the natural drainage systems leading to and within the adjacent Fitzgerald Marine Reserve. The plan shall also limit application, generation and migration of toxic substances, ensure the proper storage and disposal of toxic materials, and apply nutrients at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to surface waters. Such measures shall be confirmed to have been implemented (by a qualified contractor and under the supervision of the project's civil engineer) prior to the issuance of the respective building permits for the four residences, to the satisfaction of the Planning and Building Department. The County will monitor compliance of this mitigation measure by conducting weekly construction inspections during the rainy season (October 1 through May 1) for the period covering all land disturbance activities, as required by the State Water Board's Special Protections. Such measures shall be kept in place for each of the lots through the duration of the construction activities on that lot, up to the final inspection approval of the respective building permit for development on that lot. Said plan shall adhere to the San Mateo Countywide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including:

- a. Sequence construction to install sediment-capturing devices first, followed by runoff control measures and runoff conveyances. No construction activities shall begin until after all proposed measures are in place.
- b. Minimize the area of bare soil exposed at one time (phased grading).
- c. Clear only areas essential for construction.
- d. Within five (5) days of clearing or inactivity in construction, stabilize bare soils through either non-vegetative best management practices (BMPs), such as mulching, or vegetative erosion control methods, such as seeding. Vegetative erosion control shall be established within two (2) weeks of seeding/planting.

- e. Construction entrances shall be stabilized immediately after grading and frequently maintained to prevent erosion and control dust.
- f. Control wind-born dust through the installation of wind barriers such as hay bales and/or sprinkling.
- g. Soil and/or other construction-related material stockpiled on-site shall be placed a minimum of 200 feet from all wetlands and drain courses. Stockpiled soils shall be covered with tarps at all times of the year.
- h. Intercept runoff above disturbed slopes and convey it to a permanent channel or storm drains by using earth dikes, perimeter dikes or swales, or diversions. Use check dams where appropriate.
- i. Provide protection for runoff conveyance outlets by reducing flow velocity and dissipating flow energy.
- j. Use silt fence and/or vegetated filter strips to trap sediment contained in sheet flow. The maximum drainage area to the fence should be 0.5-acre or less per 100 feet of fence. Silt fences shall be inspected regularly and sediment removed when it reaches 1/3 the fence height. Vegetated filter strips should have relatively flat slopes and be vegetated with erosion resistant species.

**Mitigation Measure 10:** Prior to commencement of any project-related site disturbance, grading/clearing, tree removal/trimming or construction activities, and in conjunction with an approved Erosion Control Plan, the applicant shall place adequate temporary construction fencing along all boundaries of the proposed Conservation Easement and surrounding all limits of the four building sites. No such activity shall extend beyond that fenced perimeter. All environmentally sensitive areas shall be clearly flagged. Additional measures shall also be included in the plan narrative and implemented as follows:

- a. Entrance and exit from the construction site by construction equipment and other vehicles shall occur from Vallemar Street, and the point of access shall be clearly identified.
- b. An excavator with a swivel bucket shall be used during construction. The excavator will have "street" tracks to minimize site disturbance.
- c. Construction lay down areas shall be located on the building envelopes not under active construction or within other portions of the construction footprint.
- d. Spoil material that will be hauled away may first be stored either on the building envelopes not in active construction or on the paved parking area on Vallemar Street, subject to an encroachment permit from San Mateo County Public Works.
- e. A biological monitor will be present during ground disturbing activities to ensure that encroachment into the flagged environmentally sensitive areas does not occur. The biological monitor will have the authority to stop work in the event construction activities are encroaching into environmentally sensitive areas.

**Mitigation Measure 11:** The erosion control plan for the project shall include the following best management practices (BMPs) and shall be implemented and maintained (under the supervision of the project civil engineer) as described:

- a. Control and prevent the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, washwater or sediments, rinse water from architectural copper, and non-stormwater discharges to storm drains and watercourses.

- b. Store, handle, and dispose of construction materials/wastes properly to prevent contact with storm water.
- c. Do not clean, fuel, or maintain vehicles on-site, except in a designated area where wash water is contained and treated.
- d. Train and provide instruction to all employees/subcontractors RE: construction BMPs.
- e. Protect all storm drain inlets in vicinity of site using sediment controls such as berms, fiber rolls, or filters.
- f. Limit construction access routes and stabilize designated access points.
- g. Perform clearing and earthmoving activities only during dry weather.
- h. Use sediment controls or filtration to remove sediment when dewatering and obtain all necessary permits.
- i. Trap sediment on site, using BMPs such as sediment basins or traps, earthen dikes or berms, silt fences, check dams, soil blankets or mats, covers for soil stockpiles, etc.
- j. Divert on-site runoff around exposed areas; divert off-site runoff around the site (e.g. swells and dikes).
- k. Protect adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.
- l. No land clearing operations where grading operations may take place between October 15 and April 15 unless a separate winter erosion control plan is approved prior to beginning such construction.
- m. Erosion is to be controlled at all times. The specific measures shown are to be implemented at all times. Additional measures will be required for construction between October 15 and April 15.

**Mitigation Measure 12:** Site all construction materials and staging areas in converted (i.e., paved), ruderal, or planted, areas within the portion of the property proposed for development, to avoid impacts to special-status communities and species.

**Mitigation Measure 13:** Implement measures to prevent indirect effects of the development project on the adjacent coastal terrace prairie community and rare species during construction, including:

- a. Fence the project disturbance envelop during construction using ESA fencing to clearly delimit the area of work;
- b. Erect signs on the fences and in other areas to prevent workers from entering them during construction;
- c. Conduct worker awareness training to educate construction personnel about the sensitive communities and special-status species, as well as the measures that must be implemented to protect them;
- d. Prevent erosion and manage drainage during construction to prevent concentrated runoff and sediment deposition in the coastal terrace prairie, including by installing, silt fences where needed;
- e. Monitor compliance with the protection measures during construction, to ensure that fences and signage remain in places, and that the areas outside of the disturbance envelope are not disturbed or otherwise utilized during construction;

- f. Monitor the site throughout construction period (and in perpetuity, per Mitigation Measure 5 below) and using early-detection/rapid response to eradicate any new occurrences of exotic plant species.

**Mitigation Measure 14:** Prior to disturbance within any portion of the project area that supports coastal terrace prairie dominated or co-dominated by native plants (2018 McGraw Survey; Figure 6), including the stormwater infiltration spreader areas and limits of grading, salvage the sod, topsoil, seed, and individual native plants, where appropriate and feasible. Use the salvaged material to restore areas of temporary disturbance; if the salvaged area is to be permanently impacted, use the material to restore other highly degraded habitat on site (e.g., ice plant mats) where appropriate.

**Mitigation Measure 15:** Minimize the potential for indirect impacts to coastal terrace prairie and rare plant species that could result from landscaping, by:

- a. Avoiding landscaping elements that could degrade adjacent habitat, including pesticides, herbicides, fertilizers, and irrigation beyond that required to establish plantings; and
- b. Installing plants native to the coastal terrace prairie, coastal strand, and coastal scrub communities in San Mateo County. For plant species found in the native communities in the study area, use container stock from local (coastal San Mateo County) sources to avoid disrupting locally adapted genetic complexes (i.e., causing genetic erosion or outbreeding depression) within the adjacent remaining habitat on-site and in the adjacent FMR.

**Mitigation Measure 16:** Compensate for the impacts of the project on coastal terrace prairie by implementing the following measures:

- a. Permanently protect 0.92 acres of coastal terrace prairie, through dedication of a perpetual conservation easement (as required in Mitigation Measure 4) to a tax-exempt nonprofit organization qualified under Section 501(c)(3) of the Internal Revenue Code and qualified to do business in California that has as its primary purpose the preservation, protection, or enhancement of land in its natural, scenic, historical, agricultural, forested, or open-space condition or use.
- b. Restore an estimated 0.71 acres within the conservation easement area that feature planted/ornamental species (i.e., Monterey cypress), are dominated by exotic plant species, and/or have been previously disturbed and feature unnatural topography or materials (e.g., wood chips). Table 9 and Figure 8 (2018 McGraw Survey) illustrate the acreages and approximate locations of restoration treatment areas. The restoration should follow a specific restoration plan that addresses the anthropogenic factors that have degraded native plant community structure and species composition. The restoration plan will also describe how the areas in the conservation easement area that were graded and installed with spreaders will be restored. It will critically evaluate and use, where appropriate, the following approaches:
  - i. Removing the planted/ornamental plant species and ice plant mats;
  - ii. Removing wood chips, base rock, or other non-native material covering the soil;
  - iii. Recreating the natural topography in areas where mounds or swales were created through prior excavation;
  - iv. Controlling other invasive plants (e.g., Italian rye grass and prickly sow thistle) that outcompete native plant species;
  - v. Managing the abundance of disturbance-adapted native plants such as coastal tarweed, where they are dominant (e.g., in the southeastern corner of the property) to promote the establishment and growth of a broader diversity of native grasses and forbs;

- vi. Establishing native plants in areas previously used as trails to access the bluff trail;
  - vii. Salvaging seed and topsoil from coastal terrace prairie and areas supporting harlequin lotus prior to any ground-disturbing activities and using the material in on-site restoration, where appropriate; and
  - viii. Increasing the cover and diversity of native coastal terrace prairie plant species by sowing native plant seed (or spreading topsoil, where available) into restoration areas.
- c. Manage and monitor, in perpetuity, the entire 0.92-acre conservation area to address anthropogenic factors that degrade native plant community structure and species composition. Management elements should be identified in a management plan developed for the conservation area based on the site conditions and the literature documenting relevant conservation and management strategies, which are anticipated to include the following:
- i. Controlling exotic plants, and preventing the invasion and spread of new exotic plant species;
  - ii. Managing recreation and access on and adjacent to the conservation area, including by:
    - (1) Installing fencing and signage to deter public access within the conservation area;
    - (2) Recording in the CC&Rs for the site and in the conservation easement, prohibitions against recreational use and access that are not compatible with conservation and management natural community structure and species composition in the coastal terrace prairie and populations of rare native plants. Installation of permanent or semi-permanent infrastructure and play equipment such as law chairs, umbrellas, trampolines, or any other items that intensify use in one area should be prohibited;
    - (3) Siting, constructing, and managing any public trails that are all or partially within the conservation area so that the recreational use is compatible with the protection of coastal terrace prairie and adjacent costal bluff habitat;
    - (4) Monitoring compliance with the measures to prevent trampling associated with recreational use and taking steps to increase compliance when/if negative impacts are observed.
  - iii. Monitoring natural community structure and species composition and rare plant populations within coastal terrace prairie, to gauge the effectiveness of management and inform adjustments as part of the adaptive management framework.

**Mitigation Measure 17:** The erosion control plan for the project shall include the following best management practices (BMPs) and shall be implemented and maintained (under the supervision of the project civil engineer) as described:

- a. Control and prevent the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, washwater or sediments, rinse water from architectural copper, and non-stormwater discharges to storm drains and watercourses.
- b. Store, handle, and dispose of construction materials/wastes properly to prevent contact with stormwater.
- c. Do not clean, fuel, or maintain vehicles on-site, except in a designated area where wash water is contained and treated.
- d. Train and provide instruction to all employees/subcontractors regarding construction BMPs.

- e. Protect all storm drain inlets in vicinity of site using sediment controls such as berms, fiber rolls, or filters.
- f. Limit construction access routes and stabilize designated access points.
- g. Perform clearing and earthmoving activities only during dry weather.
- h. Use sediment controls or filtration to remove sediment when dewatering and obtain all necessary permits.
- i. Trap sediment on site, using BMPs such as sediment basins or traps, earthen dikes or berms, silt fences, check dams, soil blankets or mats, covers for soil stockpiles, etc.
- j. Divert on-site runoff around exposed areas; divert off-site runoff around the site (e.g. swells and dikes).
- k. Protect adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.
- l. No land clearing operations where grading operations may take place between October 15 and April 15 unless a separate winter erosion control plan is approved prior to beginning such construction.
- m. Erosion is to be controlled at all times. The specific measures shown are to be implemented at all times. Additional measures will be required for construction between October 15 and April 15.

**Mitigation Measure 18:** The applicant shall implement the drainage improvement recommendations of the Mesiti-Miller Engineering, Inc. (2017) Preliminary Storm Drainage Report to limit impacts to the Coastal Terrace Prairie grass, erosive bluff edge, and the near-shore marine environment (within the Fitzgerald Marine Reserve adjacent and just west of the project site, including the surveyed area of the endangered coast yellow leptosiphon on the coastal bluff promontory just west of the project site's westernmost property line) utilizing (within the Easement Area as shown) infiltration trenches with overflow spreaders on each lot to disperse the runoff over wide areas and maintain existing hydrology and soil moisture on the site, and using pervious pavers and detention areas to control peak runoff. The respective building permits for each of the four residences shall include a drainage plan that incorporates and implements all drainage measures cited in the report by Mesiti-Miller Engineering, Inc. The project shall minimize alteration of the site's hydrology, including by using permeable pavers (in all driveways, walkways and patio areas) to increase infiltration of rainfall, and installing overflow spreaders in trenches to diffuse runoff.

**Mitigation Measure 19:** Prior to any ground disturbing activities, including vegetation/tree removal or tree trimming, that would occur during the nesting/breeding season of native bird species potentially nesting/roosting on the site (typically February 1 through August 31 in the project region), a survey for nesting birds shall be conducted by a qualified biologist experienced with the nesting behavior of bird species of the region. The intent of the survey would be to determine if active nests of special-status bird species or other species protected by the Migratory Bird Treaty Act and/or the California Fish and Wildlife Code are present in the construction zone or within 500 feet of the construction zone. The surveys shall be timed such that the last survey is concluded no more than 2 weeks prior to initiation of construction or tree removal work. If ground disturbance activities are delayed, then an additional pre-construction survey shall be conducted such that no more than 2 weeks will have elapsed between the last survey and the commencement of ground disturbance activities.

If active nests are found in areas that could be directly affected or subject to prolonged construction-related noise, a no-disturbance buffer zone shall be created around active nests during the breeding season or until a qualified biologist determines that all young have fledged. The size of the buffer zones and types of construction activities restricted within them will be determined

through consultation with the California Department of Fish and Wildlife (CDFW), taking into account factors such as the following:

- a. Noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity;
- b. Distance and amount of vegetation or other screening between the construction site and the nest; and
- c. Sensitivity of individual nesting species and behaviors of the nesting birds.

Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or other appropriate barriers and construction personnel shall be instructed on the sensitivity of nest areas. A qualified biologist shall serve as a construction monitor during those periods when construction activities would occur near active nest areas of special-status bird species and all birds covered by the Migratory Bird Act to ensure that no impacts on these nests occur.

**Mitigation Measure 20:** The new trees indicated on the applicant's Tree Replacement Plan and Tree and Shrub Replanting Plan (found in the Project Plans) shall be planted prior to Planning final approval of the respective building permits for the four residences. Tree removal (identified by tree numbers), new trees and shrubs, additional landscaping, and tree preservation shall be shown on the submitted building plans for each of the four respective residences. The landscaping plan (for tree replacement and all other proposed landscaping) shall include plants that are pest- and/or disease-resistant, drought-tolerant, and attractive to beneficial insects. Upon implementation of the plan (for each of the four residences), the use of quick-release fertilizers shall be minimized. The associated irrigation system shall be designed to efficiently distribute water and minimize runoff. The planting of all new trees shall occur pursuant to the standards for such planting (depth of holes dug, fertilizing at planting and watering for respective tree types) and under the observation of a qualified, licensed arborist. The arborist shall confirm (via letter and/or email) that this has occurred for all trees prior to final inspection approval of the respective building permits for the four residences, to the satisfaction of the Community Development Director.

**Mitigation Measure 21:** Any plan modifications to the subsequent development on the four lots (assuming they are deemed "minor" by the Community Development Director) that occur post issuance of any of the respective building permits for the four residences shall be reviewed by the arborist to assess any potential impacts to existing trees, trees that are being preserved, and/or new trees to be planted affecting trees should be reviewed by the project consulting arborist (arborist) with regard to tree Impacts.

**Mitigation Measure 22:** The submitted building plans for each of the four respective residences shall demarcate a Tree Protection Zone, to be established for all trees to be preserved, in which no disturbance is permitted. These plans shall indicate the method and measures of such protection (i.e., 6-foot high fencing placed at the trees' dripline) pursuant to the design and confirmed observation by the arborist. All such tree protection measures shall be reviewed and approved by the Community Development Director prior to issuance of the respective building permits for the four residences. No grading, excavation, construction or storage of materials, equipment, spoils, waste or wash-out water may be deposited, stored, or parked within the Tree Protection Zone. All underground services, including utilities, sub-drains (and other drainage features), irrigation lines, water and sewer laterals, shall be routed around the Tree Protection Zone. All tree protection measures shall be confirmed by the County to have been implemented prior to the issuance of any of the respective building permits for the four residences. All tree protection measures shall remain until all construction on each respective lot is completed.

**Mitigation Measure 23:** Any herbicides placed under paving materials must be safe for use around trees (as determined and confirmed by the arborist) and labeled for that use.

**Mitigation Measure 24:** All tree pruning shall be done by skilled tree or landscape contractors pursuant to the specific standards (adhering to the latest edition for Best Management Practices – and Tree Pruning as published by the International Society of Arboriculture), directions and under the supervision of the arborist.

**Mitigation Measure 25:** Prior to the initiation of any site disturbance activities (prior to issuance of the building permits), the project contractors working in the vicinity of trees to be preserved shall meet with the arborist at the site to review all work procedures, access routes, storage areas and tree protection measures.

**Mitigation Measure 26:** Upon issuance of the building permits, any excavation within the dripline or other work that is expected to encounter tree roots should be approved and monitored by the arborist. Any roots requiring cutting (including the type of backfill soil, compaction, fertilizing and watering) shall be the standards and under the supervision of the arborist to ensure that such root cutting does not damage the long term health of the tree.

**Mitigation Measure 27:** Should any tree or its roots be damaged during construction, it should be evaluated as soon as possible by the arborist so that appropriate treatments can be applied.

**Mitigation Measure 28:** Any additional or unanticipated tree pruning needed for clearance during construction shall be performed to the standards and under the supervision by the arborist.

**Mitigation Measure 29:** Prior to building permit issuance for construction of residences on all or any of the respective lots, the applicant shall incorporate, via a note on the first page of the building construction plans, that in the event that archaeological resources are inadvertently discovered during construction, work in the immediate vicinity (within 25 feet) of the find must stop until a qualified archaeologist can evaluate the significance of the find. Construction activities may continue in other areas beyond the 25-foot stop work area. A qualified archaeologist is defined as someone who meets the Secretary of the Interior's Professional Qualifications Standards in archaeology. The Community Development Director shall be notified of such findings, and no additional work shall be done in the stop work area until the archaeologist has recommended appropriate measures, and those measures have been approved by the Current Planning Section and implemented. Disposition of Native American remains shall comply with CEQA Guidelines Section 15064.5(e).

**Mitigation Measure 30:** In the event that paleontological resources are inadvertently discovered during construction, work in the immediate vicinity (within 25 feet) of the find must stop until a qualified paleontologist can evaluate the significance of the find. The Community Development Director shall be notified of such findings, and no additional work shall be done in the stop work area until the paleontologist has recommended appropriate measures, and those measures have been approved by the Current Planning Section and implemented.

**Mitigation Measure 31:** Should any human remains be discovered during construction, all ground disturbing work shall cease and the County Coroner be immediately notified, pursuant to Section 7050.5 of the State of California Health and Safety Code. Work must stop until the County Coroner can make a determination of origin and disposition of the remains pursuant to California Public Resources Code Section 5097.98. If the County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within 24 hours. A qualified archaeologist, in consultation with the Native American Heritage Commission, shall recommend subsequent measures for disposition of the remains.

**Mitigation Measure 32:** The project design for the development of each of the four lots (at the time of the submitted respective building permits), shall each include lot-specific geotechnical reports and shall carefully follow the geotechnical recommendations presented in the subject Haro, Kasunich and Associates (HKA) geotechnical report (pages 25 through 46, except where such recommendations affect Lot 4), covering the following categories: General Site Grading (including

Cut and Fill Slopes); Foundations (including Conventional Spread and Skin Friction Pier Foundations); Perched Groundwater Drainage (including Concrete Slab-On-Ground); Retaining Walls (including Lateral Pressures and use of Tie-Backs); Utility Trenches; Surface Drainage (including use of Curtain Drains); Pavement Design; and Plan Review, Construction Observation and Testing. Additionally, and more specifically, the project design for the development on Lot 4 shall carefully follow the recommendations presented in the HKA Geotechnical Investigation Update, dated June 13, 2018. Specifically, the proposed residence and other structures on Lot 4 are recommended to be supported by shallow stiffened grid foundations or structural mat foundations, either of which is capable of withstanding the estimated liquefaction induced vertical ground settlement (from an earthquake) and capable of being re-leveled after such an event. Shallow stiffened foundations are recommended by geotechnical consultants for single-family dwelling construction on sites with potentially liquefiable soils as an alternative to ground improvements (i.e., stone columns, compaction grouting) or deep driven piles, either of which would have a much higher environmental impact to the site. Any such changes to the recommendations by the project geotechnical engineer presented in this report shall be pursuant to the review and approval of the County's geotechnical engineer.

**Mitigation Measure 33:** The applicant's architect shall complete and submit the County 2013 Energy Efficiency Climate Action Plans (EECAP) Development Checklist (Appendix F), and shall incorporate applicable measures and performance criteria into the submitted building plans for each of the four residences.

**Mitigation Measure 34:** Should any traditionally or culturally affiliated Native American tribe respond to the County's issued notification for consultation, such process shall be completed and any resulting agreed upon measures for avoidance and preservation of identified resources be taken prior to implementation of the project.

**Mitigation Measure 35:** In the event that tribal cultural resources are inadvertently discovered during project implementation, all work shall stop until a qualified professional can evaluate the find and recommend appropriate measures to avoid and preserve the resource in place, or minimize adverse impacts to the resource, and those measures shall be approved by the Current Planning Section prior to implementation and continuing any work associated with the project.

**Mitigation Measure 36:** Any inadvertently discovered tribal cultural resources shall be treated with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, protecting the cultural character and integrity of the resource, protecting the traditional use of the resource, and protecting the confidentiality of the resource.

**DETERMINATION** (to be completed by the Lead Agency).

On the basis of this initial evaluation:

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

X

I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because of the mitigation measures in the discussion have been included as part of the proposed project. A NEGATIVE DECLARATION will be prepared.

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

September 26, 2018

(Signature)

Senior Planner

**ATTACHMENTS**

- A. Location Map\*
- B. Project Site Plan\*
- C. Site Sections\*
- D. Existing Trees and Vegetation\*
- E. Tree Removal and Tree Replacement Plan\*
- F. Tree and Shrub Planting Plan on House Sites (see Attachment S.1. for Vegetation Plan on Conservation Easement Area)\*
- G. Grading Plans\*
- H. Drainage Areas\* (also see Attachment O)
- I. Erosion Control Plan\*
- J. Site Plan and Elevations (Lot 1)\*
- K. Site Plan and Elevations (Lot 2)\*
- L. Site Plan and Elevations (Lot 3)\*
- M. Site Plan and Elevations (Lot 4)\*
- N. Project Photo Simulations\*
- O. Preliminary Storm Drainage Report, Mesiti-Miller Engineering, Inc. (April 26, 2017).
- P. Coastal Bluff Recession Study, Haro, Kasunich and Associates (April 24, 2015)\*
- Q. Vallemar Bluffs Coastal Hazards Assessment, Environmental Science Associates (October 26, 2016)\*
- R. Geotechnical Investigation, Haro, Kasunich and Associates (August 2016)\*
  - R.1 (New) Geotechnical Investigation Update, Haro, Kasunich and Associates (June 18, 2018)\*
- S. (New) Biological Survey Report, Jodi McGraw Consulting (August 2018)\*
  - S.1 (New) Vallemar Bluffs Conservation and Development Project Management Planning Framework (August 2018)\*

- S.2. (New) Proposed Conservation and Open Space Easement
- S.3. (New) Draft Covenants, Conditions and Restrictions (CC&Rs)
- T. California Department of Fish and Wildlife Letter (June 6, 2017)\*
  - T.1 (New) California Department of Fish and Wildlife, Memorandum to Fish and Game Commission (December 7, 2017)\*
  - T.2 (New) California Department of Fish and Wildlife Letter/Response (February 7, 2018)\*
- U. Moss Beach Tree Survey (May 2015)\*
- V. Coastside Design Review Committee Recommendation (October, 12 2017)\*
- W. California State Coastal Commission Letter/Response (March 1, 2018)\*
- X. Midcoast Community Council Comments (January 24, 2018)

\* *These documents can be found at the Planning and Building office or on-line on the Planning and Building's website at: <http://planning.smcgov.org/major-projects>. Under Major Projects, go to the "Four Residences on Vallemar at Julianna, Moss Beach", where these documents can be found under labeled pdf files.*

**Note:** *Unless preceded by (New), all other attachments are as they appeared in the IS/MND that was initially circulated in February 2018.*

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