Exhibit E

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MONTEREY COUNTY

RESOURCE MANAGEMENT AGENCY

PLANNING DEPARTMENT 1441 Schilling Place, 2nd FLOOR, SALINAS, CA 93901 PHONE: (831) 755-5025 FAX: (831) 757-9516



INITIAL STUDY

I. BACKGROUND INFORMATION

Project Title:	le: Raiser House Combined Development Permit	
File No.:	PLN100396	
Project Location:	30650 Aurora Del Mar, Carmel, CA 93923	
Name of Property Owner:	JHR Trust	
Name of Applicant:	John Wandke of Rana Creek Design	
Assessor's Parcel Number(s):	243-341-001-000	
Acreage of Property:	1.1 Acres	
General Plan Designation:	Big Sur Coast	
Zoning District:	RDR/40-D(CZ)	
Lead Agency:	Monterey County Resource Management Agency, Planning Division, RMA)	
Prepared by:	R. Craig Smith, Associate Planner	
Date Prepared:	June 12, 2018	
Contact Person:	R. Craig Smith, Associate Planner	

Phone Number: (831) 796-6408

II. DESCRIPTION OF PROJECT AND ENVIRONMENTAL SETTING

A. Project Background and Regulatory Setting

This Initial Study is being prepared in conjunction with a Combined Development Permit consisting of a Coastal Development Permit and Design Approval as the follow-up permits to Emergency Permit PLN100094. The Emergency Permit was approved to mitigate an emergency situation, the erosion of an arroyo bank and bottom resulting from flooding following storm events of late 2009 and early 2010. The mitigation measure was limited to the installation of a Hilfiker retaining wall, and it was determined that the wall was the minimum amount of work required to mitigate the emergency situation and safeguard private property, the single-family dwelling – the Otter House – located adjacent to the top of the arroyo bank.

In October 2009, stormwater runoff concentrated within the arroyo leading to the failure of the northern creekbank slope and slope failure undermined the retaining wall elements below the Otter House. Under 2009 conditions, stormwater from both residential sites on either bank was discharged from the rooftops and other impervious areas associated with these residential developments, along with Aurora del Mar, and Highway 1, directly into the drainage channel. Stormwater runoff also originated from and the upper reaches of the arroyo east of Highway 1. The cumulative runoff created flooding situations that exceed the capacity of the arroyo and caused the erosion and ultimate failure of the northern banks of the arroyo below the Otter House. The eroded arroyo sidewall exposed the dwelling's shallow conventional foundation and pylons supporting the residence. The residence was thus "red tagged" by the Monterey County Building Division, which prohibited people from entering the structure because of structural instability and imminent safety concerns for human occupation. On February 10, 2010, an emergency permit (PLN100094) was issued by RMA to allow the owner to mitigate the emergency situation. The permit allowed construction of a Hilfiker wire retaining wall system of approximately 135 lineal feet with a maximum height of approximately 30-feet, and importation of backfill soil materials to repair and stabilize the foundation on the south side of the existing residence. Soils were also imported to restore the arroyo bottom to its approximate historical elevation. Figure 1 (Regional Location) shows the location of the project site along the Big Sur coast, and Figure 2 (Aerial View) identifies the project site (in orange).



The work performed under the Emergency Permit was completed over the course of 2010-2011 and is currently in place on the property as it was completed in 2011. In addition to the Hilfiker wall, and exceeding the scope of the approved Emergency Permit, the project included the installation of a subterranean storm drainage system, restoration of the arroyo bottom and northern bank, and restoration of the arroyo's riparian habitat and coastal scrub or upland habitat.

This Initial Study describes events, including development, in the past tense and in some cases, the present tense. This study does not refer to development in the future tense: no further development is proposed or contemplated relating to the Hilfiker wall, the arroyo, or habitat, or as described and analyzed in this study. Hence, modal verbs to express likelihood such as "would" or "will" are not used to anticipate future results relating directly to the project. Additionally, air quality standards and regulations cited in this study describe the regulations in place at the time the emergency permit was submitted and implemented, 2008 but the project can be found consistent with the 2012 - 2015 Air Quality Management Plan.

B. Description of Project

The project is the required follow-up permit to Emergency Permit PLN10094 approved on July 26, 2010 and is related to the single-family residence at 30650 Aurora Del Mar, located in Monterey County, California. The emergency repairs and site alterations conducted in July 2010 stabilized the northern arroyo sidewall. The Emergency Permit approved the installation of a Hilfiker retaining wall of approximately 130 feet in length with a maximum height of approximately 30 feet. The scope of the project was limited to the Hilfiker wall and avoided the ocean waters and any shoreline alterations. In addition to the retaining wall, the applicant installed subterranean erosion control measures in the arroyo. This work included two new high-capacity subsurface drainage culverts of 14-inches and 16-inches diameter, respectfully, and a new drainage inlet at the eastern reach of the arroyo connecting to the culverts. These features were designed to carry runoff from Highway 1 and Aurora del Mar located upstream from the arroyo and can accommodate a 100-year storm event. Drainage improvements also included two grouted rock weirs within the arroyo bottom that created a terraced or stepped arroyo bottom to accommodate a gradual elevation drop to facilitate flow to the shoreline, and a rock energy dissipater at the terminus of the stream channel as it drains over the bluff top onto the granite toe of the bluff and the shoreline. These drainage improvements did not require any shoreline alterations, or the placement of equipment on the shoreline. Drainage facilities from the Otter House and the property immediately south of the project site were also connected to the subsurface culverts to reduce erosion within the arroyo. Several feet of compacted fill were placed in the arroyo to raise the arroyo bottom to its approximate level prior to the flooding and erosion event, and to reduce erosion of the arroyo banks and bottom.

With installation of these improvements, the northern sidewall or bank of the arroyo had been stabilized. The weir tops are flush with the arroyo bottom thus allowing for free flows of surface water. The inlet to the drainage culverts is designed to allow surface water quantity of up to a 2-year storm event to flow on the surface unrestrained with higher flows- those exceeding a 2-year event - being diverted to the culvert system. All runoff from the arroyo drains to the shoreline as described above. The task of installing the Hilfiker wall and installing the drainage features in the arroyo caused the removal of the vegetation located in portions of the arroyo bottom and banks. Following installation of the Hilfiker wall and arroyo drainage features, the arroyo was revegetated

with native habitat that is characteristic of a riparian and coastal scrub habitat. The restored habitat with native vegetation created habitat for wildlife, controls erosion and reduces sedimentation deposits in the marine sanctuary located at the shoreline, and aides in reducing stream flow velocity; the majority of coastal scrub and coastal bluff scrub communities were undisturbed and are intact as these communities are located to the west of the limit of grading, and in the southeastern reaches of the arroyo, outside the limits of the grading activity. The flooding and associated erosion event *may* have caused impacts to archeological resources that existed within the arroyo banks. The improvements described throughout this study are in place and continue to perform as designed.

The County of Monterey is requiring Coastal Development Permits as a follow-up to the previously issued Emergency Coastal Development Permit for the project. The follow up permits constitute a Combined Development Permit (CDP) for: retaining wall construction, development on slopes in excess of 30 percent, drainage improvements, and development in an environmentally sensitive habitat area with archaeological sensitivity. As part of the CDP, the County, the California Coastal Commission (CCC), and the California Department of Fish and Wildlife (CDFW) required that dry-weather and stormwater flows up to the 2-year storm event are restored to the channel in order to maintain habitat and ephemeral stream function. The storm water inlet at the eastern reach of the arroyo is designed to allow surface flow during rain events. The weir tops within the arroyo are flush with the arroyo bottom so as not to impede surface flows. Refer to **Figure 3** below.





This Initial Study analyzes the potential impacts associated with these project elements, including all the project features that were implemented under the emergency permit and all subsequent reparative work required under the follow-up CDP application. The project site is located in an area with high archaeological sensitivity and includes boundaries of California archaeological site CA-MNT-438. This Initial Study includes analysis of potential impacts that may have happened

to this archaeological site. However, it is uncertain that any cultural artifacts were disturbed during the construction of the Hilfiker wall and subterranean drainage system.

C) Surrounding Land Uses and Environmental Setting

The Raiser residence, known as the "Otter House," constructed in 1984, consists of a single-story, wood-frame house situated on approximately 1.1 acres of a coastal bluff overlooking Otter Cove on the Big Sur coast. To the north of the project site is a single-family house, immediately east of the property is Aurora Del Mar Drive, and beyond Aurora Del Mar Drive is State Highway 1 (Highway1), approximately 200 feet east of the project site. To the south, adjacent to the residence, are the previously described drainage channel (arroyo) and a single-family home atop the channel's southern bank, approximately 75 feet to the south of Otter House. The Pacific Ocean is located approximately 55 feet to the west of the Otter House.

The residence is about 45 vertical feet above the shoreline on a bluff that features an erosionresistant granite bedrock found at the bluff toe with the upper reaches of the bluff being composed of sandy soils. An arroyo, approximately 22-25 feet deep, is situated immediately adjacent to the southern perimeter of the residence, separating the Otter House and a neighboring residence on the southern bank of the arroyo. The arroyo originates from a steep ridge to the east of the site across Highway 1, at an elevation of approximately 1,200 feet. The lower reaches of the arroyo support a seasonal, unnamed drainage channel that discharges into the Pacific Ocean and featured a mix of native and non-native vegetation. The stream may be ephemeral in the upper portions of the property, at the eastern property line, with groundwater surfacing at the lower end of the channel above the rocky shoreline. Water sources for the drainage channel include the watershed east of Highway 1, upstream of the project site, stormwater runoff from Highway 1 and Aurora del Mar, located upstream along the eastern property line of the project site. Stormwater runoff from the impervious surfaces associated with the Otter House and the single-family home located above the southern banks of this arroyo, south of the Otter House, also contribute runoff directed to the arroyo.

The site is designated as Rural Density Residential (RDR) by the Monterey County Local Coastal Plan. According to the Local Coastal Plan, RDR zones are appropriate for residential, recreational, and public and quasi-public uses, as well as a broad range of limited agricultural uses. The Otter Cove area is designated as a residentially developed zone by the Big Sur Coast Land Use Plan, in recognition that the area contains numerous comparatively small parcels, generally unsuitable for other kinds of development. Per the policies set forth in the Big Sur Coast Land Use Plan, a drainage easement covers the arroyo and the arroyo is also within a scenic easement, both of which restrict development within the arroyo and serve to maintain unobstructed views of the Pacific Ocean from Highway1. This drainage feature appears to be unnamed and is not identified in the Big Sur Coast Land Use Plan. Additionally, the site is not visible from Highway 1 because of vegetative screening – Gowen cypress and other trees located between Highway 1 and Aurora del Mar.

D) Other public agencies whose approval is required

The County's approval includes a Coastal Development Permit pursuant to the County's certified Local Coastal Program. California Coastal Commission review is advisory only at this juncture, unless the County's approval is appealed to or by the Coastal Commission. California Department of Fish and Wildlife (formerly California Fish and Game) does not offer after-the-fact permits.

However, Fish and Wildlife conducted a site visit on August 27, 2012, after the Hilfiker wall and stream bed alterations were completed. Their comments centered around the structural components of the arroyo (stream bed) alterations, specifically, that the grouted rock and concrete weirs, as originally installed, would obstruct water flows in the arroyo bed, and that the inlet device would capture all runoff directed to the arroyo and transfer the runoff to the culverts buried under the arroyo bed. The CDFW biologist noted that removal of the drainage components would be disruptive to the environment and the incremental environmental improvement over the existing setting would be minute, thus the recommendation was made to leave the drainage components in place with some modifications. The CDFW biologist recommended that the weirs be altered in such a way that would allow surface flow to occur unimpeded in a natural way, that the inlet should be designed in such a way that allows surface flows in volume up to a 2-year event, at which time these "excess" waters would be directed into the subterranean culverts located beneath the arroyo bottom. The design recommendations were implemented, and the arroyo operates as designed (see Figure 3 above). The culverts drain to the coastal bluff face where discharge courses over a riprap energy dissipater before flowing into the ocean.

III. PROJECT CONSISTENCY WITH OTHER APPLICABLE LOCAL AND STATE PLANS AND MANDATED LAWS

Use the list below to indicate plans applicable to the project and verify their consistency or nonconsistency with project implementation.

General Plan/Area Plan	\boxtimes	Air Quality Mgmt. Plan	\boxtimes
Specific Plan		Airport Land Use Plans	
Water Quality Control Plan	\boxtimes	Local Coastal Program-LUP	\square

1982 Monterey County General Plan

The project site is subject to the Monterey County certified Local Coastal Plan (LCP). Policies of the *1982 Monterey County General Plan* (General Plan) apply where LCP policies are silent. Noise and energy policies are the primary sections that are addressed within the General Plan and not within the LCP. The project site is zoned RDR – Rural Density Residential -and according to the Big Sur Coast Land Use Plan, the Otter Cove area is designated for residential uses. The proposed project is consistent with the Rural Density Land use designation of this residential site, continuing the existing land use. The project included the construction of a Hilfiker retaining wall, a subterranean drainage system, and environmental restoration of the arroyo on a developed parcel within a rural but built-out single-family residential neighborhood. therefore, the project proposal is consistent with the General Plan.

Water Quality Control Plan

The project included a Hilfiker retaining wall located in an arroyo bank designed to protect the residential structure located on the northern bank of the arroyo, and improvements and restoration to an unnamed drainage channel along the southern edge of the project site. The drainage channel accommodates storm water runoff from the uplands immediately east of Highway 1, a localized segment of Highway 1, Aurora Del Mar, a paved road, and site runoff from the subject parcel on the northern bank of the arroyo, and the residential parcel on the southern bank of the arroyo. The applicant installed subterranean culverts, an inlet device connected to the culverts, and a grouted rock energy dissipater at the drainage terminus with the intent of regulating water flows in the arroyo as protective devices related to the residence located on the subject property. The system is designed in such a way that seasonal water flows – up to a 2-year storm event - remain on the surface in the arroyo. Additionally, the arroyo bottom and banks were restored with native riparian vegetation as a means to control erosion of the arroyo bottom and sides, and reduce sediment load in the runoff, thus reducing sedimentary deposits into Otter Cove, located within a marine sanctuary. The drainage improvements convey drainage that is already captured and directed to the arroyo and is not a source of new drainage or a source of contamination. The project is consistent with the County General Plan and AMBAG's regional population and employment forecasts. The Regional Water Quality Control Board, Central Coast Region, incorporates the General Plan in its preparation of regional water quality plans, making this project consistent with the regional water quality plans. The following sections discuss whether this particular project violates any water quality standards or waste discharge requirements, substantially depletes groundwater supplies or interferes substantially with groundwater recharge, substantially alters the existing drainage pattern of the site or area or creates or contributes runoff water that would exceed the capacity of existing or planned stormwater drainage.

<u>Air Quality Management Plan</u> The Monterey Bay Unified Air Pollution Control District (MBUAPCD) developed the **2008** Air Quality Management Plan (Triennial Update to the AQMP) for the Monterey Bay Region. It is the responsibility of the Association of Monterey Bay Area Governments (AMBAG) to prepare new population and employment forecasts for the three-county area approximately every 3–4 years. The three-county area includes San Benito, Monterey, and Santa Cruz counties. The Plan has been updated accordingly and the 2012-2015 and the 2008 Air Quality Management Plan (AQMP) for the Monterey Bay Region (Source 5) address attainment and maintenance of state and federal ambient air quality standards within the North Central Coast Air Basin (NCCAB) that includes unincorporated Big Sur areas. California Air Resources Board (CARB) uses ambient data from each air monitoring site in the NCCAB to calculate Expected Peak Day Concentration over a consecutive three-year period. The closest air monitoring site in Big Sur has given no indication during project review that implementation of proposal for the Hilfiker wall and drainage improvements would cause significant impacts to air quality or greenhouse gas emissions (GHGs)

<u>Local Coastal Program</u> The project resulted in riparian habitat restoration and coastal bluff stabilization and would serve to reduce potential erosion of the drainage channel and the arroyo sidewalls. The proposed project is consistent with policies of the Big Sur Coast Land Use Plan. Measures have been incorporated to avoid, minimize and restore coastal resources in the area including restoration of vegetation and maintenance of flows.

IV. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED AND DETERMINATION

A. FACTORS

The environmental factors checked below would be potentially affected by this project, as discussed in the checklist on the following pages.

\bowtie	Aesthetics	Agriculture and Forest Resources	Air Quality
\boxtimes	Biological Resources	Cultural Resources	Geology/Soils
	Greenhouse Gas Emissions	Hazards/Hazardous Materials	Hydrology/Water Quality
	Land Use/Planning	☐ Mineral Resources	□ Noise
	Population/Housing	Public Services	□ Recreation
	Transportation/Traffic	Utilities/Service Systems	Mandatory Findings of Significance

Some proposed applications that are not exempt from CEQA review may have little or no potential for adverse environmental impact related to most of the topics in the Environmental Checklist, and/or potential impacts may involve only a few limited subject areas. These types of projects are generally minor in scope, located in a non-sensitive environment, and are easily identifiable and without public controversy. For the environmental issue areas where there is no potential for

significant environmental impact (and not checked above), the following finding can be made using the project description, environmental setting, or other information as supporting evidence.

☐ Check here if this finding is not applicable.

FINDING: For the above-referenced topics that are not checked off, there is no potential for significant environmental impact to occur from either construction, operation, or maintenance of the proposed project, and no further discussion in the Environmental Checklist is necessary.

EVIDENCE:

- 1. <u>Aesthetics</u>: See Section VI for a detailed analysis.
- 2. <u>Agriculture and Forest Resources</u>: The subject property is zoned RDR (Rural Density Residential), which allows recreational, public, residential, and limited agricultural services. The Otter Cove area is designated as a residentially developed zone by the Big Sur Coast Land Use Plan, in recognition that the area contains numerous comparatively small parcels, generally unsuitable for other kinds of development. The subject property does not contain nor is it bordered by agricultural uses.

The project did not convert important agricultural land to nonagricultural use. The project did not conflict with timberland production or result in the significant loss of forestland or forest conservation, because forest resources are not present at the site. The project did not change the environment of the property or surrounding area resulting in a conversion of farmland into nonagricultural land. Therefore, the project did not impact agriculture or forestry resources. No impact occurred. (Reference IX: 1, 2, 3, 6)

- 3. <u>Air Quality</u>: See Section VI for a detailed analysis.
- 4. <u>Biological Resources</u>: See Section VI for a detailed analysis.
- 5. <u>Cultural Resources</u>: See Section VI for a detailed analysis.
- 6. <u>Geology/Soils</u>: See Section VI for a detailed analysis.
- 7. <u>Greenhouse Gas Emissions</u>: Construction associated with the project involved the transport of construction materials and workers, as well as grading associated with the installation of the Hilfiker wall and arroyo improvements. Vehicles and equipment use related to the project did generate greenhouse gas (GHG) emissions, primarily in the form of carbon dioxide. However, these emissions were minor, temporary, short-term in nature, and did not have a significant impact on the environment. Consistent with state and Monterey County regulations, best management practices were employed to minimize emissions, further reducing this less than significant impact. Implementation of the project did not result in operational GHG emissions, as the project consists of a static retaining wall, drainage improvements, and riparian habitat and water flow restoration to an existing ephemeral drainage channel. Therefore, the proposed project did not conflict with applicable plans,

policies, or regulations adopted for the purpose of reducing GHG emissions. No impact occurred. (Reference IX: 1, 2, 3, 5)

- 8. <u>Hazards/Hazardous Materials</u>: The project did not involve the transportation or disposal of hazardous materials that would constitute a threat of explosion or other significant release which would have posed a threat to neighboring properties. The project site is not located within one-quarter mile of an existing or proposed school. The project site is not included on a list of hazardous materials sites, including the state's Cortese List. Additionally, the project site is located outside of the Monterey Regional Airport Master Plan planning area and is not in the vicinity of a private airstrip. The site location and scale had no impact on emergency response or emergency evacuation and continues to have no impact because it does not physically interfere with an emergency response plan. Therefore, the project has no impact to existing or proposed schools because there are no school sites in the vicinity of the project; is not located on a hazardous materials site; and would not affect an airport plan or create hazardous conditions as a result of its proximity to a private airstrip. No impact would occur. (Reference IX: 1, 2, 3)
- 9. <u>Hydrology/Water Quality</u>: See Section VI for a detailed analysis.
- 10. <u>Land Use/Planning</u>: The project, as implemented, did not physically divide an established community, nor did it conflict with any applicable land use plan, policy, or regulation of any agency with jurisdiction over the project adopted for the purpose of avoiding environmental effect. The project did not conflict with any applicable habitat conservation plan or natural community plan.

The property is zoned Rural Density Residential (RDR), which includes residential, public, recreational, and limited agricultural uses. The analysis identifies that the project has provided detailed information and protection measures and has been appropriately designed and sited to be consistent with the Monterey County General Plan, the Big Sur Coast Land Use Plan, and Title 20 of the Monterey County Zoning Ordinance. Therefore, the project did not have an impact on land use and planning. (Reference IX: 1, 2, 3, 4)

- 11. <u>Mineral Resources</u>: According to County resource maps, no mineral resources had been identified on the project site or would be affected by the project. County resources maps have not changed since the implementation of this project and no mineral resource are currently associated with this parcel. Therefore, the proposed project had no impacts on mineral resources. (Reference IX: 1, 2, 3)
- 12. <u>Noise</u>: Operation of the Hilfiker retention wall and drainage components did not and do not generate noise. The retaining wall and drainage components are static structures that do not generate noise. Moreover, wave run-up on the coastal bluff on the western portions of the project site dominates the ambient noise found on the project site and in the vicinity. The only noise-generating component of the project occurred during the construction phases. The project is flanked by low-density residential uses to the north and to the south, the Pacific Ocean immediately west, Aurora del Mar, Highway 1 and open space to the east.

Noise was generated with construction of the project. Construction activities involved transport of construction materials to construct the Hilfiker wall, pipes to create the subsurface drainage system, concrete and other materials, fill, etc. and workers as well as excavation and

use of moveable equipment. In compliance with the County Noise Ordinance, noisegenerating construction activities were limited to the hours between 8 a.m. and 4:30 p.m. Monday through Friday. Furthermore, construction activities were for a limited time and did not significantly impact adjacent properties. The restriction of construction hours ensured that the project was consistent with noise standards. Lastly, no noise complaints or other complaints were received by County offices regarding noise or construction activity from this site. Therefore, the noise generated in association with the project had no impact to surrounding properties. (Reference IX: 1, 2, 3, 6)

- 13. <u>Population/Housing</u>: The proposed project did not induce population growth in the area, nor did it displace structures or people due to construction. The use of the site as a single-family residential use did not change with implementation of the Hilfiker wall, the drainage improvements, or restoration of the riparian habitat. The property continues to be a single-family residence within a neighborhood of single-family residences. Therefore, the proposed project did not impact population and housing. (Reference IX: 1, 2, 3, 4, 6)
- 14. <u>Public Services</u>: The project did not have any impacts on public services, as there was no change in the use or intensification of use of the project site from the existing single-family residential use. The project did not have any substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objective. Therefore, the project had no impact to public services. (Reference IX: 1, 2, 3, 4, 6)
- 15. <u>Recreation</u>: The implemented project consisted of a Hilfiker retaining wall, storm water drainage improvements and habitat restoration, and did not create additional or new demands for recreational facilities or involve either the use or construction of new recreational facilities. Therefore, there were no impacts to recreation facilities or services. (Reference IX: 1, 2, 3, 4, 6)
- 16. <u>Transportation/Traffic</u>: Potential impacts from vehicular traffic related to the project were related only to temporary traffic generated during construction activities. The impacts associated with construction activities were not considered significant given the temporary nature and minimal number of trips to and from the site. The project was reviewed by RMA-Public Works, and it had been determined not to create significant impacts to traffic or transportation in the area and to be consistent with the Big Sur Coast Land Use Plan. Therefore, the project had no transportation/traffic impacts. (Reference IX: 1, 2, 3, 4, 6)
- 17. <u>Utilities/Service Systems</u>: The constructed Hilfiker retaining wall and accompanying drainage facilities did not require wastewater treatment or additional water supply. Construction at the site involved the installation of a Hilfiker retaining wall, installation of subterranean storm drainage culverts to create drainage improvements to the arroyo bottom, and habitat restoration; some vegetative materials were removed to construct improvements a mix of native and non-native plants, and thick underbrush dominated by poison oak. No soils were exported from the site; hence, existing landfill capacity was sufficient to accommodate any

construction debris that could not be recycled. Therefore, the project did not impact utilities and service systems. (Reference IX: 1, 2, 3, 4, 6)

B. DETERMINATION

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- □ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

R. Craig Smith

12/23/2019

Date

Associate Planner

V. EVALUATION OF ENVIRONMENTAL IMPACTS

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on project-specific screening analysis).
- 2) All answers must take into account 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 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 Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a

previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

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

VI. ENVIRONMENTAL CHECKLIST

1. Exce 2109	AESTHETICS opt as provided in the Public Resources Code Section 9, would the project, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Have a substantial adverse effect on a scenic vista? (Source:)				\boxtimes
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? (Source:				\boxtimes
c)	Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? (Source 1, 2, 3 & 7)				
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? (Source:)				\boxtimes

Discussion:

Implementation of the proposed project included the construction of a 135 lineal foot Hilfiker retaining wall with a maximum height of 30 feet along the northern bank of an arroyo to repair and stabilize the foundation of the existing residence, and habitat restoration of the arroyo with native coastal riparian plant species. The Hilfiker retaining wall, the arroyo bank, and the drainage channel were replanted with locally sourced, habitat-appropriate, native species, which included a mixture of perennial flowers, grasses, willow, hedge nettle, and mugwort in order to restore the riparian habitat. The prominent visual element on the project site that remains is the existing Otter House, which is not visible from any public viewing area. Exterior flood lights that illuminated the arroyo and wave runup at the toe of the bluff were removed from the residence's exterior walls as part of this project.

1 (c). Conclusion: Less Than Significant Impact.

The Hilfiker wall was planted with native, riparian plants and the plants have matured, masking the wall. The wall appears to be vegetated arroyo bank as seen from private property located on the south bank of the arroyo. Furthermore, views from Highway 1 were not altered from the existing views; the project site is not visible from Highway 1 because of topography and, more importantly, screening by vegetation located between Highway 1 and the project site. The project included removal of some plant materials within the arroyo, characterized as bushy plants – both native and non-native - and poison oak so that equipment could access the project location. There are no rocks, outcroppings, or historic buildings within the viewshed of Highway 1 in the vicinity, hence none of these features were destroyed by the flood event of 2009 or in association with the project. The restoration efforts implemented in the project serve to enhance the scenic qualities of

the Big Sur coast through careful site design, and landscaping control - riparian habitat restoration of the arroyo and coastal scrub restoration for the arroyo banks. Furthermore, the scenic easement in which the arroyo is currently located remains in place with implementation of the project. As such, there were no adverse impacts to scenic resources either on or off-site and there continues to be no visual impacts as a result of the development, thus impacts would be less than significant.

1 (a), (b) and (d). Conclusion: No Impact.

The existing arroyo channel is approximately 22-25 feet below the grade of the existing residential dwelling, Otter House. The project site is approximately 10 feet below the Highway 1 road grade; the project site is not visible from Highway 1 because of topography, spatial distance and existing vegetative screening consisting of Gowen cypress and other dense-foliage plants and grasses. Furthermore, the remaining woody brush habitat located in the eastern reaches of the arroyo, adjacent to the western edge of Aurora del Mar was left intact and further screens the arroyo and the Hilfiker wall. The project does not generate sources of light and/or glare. There is no exterior lighting incorporated into the project.

2. AGRICULTURAL AND FOREST RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forestland, 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.

Wou	ld the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use? (Source: 1, 2, 3)				
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract? (Source: 1, 2, 3)				\boxtimes
c)	Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? (Source: 1, 2, 3)				
d)	Result in the loss of forestland or conversion of forestland to non-forest use? (Source: 1, 2, 3)				\boxtimes

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		Less Than Significant		
Would the project:	Potentially Significant Impact	Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forestland to non-forest use? (Source: 1 2, 3)	,			\boxtimes

Discussion/Conclusion/Mitigation

See previous Sections II.B (Project Description) and C (Environmental Setting), and Section IV.A (Environmental Factors Potentially Affected), as well as the sources referenced.

3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

Wo	uld the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan? (Source: 1, 2, 3, 5, & 6)				\boxtimes
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is considered as nonattainment under an applicable federal or state ambient air quality standard? (Source: 1, 2, 3, 5, & 6)			\boxtimes	
c)	Result in significant construction-related air quality impacts? (Source: 1, 2, 3, 5, & 6)			\boxtimes	
d)	Expose sensitive receptors to substantial pollutant concentrations? (Source: 1, 2, 3, 5, & 6)			\boxtimes	
e)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? (Source: 1, 2, 3, 5, & 6)				\boxtimes

Discussion

The California Air Resources Board (CARB) coordinates and oversees both state and federal air quality control programs in California. The subject property is located in the North Central Coast Air Basin (NCCAB), which is under the jurisdiction of the Monterey Bay Air Resources District (MBARD). The MBARD is responsible for producing a management plan that reports air quality and regulates stationary sources throughout the NCCAB. In this case, it included the 1991 AQMP and the 2009-2011 Triennial Plan Revision (Source 19). Monterey County is within the federal and state attainment standards for carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), lead, and fine particulates (PM_{2.5}), and within the federal attainment standards for State standards, the more stringent standard for particulates). The 1991 Air Quality Management Plan (AQMP) addresses only attainment of the State zone standard.

3(a), and (e). Conclusion: No Impact.

The Project included the construction of a Hilfiker retaining wall, storm drain culverts, and habitat restoration on a lot developed in 1984 with a single-family dwelling. The project did not result in a population increase not already accounted for in the 2008 *Regional Growth Forecast* adopted by the Associate of Monterey Bay Area Governments. The Project included the temporary use of vehicles and construction equipment through the duration of the construction of the Hilfiker wall and storm drain improvements; however, emissions from these sources had been accounted for in the AQMP. Therefore, the Project had no impact caused by conflict or obstruction of the AQMP. The construction of the Project likely produced temporary odors during construction (equipment fumes from internal combustion engines), but the project incorporated Best Management Practices (BMPs) to control dust and runoff. Regardless, the historical and continued long-term residential use, the Project's operational component, does not result in uses or activities that produce sustaining objectionable odors that would affect a substantial number of people.

3 (b), (c) and (d). Conclusion: Less Than Significant Impact.

The NCCAB was in nonattainment status of state standards for Ozone (O₃) and respirable particulates (PM_{10}) (Source 5). Therefore, projects resulting in a substantial increase in particulates PM_{10} emissions would cause a significant impact to air quality. In addition, ambient ozone levels depend largely on the number of precursors, nitrogen oxide (NO_x) and reactive organic gases (ROG) emitted into the atmosphere. Implementation of the project resulted in temporary impacts resulting from construction and grading activities caused by dust generation and fuel combustion of construction vehicles (major sources of primary PM_{10}) and NO_x and ROG emittance.

Earth disturbance was limited to grading - excavation and fill - required to install the Hilfiker wall and subterranean storm drain system (approximately 550 cubic yards of cut (excavation) and approximately 350 cubic yards of fill – imported soil); total grading activities for site preparation account for approximately 890 cubic yards on a 47,916-sq. ft. (1.1 acre) lot. No soils were mechanically exported from the site. The proposed earth movement is well below the 2.2 acres of disturbance threshold established by the CEQA Air Quality Guidelines (Source 5). Therefore, this analysis is based on the assumption of the worst-case-scenario where all soils associated with a 2.2-acre grading project would have been hauled offsite. The project had been reviewed by the Grading Division of the Monterey County Building Services Department. In accordance with the regulations contained in Monterey County Code Chapter 16.12, Conditions of Approval were incorporated into the Emergency Permit, PLN10094, that required that the project comply with all aspects of County ordinances as they relate to the project, including the stabilization of disturbed areas and implementation of temporary erosion and sediment control measures (Sheet C-6) as depicted on approved plans dated January 11, 2011.

Grading-related air quality impacts, notably particulates, were controlled by implementing the above-mentioned conditions. Therefore, implementation of the project resulted in less than significant impacts to air quality caused by pollutants currently in nonattainment for NCCAB and construction-related activities. Air pollutants increased temporarily and returned to base-line conditions after the project was completed. Therefore, impacts due to exposure of sensitive receptors to pollutant concentrations were less than significant.

4.	BIOLOGICAL RESOURCES		Less Than		
W	ould the project:	Potentially Significant Impact	Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? (Source: 1, 3, 14, 15 & 16)				
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service? (Source: 1, 3, 14, 15 & 16)				
c)	Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? (Source: 1, 3, 14, 15 & 16)				
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? (Source: 1, 3, 14, 15 & 16)				
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (Source: 1, 3, 14, 15 & 16)				
f)	Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan? (Source: 1, 3, 14, 15 & 16)			\boxtimes	

Discussion:

Data for this section was taken from the biological surveys of the project site that were conducted over several months in 2010, and in March 2011. Surveys conducted prior to grading in March 2009 and February 2010 (Ballerini) established base-line conditions of the site after the erosion damage but prior to grading activities. These site visits coincide with a majority of the blooming periods of special-status plants that had the potential to occur on the property and migratory or seasonal occurrence of wildlife. Post-grading observations were made in April 2010, May 2010, and June 2010 (Balleini) to observe any special-status or sensitive plant blooms, to establish postgrading conditions and to design a habitat restoration plan. A supplemental biological assessment was conducted during March 2011 to observe plant communities present on the site, to determine if existing conditions were suitable habitat for any special-status plants or wildlife species, and to determine if any sensitive habitats were present (Slavaggio, WRA, August 2011). A 2011 search of the California Natural Diversity Database (CNDDB) records and the California Native Plant Society (CNPS) database also documented that 55 special-status plant species occur in the vicinity of the project area. Lastly, the current project biologist, John Wandke of Rana Creek, notes that site inspections conducted by Rana Creek staff over the last seven (7) to eight (8) years confirm that the disturbed areas were restored according to the landscape plan of 2011 (LIB190153). Wandke notes that the restoration has matured accordingly, providing coverage over approximately 80 percent of the project area and that there are no indications of erosion within the area of restoration or within the project area. Wandke observed that native plants not on the landscape plan have recruited to the site, a typical and desirable occurrence at restoration sites. Wandke continues that there are limited occurrences of non-native plants within the project area but in lower concentrations on some of the neighboring properties. The property owner has, under the guidance of Rana Creek, performed manual weed removal within the habitat restoration area, including Spring 2018, that targeted black mustard and poison hemlock. The result is a restored riparian and coastal upland habitat that exhibits diversity, is robust, and not prone to high density weed invasion.

Riparian habitats are sensitive communities and considered by the Coastal Act as environmentally sensitive habitat areas (ESHA). Emergency repairs and site alterations conducted in July 2010 impacted southern portions of the property, within the arroyo. The extent of resultant impacts was limited primarily to willow riparian habitat, the dense poison oak understory, the invasive nonnative ngaio tree (*Myoporum laetum*), other non-native plant communities such as Hottentot fig (ice plant) and pride of Madeira. The majority of coastal scrub and coastal bluff scrub communities are farther to the west of the limit of grading. Of the 55 special-status plants known to occur in the vicinity of the property, none are known to occur in willow riparian habitat. Surveys of unimpacted portions of the riparian habitat in 2011 (upstream of the impacted area) resulted in finding no special-status plant species. The willow canopy and poison oak understory within this area was dense, and only three plant species were observed in the limited light conditions in the Those included common ladyfern (Athyrium filix-femina), coastal hedge nettle understory. (Stachys chamissonis), and watercress (Nasturtium officinale), none of which are sensitive or special-status plants. The likelihood that sensitive plants were impacted in the grading area was very low given the low diversity present in the riparian understory at the time of the construction activity.

4 (a), (b), & (c). Conclusion: Less Than Significant Impact with Mitigation Incorporated.

Vegetation communities within the Otter House property included coastal scrub and limited riparian habitat, along with landscaped and unvegetated eroded areas. Observed species within the channel on the project site included arroyo willows (*Salix lasiolepis*) and poison oak (*Toxicodendron diversilobum*). In addition, invasive non-native species were interspersed throughout the project site including Hottentot fig (ice plant) (*Carpobrotus edulis*), ngaio tree (*Myoporum laetum*), pride of Madeira (*Echium fastuosum*), and others. Mixed coastal scrub species were identified on the west section of the drainage channel at the end of the willow grouping, including California sagebrush (*Artemisia californica*), coyote brush (*Baccharis pilularis*), beach aster (*Corethrogyne filanginfolia*), sea lettuce (*Dudleya farinose*), and seaside daisy (*Erigeron glaucus*), seaside buckwheat (*Eriogonum latifolium*), and thrift seapink (*Armeria maritima*).

The work area for the completed restoration efforts did not impact special-status vegetation communities or species, as the designated area had already been impacted and modified in part by the presence of non-native plant communities and the high-water flows and flooding within the arroyo. The high-water flows and flooding caused the erosion and collapse of the northern portions of the arroyo that created the emergency situation. In addition to replanting the arroyo with native riparian habitat, the applicant designed the inlet system connecting to the culverts in such a way to allow normal seasonal surface flows, up to a two-year storm event, to support the restored arroyo riparian habitat. In addition, the project included the rock and concrete weirs that are flush with the arroyo bottom and serve to stepdown the elevation of the arroyo in a way that promotes natural surface flows and reduce flow velocity within the arroyo. (refer to Section IV.9, Hydrology and Water Quality, for more details regarding the designed inlet).



Figure 3

Allowing low-flow volumes, up to a two-year storm event, in the drainage channel and replanting the channel bed, the channel banks, and the Hilfiker wall with native species has improved the riparian and coastal bluff scrub habitats compared to the conditions that existed prior to the high-flow event that scoured the banks of the arroyo. **Figure 3** above shows the arroyo bottom and a

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weir with water flowing in the April 2019 photograph. **Figure 4** below shows surface water flow and the restored habitat of the arroyo during April 2019.



Figure 4

The Ballerini biological analysis contained five (5) mitigation measures that would lead to a restoration of the arroyo habitat. Those mitigations are described in detail below. Implementation of mitigation measures MM 4-1 through MM 4-5 would ensure that the restoration efforts would result in a viable riparian community featuring willow, similar to that which existed prior to the grading work, and other riparian plants indicative to a riparian habitat, including but not limited to mugwort, and miner's lettuce. The restoration efforts were designed to also improve water quality by reducing sedimentation impacts. The applicant implemented the mitigation measures after the conclusion of the grading activities. Fred Ballerina supervised the planting of the restoration plantings. The installation of the plants occurred in the Fall and included a temporary on-grade irrigation system (spray) and used for two (2) years to encourage the survival and establishment of the native plantings. The temporary irrigation system was removed after the two (2) year period. Current conditions of the arroyo confirm that the mitigation measures were implemented. The plant stakes and irrigation still remain from the restoration efforts and will be removed as a condition of approval of the follow-up Coastal Development Permit. Mitigation measures MM 4-1 through MM 4-5 have been implemented as designed and confirmed by the current biological consultant, John Wandke of Rana Creek Habitat Restoration. With mitigation already incorporated the impact is less than significant.

4 (d). Conclusion: Less Than Significant Impact.

The wildlife species analysis included surveys for several special-status wildlife species occurring within the northern vicinity of the Soberanes Quadrangle, including California red-legged frog (*Rana aurora draytonii*), black legless lizard (*Anniella pulchra nigra*), monarch butterfly (*Danaus plexippus*), and Smith's blue butterfly (*Euphilotes enoptes smithi*). No individual state or federally listed plants or wildlife were identified on the site at the time the surveys were conducted. Seaside buckwheat is the host species for the Smith's blue butterfly and is located on the site in limited circumstances; however, no butterflies were observed during the surveys. The project site is not located within a migratory wildlife corridor or a wildlife nursery. Buckwheat plants have been

incorporated in restoration efforts improving potential butterfly habitat from preconstruction conditions. Therefore, this impact would be less than significant.

4 (e). Conclusion: Less Than Significant Impact.

As previously noted, the grading work performed under the emergency permit resulted in the removal of willow trees from the arroyo bottom and coastal scrub from the channel banks. The restoration work performed in conjunction with the CDP included replanting of arroyo willow and other native riparian vegetation within the channel bed and coastal scrub communities within the arroyo banks, in accordance with Policy 3.3.3.A.3 and Policy 3.3.3.A.4 of the Big Sur Coast Land Use Plan. Additionally, the identified mitigation measures MM 4-1 through MM 4-5 were implemented in a way that created a natural, riparian habitat that included the removal of non-native invasive species previously found in the arroyo.

4 (f). Conclusion: Less Than Significant Impact.

Section 20.145.040 of the Big Sur Coastal Implementation Plan (Part 3) defines the arroyo as environmentally sensitive due to the arroyo willow and riparian habitat. The CIP provides Environmentally Sensitive Habitat Development Standards for development in such areas. Section 3.3 of the Big Sur Land Use Plan defines environmentally sensitive habitats and provides policies pertaining thereto. The Biological Report (Ballerini, 2010) provides mitigation measures requiring the removal of non-native and sometimes invasive habitat and the replacement of removed native habitat, as well as the riparian and coastal bluff habitat to ensure that the disruption of environmentally sensitive habitat is not significant. The restoration efforts were designed to return the habitat to a riparian habitat featuring willow and coastal scrub communities that would occur naturally, including the removal of non-native plant communities. The result is a native riparian plant and coastal scrub plant communities that are superior to what existed prior to the erosion event and grading relating to the repairs of the bank and construction of the Hilfiker wall. The mitigation measures as crafted by Bellerini (provided below) ensured that the project was consistent with Policy 3.3.2.1 of the Big Sur Coast Land Use Plan, that the development did not disturb the habitat in a significant way.

The following Mitigation Measures were implemented prior to the benefit of a follow-up Combined Development Permit. Evidence that the measures were followed is substantiated by the current biological summary report based on observations conducted in April 2019, and photographs taken on site visits in August 2018 during dry time of the year, and April 2019 after several weeks of rain. The April site visit observed that surface water was visibly flowing within the arroyo and that the arroyo is populated with native riparian habitat, including the willow, and that the arroyo banks were characterized by coastal scrub plant communities. Notably absent was the thick outcropping of poison oak, allowing other forms of riparian plant communities to establish a more robust and diverse native riparian habitat. (Figure 4)

Mitigation Measures

MM 4-1 Preconstruction BMPs

The following construction best management practices shall be required for the plant establishment phase of the revegetation project:

a. Installation crews shall be trained in recognizing the coastal scrub plant community in order to avoid further impacts.

b. Installation crews shall be instructed in the appropriate methods for entering, exiting, and working within the revegetation site to ensure the surrounding coastal scrub habitat is not adversely impacted.

MM 4-2 Erosion Control

- a. Prior to final grading, all construction debris shall be removed and construction activities completed in the areas to be treated with native seed mix and native plantings.
- b. Final grading shall consist of a roughened condition, perpendicular to the slope, in order to augment seed germination and soil stabilization. Any on-site stockpiled soil shall be spread over disturbed areas prior to seeding activities to provide suitable medium for vegetation establishment and growth.
- c. Erosion control blankets shall be installed, per manufacturers' instructions, on all disturbed, exposed soils within the drainage channel. A 100 percent biodegradable, all-natural coconut fiber, 3- to 5-year blanket shall be used to effectively reduce soil, wind erosion, and sediment delivery off-site.

MM 4-3 Invasive Species

Several invasive species exist outside of the restoration area and should be prevented from migrating into the restoration area. The following shall be implemented during construction to ensure that an adverse impacts from invasive species do not occur:

- a. All invasive species shall be removed by utilizing hand removal techniques. All hand-removed invasive plant material shall be bagged, removed from the project site, and disposed of in a green waste facility.
- b. All invasive species shall be removed prior to the native plants setting seed.
- c. Invasive species control and monitoring shall be carried out during the geminating months for the duration of the revegetation monitoring, for a minimum of 2 years. Periodic monitoring site visits will be necessary in order to execute timing, frequency, and intensity of invasive species management techniques.

MM 4-4 Irrigation

Seeding and planting activity shall be conducted in the late fall months to take advantage of seasonal rains. Plantings shall occur after the first significant seasonal rain event. If fall/winter planting is not completed, a temporary (2-year) supplemental irrigation system shall be installed prior to planting to aid in the establishment of new plants.

MM 4-5 Revegetation

Native site-specific seed of coastal scrub species shall be collected from the project site during the summer months as seed becomes viable for collection. Native seed mix shall be used as seeding stock for contract-grown restoration plants. Extra seed should be hand-broadcasted on all bare soils within the restoration site. Seed should be lightly raked and incorporated into the soil. Initial hand watering of the seed area will assist in securing seed-to-soil contact.

Seeding activities shall be conducted in the fall after the first substantial seasonal rain event.

Revegetation of native plants shall occur in all disturbed soils. Plant materials shall be contract grown by a reputable local restoration nursery using site-specific seed and cuttings from existing coastal scrub and riparian species. Plant materials shall be installed in the fall months after the initial seasonal rains, when soil moisture levels have reached a minimum depth of 4 inches. Prior to planting, a biological monitor, approved by the County, shall lay out plant locations to simulate natural plant community conditions. The following list includes those species identified as plant species suitable and adapted to the environmental conditions of the Otter House restoration area:

• Achillea millefolium

• Artemisia californica

- Castilleja latifolia
- *Corethrogyne filanginfolia*

• Erigeron glaucus

- Eriogonum parvifolium
- Eriphyllum staechadifolium
- Iris douglasiana
- Salix lasiolepis
- Salvia mellifera

yarrow California sagebrush Indian paintbrush beach aster seaside daisy sea cliff buckwheat lizard tail Douglas iris arroyo willow black sage

All revegetation stock shall be watered prior to and after installation. Installation shall occur in the fall months to coincide with the seasonal rains. Complete weed control shall be maintained at the base of each plant at a minimum of 2 feet diameter around the plant base. To ensure the success of the revegetation, the plantings shall be monitored twice a year for 2 years by a qualified biologist.

5.	CULTURAL RESOURCES		Less Than Significant		
		Potentially	Impact With	Less Than	
		Significant	Mitigation	Significant	No
W	ould the project:	Impact	Incorporated	Impact	Impact
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5? (Source: 1, 2, 3, 4, 7, 8, 9, 10, 11, 12, & 13)				
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5? (Source: 1, 2, 3, 4, 7, 8, 9, 10, 11, 12, & 13)		\boxtimes		
c)	Disturb any human remains, including those interred outside of formal cemeteries? (Source: 1, 2, 3, 4, 7, 8, 9, 10, 11, 12, & 13)		\boxtimes		

Discussion:

The data for this section comes from the preliminary cultural resources reconnaissance that was prepared for the project site in December 2010, as part of the CDP application (Morley, LIB110012). A site record search was conducted through the Northwest Regional Information Center in Rohnert Park. Prior to the Morley reconnaissance, there were five (5) archaeological studies prepared for this site, the first dating to 1973 (Howard, LIB110044), which addressed the entire Otter Cove subdivision of 17 separate lots. The Howard study noted that 11 sites within the subdivision contained cultural artifacts, this suggested the area was used as a food harvesting / processing site but not as a permanent village. The report concluded that further archaeological investigation prior to development were warranted on the 11 affected lots. The site subject to this Initial Study was identified as a site that contained midden, is a site of significance, and contains a recorded archaeological site, CA-MNT-438. Subsequent to the Howard report, several archaeological studies had been conducted on the project site, all associated with construction of the otter residence on site with the exception of the 2010 Morely report:

1978. Dr. Gary Breschini conducted a reconnaissance of the site (LIB110038) and noted the presence of small surface quantities of scattered shell, small amount of fire-cracked rock and greasy soils, or midden. This Breschini reconnaissance also included subsurface observations using a six-inch hand auger that resulted in only small amounts of unnamed materials. Breschini concluded that the artifacts located on the subject parcel, lot 6, were scattered materials and indicated the periphery of the main site located off the project site.

1980. A subsurface archaeological reconnaissance was conducted by George Brook-Kothlow (LIB110039). This study included two (2) 1 x 1 meter excavation units on the subject site, excavating to depths of 60 cm and 40 cm, respectively, the point where (sterile) soils were encountered. The results of this survey produced small quantities of shell and stone materials with the archaeologist noting that the density of the materials recovered were much lower than densities associated with other coastal sites. None the less, the study concluded that there was potential to damage significant artifacts if construction were to take place on the property and that an archaeologist should be present on the site during excavation activities.

1981. Breschini once again conducted a reconnaissance on the site (LIB110040) to determine if any archaeological artifacts were damaged during construction activities that had begun on the site. This study identified a midden deposit at a depth of 75 cm that was discovered while trenching. Breschini determined that this midden layer was much older than other midden found in the vicinity and the peninsula in general. This report concluded that the archeological finds at such depths are unexpected and represent a significant increase in the knowledge of cultural history along this portion [Carmel Highlands] of the coast. The report recommended that an excavation unit of 1 x 2 meters be completed, and that construction should commence once the excavation is completed.

1983. An Archaeological Investigation was conducted in February 1983 by Robert Cartier of Archaeological Resource Management (LIB110041) after human remains – bone fragments – were found. The bone fragments were removed from the site, along with other materials recovered, and sent to a lab in Texas for radiocarbon dating. Radiocarbon dating placed the site between 3,500 - 5,000 years old, with the deeper portions of the discovery older than the discoveries located above at shallower depths. The bone fragments were dated to about 3,440 BC. Unfortunately, Cartier did not mention the depth at which the bone fragments were found, nor did Cartier disclose at

which depth the other artifacts were discovered. Per the Native American representatives and with permission from the property owner at the time, the remains were to be returned to the site and buried once construction had concluded. It is unknown if the remains were indeed returned and where they may have been buried. If the remains were deposited in the arroyo (an unlikely scenario) or on the banks of the arroyo, then there is a strong possibility that the remains were washed to the Pacific Ocean during the flooding and erosion episode of 2010. There is the possibility that any remains are still on site, buried under the fill material imported to the site and utilized in the repairs and restoration of the arroyo.

2010. Susan Morley conducted an archaeological reconnaissance on the site during September 2010 and December 2010 (LIB110012). She considers the site as a small village because of the quantity and variety of the archeological resources found, resulting in the artifacts and site being considered significant and suggests reconsidering the-up-to-then [1981] thoughts that all the artifacts (shell and stone fragments) being peripheral to the discoveries on adjacent lots. Morley suggests that the artifacts found on the subject site, represent an occupational site, a small village, occupied by several families. She proposed that the deeper midden presence indicates a long period of human habitation. Morley concluded that to mitigate emergency permit constructionrelated disturbance to archaeological resources to less than significant, that - if possible - a minimum of six (6) radiocarbon dates be recovered from the project parcel so that a more reliable chronology of the site can be developed to better understand the cultural history of the site. However, no cultural artifacts were recovered from the site during construction of the Hilfiker wall or improvements and restoration of the arroyo. Furthermore, staff has determined that there would be little chance of discovering any artifacts in the arroyo because of the level of disturbance both by the flood and erosion events and the construction activities associated with the repairs to the dwelling's foundation system, construction of the Hilfiker retaining wall, and the installation of the subterranean storm drain system. The project required the importation of approximately 350 cubic yards of soil material to complete the project; no soils were exported from the site. Soil removal was the result of flood and erosion activities and those soils were carried to the Pacific Ocean. If there are artifacts remaining in the arroyo, they would be under the fill imported to the site to implement the project.

5 (a). Conclusion: No Impact

See previous Sections II. B (Project Description) and C (Environmental Setting) and Section IV. A (Environmental Factors Potentially Affected), as well as the sources referenced.

5 (b) and (c). Conclusion: Less Than Significant Impact with Mitigation Incorporated

Archeological monitoring was conducted during excavation activities associated with the Otter House during 1982 and 1983. During this excavation of the site, significant resources were discovered. These include choppers, manos, chert and quartz lithics, the presence of many intertidal species (dietary), such as chiton, mussels (*Mytilus californicus*), red abalone (*Haliotis rufescens*), sea snails (*Tegula* spp.), barnacles (*Balanus* spp.), sea urchins (*Stronglocentrotu* spp.), and limpets (*Lottia* spp.). Midden accumulated to 120 centimeters (compared to 40 to 70 centimeters on a nearby lot) indicates a long period of human habitation in the form of a small village.

Subsequent to the emergency repair work, and in accordance with the proposed CDP, archaeological reconnaissance was conducted for the project site on September 23 and December

14, 2010, utilizing standard methods. The project site was subject to a physical inspection for evidence of historic and prehistoric cultural activities. Some prehistoric sites are occupational sites, while others may be quarries, workstations, milling stations, hunting stations, gathering places, or ideological sites that exhibit rock art or petroglyphs. The reconnaissance revealed the presence of cultural soils. Cultural materials noted during the 2010 surveys include chiton, mussels, and red abalone. These are the most common species reported by previous investigations. Lithics, ground stone, and heat-affected rock indicate cooking; the general nature of these artifacts defines the site as an occupation site, not a shellfish gathering site.

The archeological resources located at the Otter House property constitute an important and significant site, as it embodies unusual characteristics that are rare for coastal sites in Monterey County. The site continues to likely yield evidence and important information about an ancient time period in California prehistory about which little is known, and it potentially contains significant Native American resources and artifacts beneath the developed portions of the property and in the undeveloped southeastern portions of the site. As such, two (2) mitigation measures were recommended relating to the construction of the Hilfiker wall to ensure that any potential impacts to archeological resources remain less than significant. Mitigation measure MM 5-1 required that any if any resources were discovered that they be sent to a qualified lab for carbon dating to provide a more reliable chronology of the site, and that six (6) samples would be a minimum number of artifacts, "*should suitable materials be recovered*" [emphasis by Smith]. No artifacts or archaeological resources were encountered during the construction activity relating to the Hilfiker wall or subterranean drainage system; therefore, no resources were collected, or carbon dated.

Mitigation measure MM 5-2 recommended that the relatively natural portion of the arroyo, located along the southeastern portion of the project site, remain undeveloped to ensure that any undiscovered archeological resources are not adversely impacted. County RMA has conditioned the project to include a conservation easement over the southeastern portion of the site to ensure that no new development would occur there, thus avoiding any potential impacts to possible cultural and archaeological artifacts that may be located in that area of the lot.

Due to the presence of previously identified archeological resources as discussed above, the potential for significant impact to archaeological resources during restoration activities existed. It is also likely that the undisturbed portion of the arroyo, located in the southeastern portions of the parcel, contains additional cultural resources. The completed Hilfiker wall and repairs to the arroyo bottom and northern bank required extensive grading activities, including the importation of 350 cubic yards of soil and contouring the arroyo bottom in such a way as to accommodate surface flow of water to the ocean, and compaction of the soils in the bottom of the arroyo to help eliminate erosion and sediment deposits to Otter Cove. No artifacts were observed or recovered during these grading activities performed within the Emergency Permit. No further site disturbance was undertaken once the grading activities were completed. The grading activities were followed by restoration of the riparian habitat in the arroyo bottom and banks utilizing hand There are no plans for further construction activities or habitat restoration activities, tools. therefore, there is no opportunity to recover cultural artifacts for radiocarbon dating as recommended in the post-construction archaeological report and recommended Mitigation Measures. However, County RMA has conditioned the project to include a conservation easement over the southeastern portion of the site to ensure that no new development would occur there,

thus fulfilling MM 5-2 of the Morley recommendations. The implementation of this condition would avoid any potential impacts to possible cultural and archaeological artifacts that may be located in that area of the lot by blocking any kind of development that would disturb the soils.

Therefore, this impact was reduced to a less than significant level by ensuring appropriate examination, treatment, and protection of human remains, as required by law.

Mitigation Measures

MM 5-1 Archeological Resources Protection

Prior to any ground-disturbing activity, the project applicant shall retain a qualified archeologist to collect and process six samples of Native American artifacts from the archeological site and perform radiocarbon dating for use in developing a more accurate chronology of the site. The archeologist shall prepare a findings report and submit it to the California Register of Historical Resources.

MM 5-2 Archeological Resource Avoidance

The eastern portion of the site in the upper arroyo, where a thicket of willow and poison oak still exists, shall be protected. No work shall be performed within this boundary.

MM 5-3 Human Remains

In the event of the discovery of a burial, human bone, or suspected human bone, all excavation or grading in the vicinity of the find shall halt immediately, the area of the find shall be protected, and the project applicant shall immediately notify the Monterey County Coroner of the find and comply with the provisions of Public Resources Code Section 5097. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a Most Likely Descendent (MLD). The MLD shall complete the inspection of the site within 24 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Based on the cultural resource assessment and documentation, the project will have no impact on historic or paleontological resources (items a and c).

6. ENERGY	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No
Would the project:	Impact	Incorporated	Impact	Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? (Source: 1, 3, 7)				
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? (Source: 1, 3, 7)				\boxtimes

7. W	GEOLOGY AND SOILS ould the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Source: 1, 2, 3, 4, 6, 16, 18, 19, & 20) Refer to Division of Mines and Geology Special Publication 42.				
	ii) Strong seismic ground shaking? (Source: 1, 2, 3, 4, 6, 16, 18, 19, & 20)			\boxtimes	
	iii) Seismic-related ground failure, including liquefaction? (Source: 1, 2, 3, 4, 6, 16, 18, 19, & 20)			\boxtimes	
	iv) Landslides? (Source: 1, 2, 3, 4, 6, 16, 18, 19, & 20)			\boxtimes	
b)	Result in substantial soil erosion or the loss of topsoil? (Source: 1, 2, 3, 4, 6, 16, 18, 19, & 20)			\boxtimes	
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? (Source: 1, 2, 3, 4, 6, 16, 18, 19, & 20)			\boxtimes	

7. GEOLOGY AND SOILS Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Be located on expansive soil, as defined in Chapter 18A of the 2007 California Building Code, creating substantial direct or indirect risks to life or property? (Source: 1, 2, 3, 4, 6, 16, 18, 19, & 20)				
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? (Source: 1, 2, 3, 4, 6, 16, 18, 19, & 20)				\boxtimes
 f) Directly or indirectly destroy a paleontological resource or site or unique geologic feature? (Source 1, 2, 3, 4, 6, 16, 18, 19, & 20) 				\boxtimes

6 (a), (b), (c). Conclusion: Less Than Significant Impact.

Data for this section was taken from the geotechnical investigation and evaluations that were prepared for the project site as part of the CDP application. The project site is located within the Coast Ranges geomorphic province of California. Regional topography within the Coast Ranges province is characterized by northwest–southeast-trending mountain ridges and intervening valleys that were formed by compressive forces at the convergent boundary between the North American Plate and the Pacific Plate. Recent seismic activity within the Coast Range province is concentrated around the San Andreas Fault Zone, which is the defining structural feature of the province.

Regional geological mapping by the California Geological Survey indicates that the project site is underlain by Pleistocene-age marine terrace deposits. Terrace deposits commonly consist of poorly to moderately sorted, generally weakly indurated alluvial silts, clays, and sands, often with a basal gravel or cobble horizon. United States Geological Survey (USGS) mapping also indicates that the site is underlain by Cretaceous-age granite rocks of the Salinian Complex, overlain by older alluvium, consisting of poorly sorted soil and rock debris washed down from the adjacent mountains to the east.

Based on the site inspection and a review of reference reports, the project site is underlain by approximately 15 to 25 feet of poorly indurated silty sand terrace deposits, with hard, resistant granitic rocks exposed in the lower reaches of the arroyo channel and the lower portion of the coastal bluff. The primary geotechnical and geologic hazards that could result in significant impacts to the site are strong seismic ground shaking, lurching of the arroyo banks, and erosion of the arroyo banks and the slope on the upper portion of the coastal bluff. The following summarizes the geological hazards associated with the project site.

a). i). Fault Surface Rupture

The project site is not located within an Alquist-Priolo Special Studies Zone. The closest active faults are the Palo Colorado-San Gregorio Fault Zone, located 1.1 miles to the west, and the Monterey Bay-Tularcitos Fault Zone, located 7.9 miles to the east. Therefore, the potential for fault surface rupture is low, and this impact is considered less than significant.

ii). Seismic Ground Shaking

The project site is located in a seismically active area and could experience seismic ground shaking from future earthquakes in the San Francisco Bay and Central Coast regions. The San Gregorio fault presents the greatest potential for strong ground shaking at the project site due to its proximity. However, the existing Hilfiker wall system is stable under seismic conditions and would ensure that the effects of strong seismic ground shaking on arroyo banks or the Otter House is less than significant. No mitigation would be required.

iii). Liquefaction

The project site is underlain by 14 to 24 feet of marine terrace deposits and channel deposits, generally consisting of medium-dense to dense silty sand with lesser gravels and some large cobbles within the channel deposits. These dense soils are generally not prone to liquefaction, and as such, this impact is less than significant.

iv). Landsliding

Weak soils and bedrock on moderate to steep slopes can move downward due to gravity or in response to seismic events. The Otter House is situated on a moderate slope at the top of a steep coastal bluff. The arroyo banks have a high risk of instability due to the potential that supporting material could be removed by erosion or scour, which was the condition prior to the emergency permit work and installation of the Hilfiker wall system. The installation of the Hilfiker wall system on the western bluff face and southern sides of the arroyo that support the Otter House provide protection against instability of the upper portion of the bluff and the northern arroyo bank. Therefore, this impact is less than significant.

b). Erosion or Loss of Topsoil. Less Than Significant Impact.

The project site is located on a moderately sloping, west-facing hillside, adjacent to a deeply incised arroyo. The arroyo emanates from the steep ridge to the east of the site, at an elevation of approximately 1,200 feet, and discharges into the Pacific Ocean just southwest of the existing residence. At the Otter House site, the arroyo banks are incised up to approximately 25 feet deep. The relatively steep stream gradient and poorly indurated silty sand marine terrace deposits at the site create a highly erosive condition. The original emergency permit for the project was issued in order to allow mitigation of excessive erosion and resulting arroyo bank instability near the southern perimeter of the Otter House.

Installation of the Hilfiker wall system and the two subsurface, high-capacity drainage culverts, as well as restoration of the riparian habitat, has reduced the potential for significant erosion of the arroyo, including the arroyo bottom and the northern arroyo bank. The project included a subterranean storm drain system installed with the arroyo bottom and restoration of the arroyo channel to accommodate surface water flows of up to a two-year flow event. Flows in excess of a two-year flow event are diverted to the subterranean culverts. The arroyo bottom is contoured such that it drains naturally to the west and to the Pacific. Portions of the arroyo bottom include a coble bottom that aided in the establishment of a riparian habitat and created conditions that

reduced erosion and sedimentation of the coast that is part of the Monterey Bay Marine Sanctuary. The Hilfiker wall will also provide protection against erosion of the upper slope of the adjacent coastal bluff (refer to Section IV.9, Hydrology and Water Quality, for more details regarding stormwater flows). Therefore, this impact is less than significant.

c). Seismically Induced Ground Settlement; Lateral Spreading, Lurching, and Ground Cracking. Less Thank Significant Impact.

Seismic ground shaking can induce settlement of unsaturated, loose granular soils. Settlement can occur when loose soils are improperly compacted. Installation of the Hilfiker wall system included properly compacted fill material, both behind the wall and in the arroyo bottom, which serves to stabilize the Otter House. Therefore, this impact is less than significant.

Lurching and associated ground cracking can occur during strong ground shaking. The ground cracking generally occurs along the tops of slopes where stiff soils are underlain by soft deposits or along steep slopes or channel banks. The existing Otter House has minimal setback from the top of the northern arroyo bank; therefore, risk of damage from lurching or ground cracking exists. The Hilfiker wall system provides protection against lurching of the northern portions of the arroyo banks. The Hilfiker wall was developed with sufficiently deep foundations and properly engineered fill material in order to provide protection against lurching and ground cracking. Therefore, this impact is less than significant.

d), e & f) Expansive soils; soils incapable of supporting septic systems. No Impact.

There will be no impact with respect to expansive soils; expansive soils are not present in the arroyo or project site; fill materials were not expansive in nature. The project does not include a septic system, therefore there are no impacts relating to septic system functions. See previous Sections II. B (Project Description) and C (Environmental Setting) and Section IV. A (Environmental Factors Potentially Affected), as well as the sources referenced. Therefore, there are no impacts to the project relating to expansive soils.

8. W	GREENHOUSE GAS EMISSIONS ould the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? (Source: 1, 2, 3, 5, & 6)				
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (Source: 1, 2, 3, 5, & 6)			\boxtimes	

Discussion:

According to the United States Environmental Protection Agency (EPA), greenhouse gases (GHG) are emitted by natural processes and human activities such as electricity production, motor vehicle use, and agricultural uses. These gases trap heat in the atmosphere and the elevation of GHGs has led to a trend of unnatural warming of the earth's climate, otherwise known as the "greenhouse effect". In order to reduce the statewide level of GHG emissions, the State Legislature adopted

California Assembly Bill 32 (AB 32) California Global Warming Solutions Act of 2006. AB 32 established a comprehensive statewide program of regulatory and market mechanisms to achieve reductions in GHG emissions, thereby reducing the State's vulnerability to global climate change. The Monterey Bay Air Resources District (MBARD) is responsible for the monitoring of air quality and regulation of stationary and mobile sources throughout the North Central Coast Air Basin, where the proposed Project is located, by enforcing standards and regulating stationary and mobile sources through the 2008 Air Quality Management Plan for the Monterey Bay Region (AQMP) (Source 5) which evaluates a project's potential for a cumulative adverse impact on regional air quality (ozone levels).

8(a) & (b) Greenhouse Gas Emissions – Less than Significant Impact

Grading activities involving medium-duty equipment and vehicle use associated with this project were temporary. Operational elements of the project do not increase the baseline amount of GHGs emitted prior to implementation of the project. In other words, temporary construction and grading related to the construction of the Hilfiker wall and drainage improvements to the arroyo bottom did not induce a permeant increase of vehicle trips over what is existing or cause a permanent increase in the emission of carbon dioxide (CO₂) by fuel combustion. As described above, the project's temporary construction and permanent use emissions are below the applicable GHG significance thresholds established by CARB, and the MBUAPCD has no established GHG thresholds. The project did not conflict with any local or state GHG plans or goals. Therefore, the project would have a less than significant impact as it relates to GHGs (Source: IX. 1, 5).

9.	HAZARDS AND HAZARDOUS MATERIALS		Less Than Significant		
W	ould the project:	Potentially Significant Impact	Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (Source: 1, 2, 3)				
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? (Source: 1, 2, 3)				
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (Source: 1, 2, 3)				
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? (Source: 1, 2, 3)				

9. W	HAZARDS AND HAZARDOUS MATERIALS	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? (Source: 1, 2, 3)				
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (Source: 1, 2, 3)				\boxtimes
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires? (Source: 1, 2, 3)				\boxtimes

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10. Wo	HYDROLOGY AND WATER QUALITY ould the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality? (Source: 1, 2, 3, 7, 17, 18, 19, & 20)				\boxtimes
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? (Source: 1, 2, 3, 7, 17, 18, 19, & 20)				

10.	HYDROLOGY AND WATER QUALITY		Less Than Significant		
Wo	ould the project:	Potentially Significant Impact	Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
	i) result in substantial erosion or siltation on- or off- site? (Source: 1, 2, 3, 4 & 7)				
	ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite? (Source: 1, 2, 3, 4 & 7)		\boxtimes		
	iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? (Source: 1, 2, 3, 4 & 7)				
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? (Source: 1, 2, 3, 4 & 7)				\boxtimes
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? (Source: 1, 2, 3, 4 & 7)				\boxtimes

10 (a), (b), (d) & (e). Conclusion: No Impact.

See previous Sections II.B (Project Description) and C (Environmental Setting), and Section IV.A (Environmental Factors Potentially Affected), as well as the sources referenced.

10 (c) &. Less Than Significant Impact with Mitigation Incorporated.

The emergency repairs and site alterations conducted in July 2010 stabilized the northern arroyo sidewall. In addition to the retaining wall, the project applicant installed two (2) subterranean storm culverts of 16 inches and 14 inches in diameter within the arroyo bed, imported soils to replenish the soils lost during the flood event, and engineered the soil in such a way to stabilize the arroyo bed. Drainage improvements also included grouted rock weirs within the arroyo that accommodated a gradual elevation drop in the arroyo bottom as it traverses to the shoreline, thus slowing the velocity of storm water runoff discharging into the ocean. The drainage system also included a drainage inlet at the eastern reach of the arroyo that connects to the culverts but allows for surface flows of up to 10 cubic feet per second [cfs], a two-year storm event, to flow freely on the arroyo surface. Flow rates in excess of a two-year event are diverted to the culverts, which are capable of handling a 100-year storm event and discharged to the energy dissipater located on the bluff top, before draining into the Pacific. Storm water sources include the upper reaches of the arroyo, east of Highway 1, Highway 1 drainage and Aurora Del Mar drainage. The design is not an expansion of capacity but a management of existing capacity in such a manner that reduces the amount of erosion that may occur within the arroyo and resultant sedimentation of the shoreline

and marine sanctuary. The design reduces the amount of siltation in Otter Cove, thus water quality is improved as a result of the project.

11. LAND USE AND PLANNING Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community? (Source: 1, 2, 3)				\boxtimes
 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? (Source: 1, 2, 3) 				
c) Conflict with any applicable habitat conservation plan or natural community conservation plan? (Source: 1, 2, 3)				\boxtimes

Discussion/Conclusion/Mitigation:

See previous Sections II.B (Project Description) and C (Environmental Setting), and Section IV.A (Environmental Factors Potentially Affected), as well as the sources referenced.

12. MINERAL RESOURCES Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? (Source: 1, 2, 3)				
 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? (Source: 1, 2, 3) 				

Discussion/Conclusion/Mitigation:

13. NOISE Would the project result in:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in in the vicinity of the project excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? (Source: 1, 2, 3, 4, & 7)				
b) Generation of excessive groundborne vibration or groundborne noise levels? (Source: 1, 2, 3, 4, & 7)				\boxtimes
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? (Source: 1, 2, 3, 4, & 7)				\boxtimes

See previous Sections II.B (Project Description) and C (Environmental Setting), and Section IV.A (Environmental Factors Potentially Affected), as well as the sources referenced.

14. POPULATION AND HOUSING Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? (Source: 1, 2, 3, 4)				
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? (Source: 1, 2, 3, 4)				\boxtimes

Discussion/Conclusion/Mitigation:

15. Woul	PUBLIC SERVICES d the project result in:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Substa provis facilit facilit enviro servic object	antial adverse physical impacts associated with the sion of new or physically altered governmental ies, need for new or physically altered governmental ies, the construction of which could cause significant onmental impacts, in order to maintain acceptable e ratios, response times, or other performance tives for any of the public services:				
a)	Fire protection? (Source: 1, 2, 3, 4)				\boxtimes
b)	Police protection? (Source: 1, 2, 3, 4)				\boxtimes
c)	Schools? (Source: 1, 2, 3, 4)				\boxtimes
d)	Parks? (Source: 1, 2, 3, 4)				\boxtimes
e)	Other public facilities? (Source: 1, 2, 3, 4)				\boxtimes

See previous Sections II.B (Project Description) and C (Environmental Setting), and Section IV.A (Environmental Factors Potentially Affected), as well as the sources referenced.

16. RECREATION Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? (Source: 1, 2, 3, 4)				\boxtimes
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? (Source: 1, 2, 3, 4)				

Discussion/Conclusion/Mitigation:

17. TRANSPORTATION Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? (Source: 1, 2, 3, 4, &7)				\boxtimes
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? (Source: 1, 2, 3, 4, &7)				\boxtimes
 c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (Source: 1, 2, 3, 4, &7) 				
d) Result in inadequate emergency access? (Source: 1, 2, 3, 4, 6)				\boxtimes

18. TRIBAL CULTURAL RESOURCES Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
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) (Source: 1, 2, 3, 4, 7 &15); or				
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. (Source: 1, 2, 3, 4, 7 &15)				

The archeological resources located at the Otter House property constitute an important and significant site, as it embodies unusual characteristics that are rare for coastal sites in Monterey County. The site continues to likely yield evidence and important information about an ancient time period in California prehistory about which little is known, and it potentially contains significant Native American resources and artifacts beneath the developed portions of the property and in the undeveloped southeastern portions of the site.

18 (i). Conclusion: No Impact.

The subject property is not listed as a historical site in the California Register of Historical resources or the Monterey or the Monterey County Local Official Register of Historic Resources.

18 (ii). Conclusion: Less Than Significant with Mitigation Incorporated.

Due to the presence of previously identified archeological resources as discussed in Section 5, *Cultural Resources*, the potential for significant impact to archaeological resources during restoration activities existed. It is also likely that the undisturbed portion of the arroyo, located in the southeastern portions of the parcel, contains additional cultural resources. The completed Hilfiker wall and repairs to the arroyo bottom and northern bank required extensive grading activities, including the importation of 350 cubic yards of soil and contouring the arroyo bottom in such a way as to accommodate surface flow of water to the ocean, and compaction of the soils in the bottom of the arroyo to help eliminate erosion and sediment deposits to Otter Cove. There are no plans for further construction activities or habitat restoration activities. County RMA has conditioned the project to include a conservation easement over the southeastern portion of the site to ensure that no new development would occur there, thus fulfilling MM 5-2 of the Morley recommendations. The implementation of this condition would avoid any potential impacts to possible cultural and archaeological artifacts that may be located in that area of the lot by blocking any kind of development that would disturb the soils.

Therefore, this impact was reduced to a less than significant level by ensuring appropriate examination, treatment, and protection of human remains, as required by law.

19. UTILITIES A Would the project:	ND SERVICE SYSTEMS	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in wastewater treatmen facilities, the constr significant environr &7)	the construction of new water or nt facilities or expansion of existing uction of which could cause nental effects? (Source: 1, 2, 3, 4,				
 b) Have sufficient wat project and reasona during normal, dry 2, 3, 4, &7) 	er supplies available to serve the bly foreseeable future development and multiple dry years? (Source: 1,				\boxtimes

19. UTILITIES ANI	D SERVICE SYSTEMS		Less Than		
			Significant		
		Potentially	Impact With	Less Than	
		Significant	Mitigation	Significant	No
Would the project:		Impact	Incorporated	Impact	Impact
c) Result in a determinati provider which serves has adequate capacity demand in addition to commitments? (Source	on by the wastewater treatment or may serve the project that it to serve the project's projected the provider's existing x: 1, 2, 3, 4, &7				
 d) Generate solid waste in standards, or in excess infrastructure, or other solid waste reduction g 	n excess of State or local of the capacity of local wise impair the attainment of goals? (Source: 1, 2, 3, 4, &7)				
e) Comply with federal, s reduction statutes and a (Source: 1, 2, 3, 4, &7)	tate, and local management and regulations related to solid waste?				\boxtimes

20	WILDFIRE If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact		
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan? (Source: 1, 3, 4 & 6)				\boxtimes		
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? (Source: 1, 3, 4 & 6)						
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? (Source: 1, 3, 4 & 6)						
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? (Source: 1, 3, 4 & 6)				\boxtimes		
Discussion/Conclusion/Mitigation:							

VII. MANDATORY FINDINGS OF SIGNIFICANCE

NOTE: If there are significant environmental impacts which cannot be mitigated and no feasible project alternatives are available, then complete the mandatory findings of significance and attach to this initial study as an appendix. This is the first step for starting the environmental impact report (EIR) process.

Do	es the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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? (Source: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, & 20)				
b)	Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) (Source: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, & 20)				
c)	Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? (Source: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, & 20)				\boxtimes

Discussion/Conclusion/Mitigation

a) Less Than Significant Impact with Mitigation Incorporated. The project did not degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species or threaten to eliminate a plant or animal community. The arroyo contained a mix of native and non-native plants prior to the flood and erosion event that caused significant erosion to the arroyo bottom and northern bank. The project included the removal of this vegetation so that the work site could be accessed, and repairs made. The follow-up Coastal Development Permit application, as related to this study, included a habitat restoration plan that prescribed numerous native plants species, many of which were locally sourced stock. Once grading and repairs were completed, the arroyo bottom and sides were restored according to the landscape plan with native plants that are characteristic of a coastal drainage feature. Riparian habitat was restored within the arroyo bottom and coastal scrub and other upland coastal plant species were planted on the disturbed areas. Currently, the restoration efforts have become established and are in a healthy state. The existing riparian habitat and coastal scrub habitat are superior to the pre-

emergency conditions in that the plant community is more diverse and the presence of non-native plants is significantly lower than pre-emergency conditions.

The cultural resources analysis (see section VI.5 above) indicates that the site and the vicinity contains significant cultural, archaeological, or historical resources. The project site is located within the bounds of CA-MNT-438 archaeological site, which covers most of the Otter Cove subdivision. In this particular case, the project site contained (and continues to contain) significant archaeological resources that represent a time in California pre-history. Resources were disturbed when the residential dwelling was constructed in the 1980s. Artifacts were sent off-site for radiocarbon dating and then purported to have been returned to the site, though there is no documentation to substantiate this claim, or documentation as to where on the site the resources were deposited. It is unlikely that resources would have been placed in the arroyo or arroyo walls. No soils were mechanically exported from the site; approximately 350 cubic yards of soil were delivered to the site to complete the repairs described within this study. Regardless, the follow-up Coastal Development Permit is conditioned such that the southeastern portion of the property, largely undisturbed, is placed within a conservation easement. This easement was recommended as mitigation in the 2010 Morley archaeological survey.

b, c): No Impact.

The project did not result in cumulatively considerable impacts. The individual impacts for the project were less than significant and minimal. Further, there was no other development occurring in the area, and daily uses of the surrounding properties consist of coastal rural residential uses within a single-family residential setting. Therefore, there would be no cumulative impact as a result of development occurring in the vicinity of the project and the minimal nature of the proposed project. The neighborhood is not a migratory route for wildlife. The project would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or restrict the range of a rare or endangered plant or animal. Furthermore, the Project would not result in impacts to Agriculture and Forest Resources, Geology and Soils, Hydrology and Water Quality, and Mineral Resources. Implementation of the project, as proposed and conditioned, would not result in a considerable cumulative increase in development potential for the project site or the surrounding area.

Note: Authority cited: Sections 21083 and 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080(c), 21080.1, 21080.3, 21082.1, 21083, 21083.05, 21083.3, 21093, 21094, 21095, and 21151, Public Resources Code; Sundstrom v. County of Mendocino, (1988) 202 Cal.App.3d 296; Leonoff v. Monterey Board of Supervisors (1990) 222 Cal.App.3d 1337; Eureka Citizens for Responsible Govt. v. City of Eureka (2007) 147 Cal.App.4th 357; Protect the Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal.App.4th at 1109; San Franciscans Upholding the Downtown Plan v. City and County of San Francisco (2002) 102 Cal.App.4th 656.

VIII. FISH AND GAME ENVIRONMENTAL DOCUMENT FEES

Assessment of Fee:

The State Legislature, through the enactment of Senate Bill (SB) 1535, revoked the authority of lead agencies to determine that a project subject to CEQA review had a "de minimis" (minimal) effect on fish and wildlife resources under the jurisdiction of the Department of Fish and Game [now the Department of Fish and Wildlife]. Projects that were determined to have a de minimis effect were exempt from payment of the filing fees.

SB 1535 eliminated the provision for a determination of de minimis effect by the lead agency; consequently, all land development projects that are subject to environmental review are now subject to the filing fees, unless the Department of Fish and Game determines that the project will have no effect on fish and wildlife resources.

To be considered for determination of "no effect" on fish and wildlife resources, development applicants must submit a form requesting such determination to the Department of Fish and Game. Forms may be obtained by contacting the Department by telephone at (916) 631-0606 or through the Department's website at <u>www.dfg.ca.gov</u>.

Conclusion: The project will be required to pay the fee.

Evidence: Based on the record as a whole as embodied in the Planning Department files pertaining to PLN100396 and the attached Initial Study/Proposed Mitigated Negative Declaration.

IX. REFERENCES

- 1. Project Application/Plans (PLN100396).
- 2. Monterey County General Plan.
- 3. Big Sur Coast Land Use Plan.
- 4. Title 20/21 of the Monterey County Code (Zoning Ordinance).
- 5. CEQA Air Quality Guidelines, Monterey Bay Unified Air Pollution Control District, revised February 2008; 2008 Air Quality Management Plan Monterey Bay Unified Air Pollution Control District, dated August 2008; and Rule 402 Nuisance Monterey Bay Unified Air Pollution Control District, adopted September 1, 1968, revised August 21, 2002.
- 6. The 1991 AQMP and the 2009-2011 Triennial Plan Revision.
- 7. Site visit conducted by the project planner on April 18, 2014.
- 8. Preliminary Cultural Resources Reconnaissance of Assessor's Parcel Number 243-341-001, Lot 6, of the Carmel Sur Subdivision Otter Cove, south of Yankee Point, an unincorporated area in the County of Monterey, California. Prepared by Susan Morley M.A., December 2010.
- 9. Archeological Investigation of Lot 6, Tract 588, Carmel Sur Subdivision of Otter Cove, Monterey, County, CA. Prepared by Archaeological Resource Management, Robert Cartier, Principal, February 1983.
- 10. Archaeological Observations and Recommendations for CA-MNT-438, Located on Otter Cove Lot 6 Carmel Highlands, Monterey County, California. Prepared by Gary S. Breschini, December 1981.
- 11. Subsurface Archaeological Evaluation of Lot 6, Tract 5888, Carmel Sur Subdivision of Otter Cove. Prepared by Archaeological Resource Management, Robert Cartier, Principal, Barbara Bocek, Analyst, January 1980.
- 12. Preliminary Archaeological Reconnaissance of Lot 6, Tract 588, Carmel Subdivision, Otter Cove, Monterey County, California. Prepared by Gary S. Breschini, Trudy Haversat, Archaeological Consulting, June 1978.
- An Archaeological Reconnaissance of the Otter Cove Subdivision. Prepared by Donald M. Howard, September 1973.
- 14. Biological Resource Analysis of Phillip Raiser Residence, PLN 10094. Prepared by Fred Ballerini Horticultural Services, June 21, 2010.
- 15. Biological Resource Assessment: Supplemental Information for the Otter Residence. Prepared by WRA, Inc., August 2011.
- 16. Stream Restoration. Site inspection to verify restoration consistent with the 2011 WRA Landscape/Restoration Plan. Prepared by Rana Creek Design, John Wandke, biologist, May 30, 2019.

- 17. California Department of Fish and Wildlife Memorandum, Design for Corrective Actions to Unpermitted Work on an Unnamed Stream, Raiser Residence, Carmel Highlands, Monterey County, August 27, 2012.
- 18. Geotechnical Engineering Investigation for Proposed Arroyo Retaining Wall, Existing Raiser Residence, 30650 Aurora Del Mar, Otter Cove Carmel Highlands, Monterey County, California. Prepared by Haro Kasunich and Associates, Inc., September 2010.
- 19. Geologic and Geotechnical Evaluation, Otter House 30650 Aurora Del Mar, Carmel Highlands, California. Prepared by Miller Pacific Engineering Group, April 20, 2013.
- 20. Final Engineering Report & Construction Documents 04/15/2010 to 07/27/2010 for 30650 Aurora Del Mar, Otter Cove, Carmel Highlands, California. Grice Engineering, August 2010.