MITIGATED NEGATIVE DECLARATION

Marin County Environmental Review

Pursuant to Section 21000 et. seq. of the Public Resources Code and Marin County Environmental Impact Review Guidelines and Procedures, a Negative Declaration is hereby granted for the following project.

1. Project Name: Brian Johnson Trust Coastal Permit (P3049)

2. Location: 21 Calle Del Onda, Stinson Beach, Assessor Parcel Number 195-162-49.

3. Project Summary:

   The Applicant is proposing to construct a new 1,296 square foot house and associated septic system on a 15,200 square foot vacant lot located at 21 Calle del Onda in the unincorporated community of Stinson Beach. This subsequent Mitigated Negative Declaration follows a previous environmental review that was conducted for review of the septic system by the Stinson Beach County Water District in July 2020.

4. Project Sponsor: Brian Johnson Trust and Civic Knit

5. Finding:

   Based on the attached Initial Study and without a public hearing, it is my judgment that:

   ☐ The project will not have a significant effect on the environment.

   ☒ The significant effects of the project noted in the Initial Study attached have been mitigated by modifications to the project so that the potential adverse effects are reduced to a point where no significant effects would occur.

Rachel Reid

Date: 1/4/2023

Rachel Reid
Environmental Planning Manager

Based on the attached Initial Study, a Mitigated Negative Declaration is granted.

_____ Date: _____
Marin County Planning Commission

_____ Date: _____
Marin County Board of Supervisors

1. Mitigation Measures:

   ☐ No potential adverse impacts were identified; and therefore, no mitigation measures are required.

   ☒ Please refer to mitigation measures in the attached Initial Study.

   ☒ The potential adverse impacts have been found to be mitigable as noted under the following factors in the Initial Study attached.

   All of the mitigation measures for the impacts listed above have been incorporated into the project and are required as conditions of approval.

2. Preparation:
   This Mitigated Negative Declaration was prepared by Tammy Taylor, Senior Environmental Planner in coordination with Sicular Environmental Consulting and Natural Lands Management on behalf of the Marin County Community Development Agency - Planning Division. An electronic version is available for review on the County of Marin's webpage: https://www.marincounty.org/depts/cd/divisions/environmental-review.

   Upon request, a copy may be obtained at the address listed below.

   Marin County Community Development Agency
   Planning Division
   3501 Civic Center Drive, Suite 308
   San Rafael, CA 94903
   (415) 473-6269
   Monday-Thursday, 8:00 a.m. to 4:00 p.m. and Friday, 8:00 a.m. to 12:00 p.m.

JOHNSON TRUST COASTAL PERMIT

Supplemental Environmental Review and Subsequent Mitigated Negative Declaration

Prepared for:

Marin County Community Development Agency

By: **Sicular Environmental Consulting and Natural Lands Management**
in association with:
Sutro Science, LLC
Environmental Science Associates

January 2023

Sicular Environmental Consulting & Natural Lands Management
P.O. Box 582, Philo, CA 95466 www.sicularconsulting.com (415) 717-6328

This page intentionally left blank

JOHNSON TRUST COASTAL PERMIT

Supplemental Environmental Review and Subsequent Mitigated Negative Declaration

Prepared for:

Marin County Community Development Agency

By: **Sicular Environmental Consulting and Natural Lands Management**
in association with:
Sutro Science, LLC
Environmental Science Associates

January 2023

Sicular Environmental Consulting & Natural Lands Management
P.O. Box 582, Philo, CA 95466 www.sicularconsulting.com (415) 717-6328

This page intentionally left blank

TABLE OF CONTENTS

Tables

Figures

Appendix

CHAPTER 1
Project Description

1. Introduction and Background

The Marin County Community Development Agency has received an application from the Brian Johnson Trust for a Coastal Permit for construction of a new single-family dwelling (the "Project") at 21 Calle Del Onda, Stinson Beach (the "Project site") (Figures 1, 2, and 3). The Project Applicant (Applicant) is the property owner, Brian Johnson, Trustee for the Brian Johnson Trust. CivicKnit, a consulting firm, is the Applicant's representative.

The Project site is within the Coastal Zone, and therefore the proposed development requires a Coastal Permit, pursuant to the County's recently amended Local Coastal Plan (LCP) policies and regulations. Approval of a Coastal Permit is a discretionary action that may be appealed to the Marin County Board of Supervisors. The California Coastal Commission, a State agency, has final approval authority over projects in the Coastal Zone. Because it is a discretionary action, the Coastal Permit qualifies as a "project" under the California Environmental Quality Act (CEQA). CEQA is a California State law that requires environmental review of most projects that could result in impacts to the physical environment and are subject to discretionary approval by local or State agencies.

On July 18, 2020, the Stinson Beach County Water District (SBCWD) approved a variance for an onsite wastewater system (i.e., a septic system) on the Project site (SBCWD, 2020a). The system was designed by AYS Engineering Group, Inc. The variance authorized a reduction in the setback requirements from a water body, that is, the Pacific Ocean. As the variance qualified as a project under CEQA, SBCWD prepared an Initial Study (IS) to determine whether the variance would result in one or more significant environmental impacts (WRA, 2020). The IS determined that impacts could occur, but included mitigation measures to reduce all impacts to less than significant, and the Applicant agreed to incorporate the measures in his plans. Consequently, prior to approving the variance, SBCWD adopted a Mitigated Negative Declaration (MND) (SBCWD, 2020b).

The IS/MND focused on the wastewater system variance, but considered future development of a residence a reasonably foreseeable consequence of project approval. Therefore, construction of a residence was considered a part of the project, and included in the environmental analysis. As a design for the future residence had not yet been developed,[1] the IS/MND considered generally the potential impacts of construction of a residence, based on reasonable assumptions about scale, location within the parcel, and construction methods.

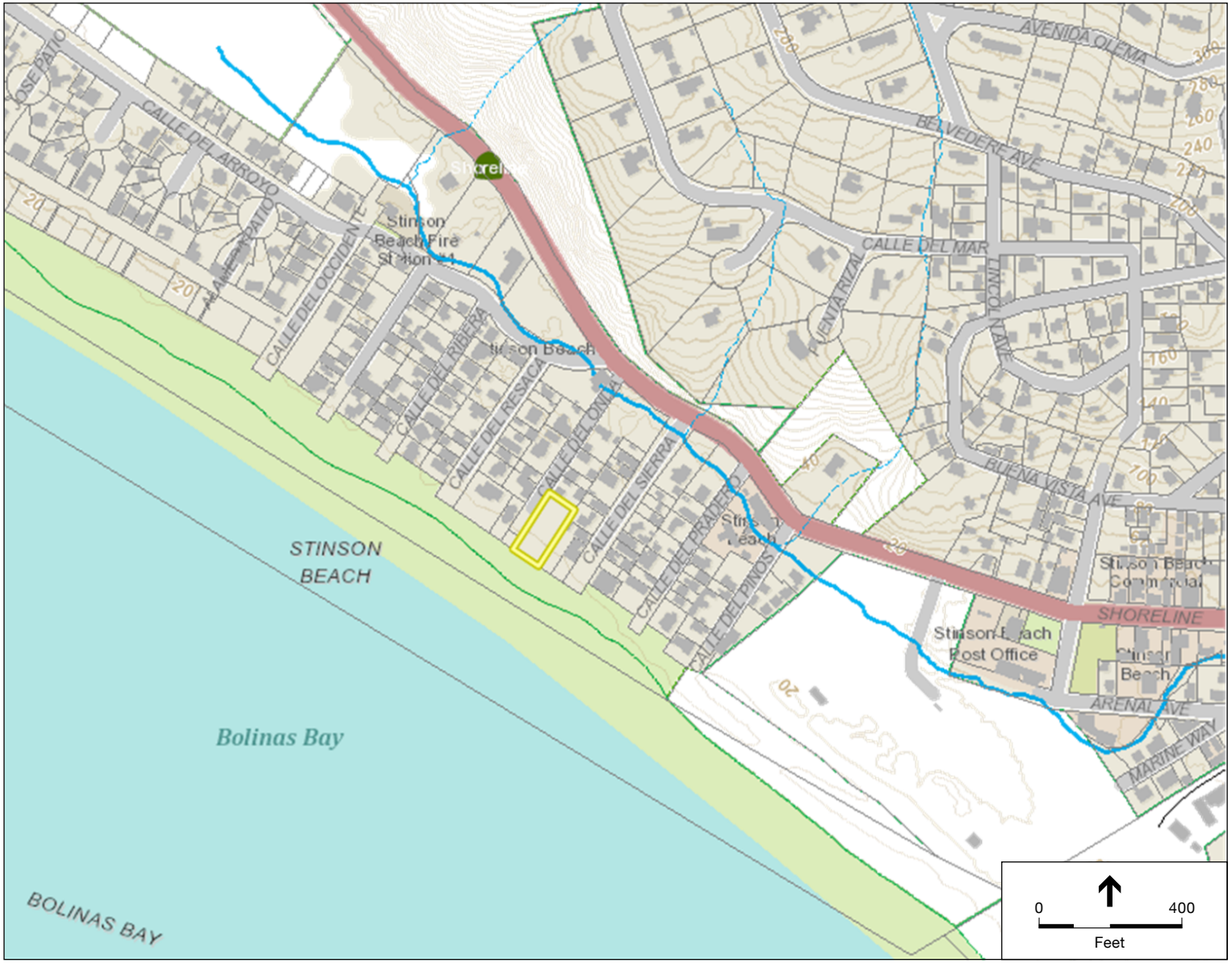
[1] An earlier application for a 2,154 square-foot single-family residence with an attached 330 square-foot one-car garage had expired.

JOHNSON TRUST COASTAL PERMIT SUPPLEMENTAL ENVIRONMENTAL REVIEW

Figure 1

Source: Google Earth Pro, 2022

Regional Location

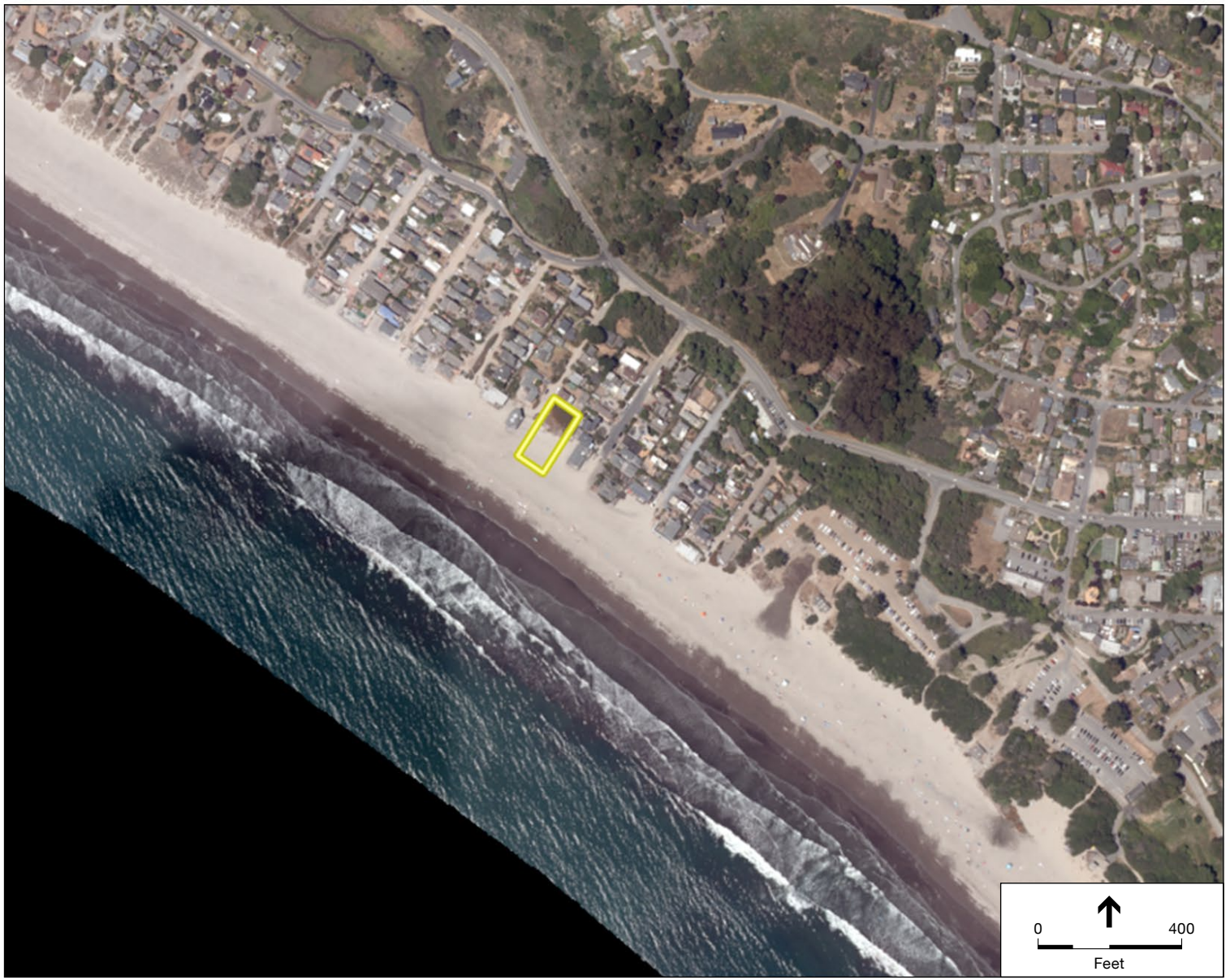


JOHNSON TRUST COASTAL PERMIT SUPPLEMENTAL ENVIRONMENTAL REVIEW

Figure 2

Source: MarinMap, 2022

Project Site



Source: MarinMap, 2022

Figure 3

Project Site – Aerial Photo (2018)

The IS/MND was supported by several technical studies of the Project site. Some of these studies have been amended since completion of the environmental review and other studies have been added to support the application for the current Project. These include a biological assessment (WRA, 2019, 2021), a coastal engineering analysis (Noble Consultants, 2016) and update (CivicKnit, 2020), a floodplain analysis (R.M. Noble & Associates, 2021), a geotechnical feasibility study (Murray Engineers, Inc., 2021), a cultural resources study (Tom Origer & Associates, 2019), and an approved on-site wastewater system design prepared by AYS Engineering Group, Inc.

Following SBCWD's approval of the septic system variance, the Applicant submitted an application to the Marin County Community Development Agency for a Coastal Permit to allow development of the septic system and a 1,563 sf, two-story residence with a 288 sf accessory building/garage. The application was deemed complete on July 7, 2021. At its November 22, 2021 meeting, the Planning Commission conducted a public hearing to consider the application. The Planning Commission did not make a decision on Project approval, but continued the hearing to allow County staff to look further into issues raised in comment letters received from the public and from the California Coastal Commission,[2] and to determine the environmental review requirements for the Project. Upon further review, the County, as a Responsible Agency per State CEQA Guidelines Section 15381, determined that it would be necessary to prepare a Supplemental Environmental Review (SER) to determine the correct CEQA document to support a decision on the Project, pursuant to State CEQA Guidelines Section 15162: an addendum to the IS/MND, or an Environmental Impact Report (EIR).

After the Planning Commission hearing in November 2021, the Applicant reduced the scale of the proposed development from 1,563 sf to the currently proposed one-story, 1,296 sf residence. The revised proposal also reduced the deck and stair area from 528 sf to 252 sf, and eliminated a free-standing 288 sf garage (CivicKnit, 2022a, 2022b).

2. Project Location and Setting

The Project site is a 15,200 sf lot located at 21 Calle del Onda in the unincorporated community of Stinson Beach (Figures 2, 3, and 4). It is a legal lot of record (APN 195-162-49) that currently is vacant, but was previously developed with a small house that was destroyed by fire in the 1980s. Some ruins of the house remain, including a chimney and underground septic system components. The Project site is the last lot on Calle del Onda, and a portion of it is surrounded by Upton Beach, a County beach that is adjacent to Stinson Beach, a part of the Golden Gate National Recreation Area. The Project site is accessed via Shoreline Highway (State Route 1) and Calle del Onda. Pedestrians can access the beach past the Project site, though there is a parking lot a short distance to the southeast that provides the main access to the beach. The lot is within

[2] Comment letters are included as Attachments 7-11 to the Staff Report to the Marin County Planning Commission for the Brian Johnson Trust Coastal Permit, Hearing date: November 22, 2021. Additional comment letters are attached to memoranda to the Planning Commission from Sabrina Cardoza, Senior Planner, dated November 18, 2021, and from Rachel Reid, Environmental Planning Manager, dated November 19, 2021. Additional emailed comments from Coastal Commission staff dated November 19 and November 22, 2021 were provided to the Planning Commission at the public hearing.

View 1. View of the project site looking east from Calle del Onda.

View 2. View of the project site looking southeast from Upton Beach.

View 3. View of the project site from its southern side, looking north.

View 4. View of the project site from [illegible].

JOHNSON TRUST COASTAL PERMIT SUPPLEMENTAL ENVIRONMENTAL REVIEW

Figure 4

Source: WRA, 2019a[illegible]

Project Site – Site Photos

the Coastal Corridor, as defined in the Marin Countywide Plan, and zoned C-R2 (Coastal, Residential, Two-family). The "Calles" neighborhood within which the Project site is located, including adjacent lots, is developed mostly with single-family residences.

The Project site is a rectangular lot ranging from elevation 17.7 feet above mean sea level (amsl) to 12.0 feet amsl (L.A. Stevens & Associates, 2020),[3] with an average slope of about 7.1 percent (MarinMap, 2022). The southwestern part of the Project site, that is, the beach area, is at a higher elevation than the northeastern, inland portion. Easkoot Creek flows to the east of the project site. Easkoot Creek tributaries have their headwaters on the southwest facing slope of Bolinas Ridge. Easkoot Creek itself flows roughly parallel to the beach seaward of Shoreline Highway before emptying into Bolinas Lagoon. The Federal Emergency Management Agency (FEMA) has mapped the seaward portion of the Project site within the VE (coastal flooding) flood hazard zone and the northeastern portion of the site within the AO (1 percent annual risk of flooding, that is, the 100-year floodplain) flood hazard zone (FEMA, 2022).

Soils on the Project site are mapped as Beaches in the southwest portion of the site, and Dune Land in the northeast portion (USDA Natural Resources Conservation Service, 2022). The 2019 Biological Site Assessment characterizes vegetation within the Project site as dominated by invasive non-native plants, including ice plant mat in the northeastern portion of the site, and sand beach/dune in the southwestern portion of the site (WRA, 2019). The Project site is within the Wildland-Urban Interface (WUI) fire hazard zone (MarinMap, 2022b). The Project site is not within a Countywide Plan-defined Stream Conservation Area (MarinMap, 2022a).

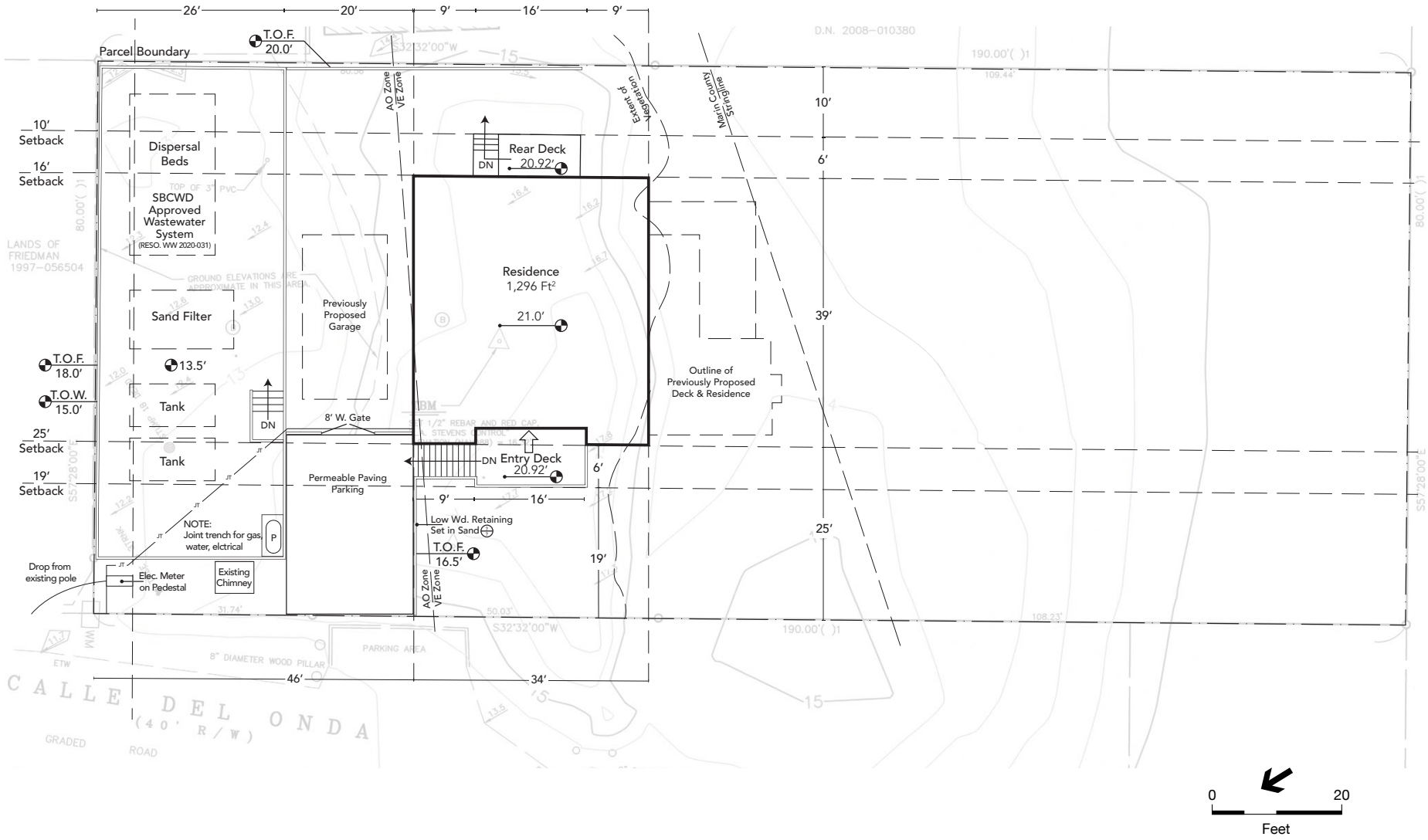
The Project Site is also subject to the Stinson Beach Community Plan, adopted by the Marin County Board of Supervisors in 1985, which, along with the 2007 Marin Countywide Plan Update, governs land use within the Stinson Beach community.

3. Proposed Development

The Applicant is proposing to construct a new, single-story, 1,296 sf, one bedroom, two bathroom house with 252 sf of decks, porches, and stairs, and associated septic system, driveway/parking pad, and landscaped areas on the Project Site (Figures 5-9). The house would be constructed on concrete piers to elevate it above grade a maximum of 6 feet 6 inches, such that the minimum height of any structural member (other than foundation piers) would be 19.1 feet amsl, and the height of the subfloor would be 21.0 feet amsl, to place it above Base Flood Elevation.[4] Height to the roof ridge from the subfloor would be 15 feet 4 inches, and maximum height above grade would not exceed 20 feet (Figure 6). The house would be placed close to the center of the Project Site, with set-backs of 25 feet in the front (facing Calle del Onda), 16 feet in the rear, 46 feet to the northeast, and 100 feet to the southwest. A 20' x 25' driveway and parking area, paved with permeable blocks, would be located between the front of the house and Calle del Onda, and

[3] The cited topographic survey and other elevations cited in this document use the North American Vertical Datum of 1988 (NAV88).

[4] FEMA defines Base Flood Elevation as "the elevation of surface water resulting from a flood that has a 1% chance of equaling or exceeding that level in any given year…," that is, the 100-year flood (https://www.fema.gov/node/404233).

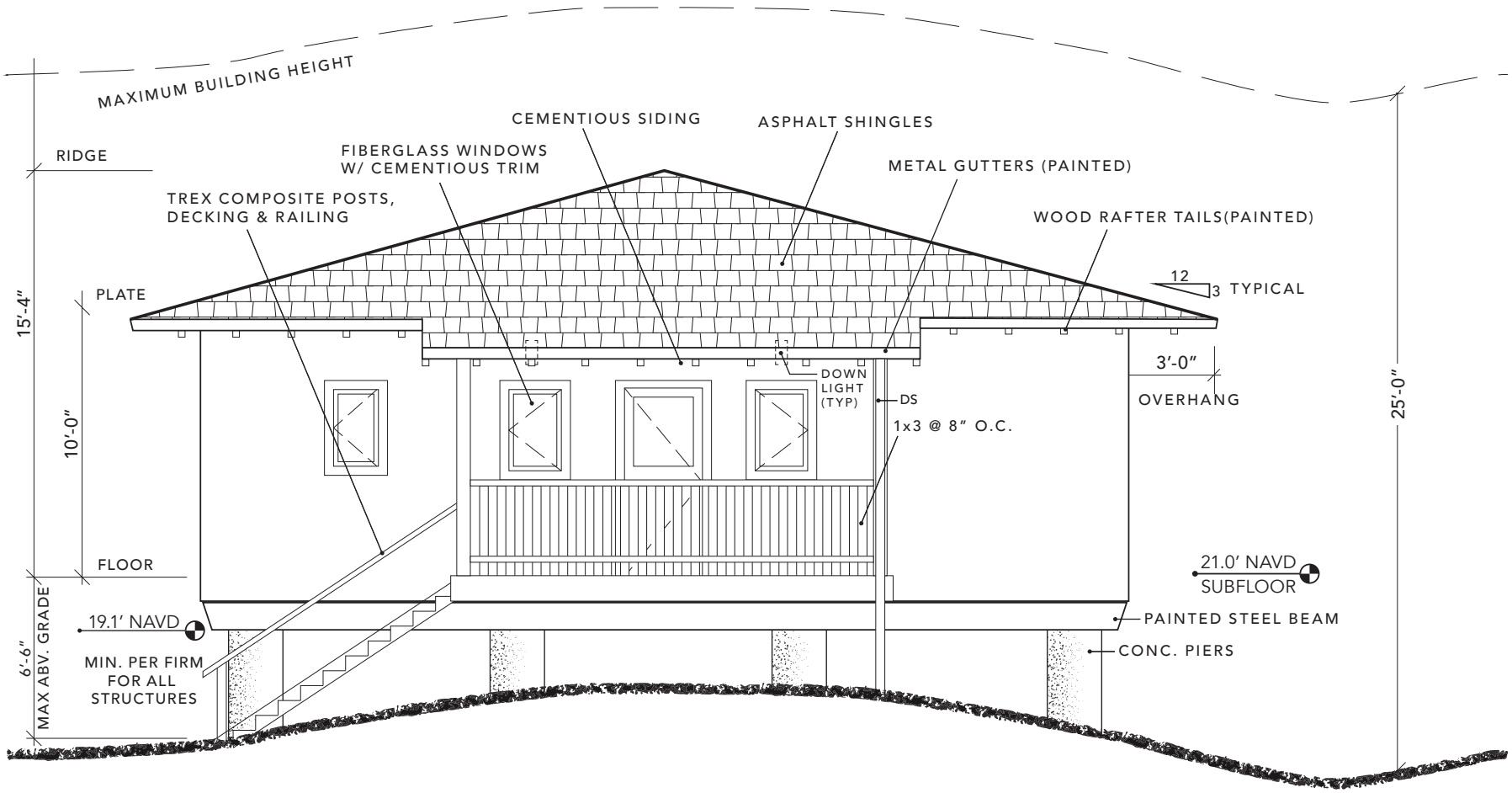


JOHNSON TRUST COASTAL PERMIT SUPPLEMENTAL ENVIRONMENTAL REVIEW

Figure 5

Source: CivicKnit, 2022

Proposed Site Plan

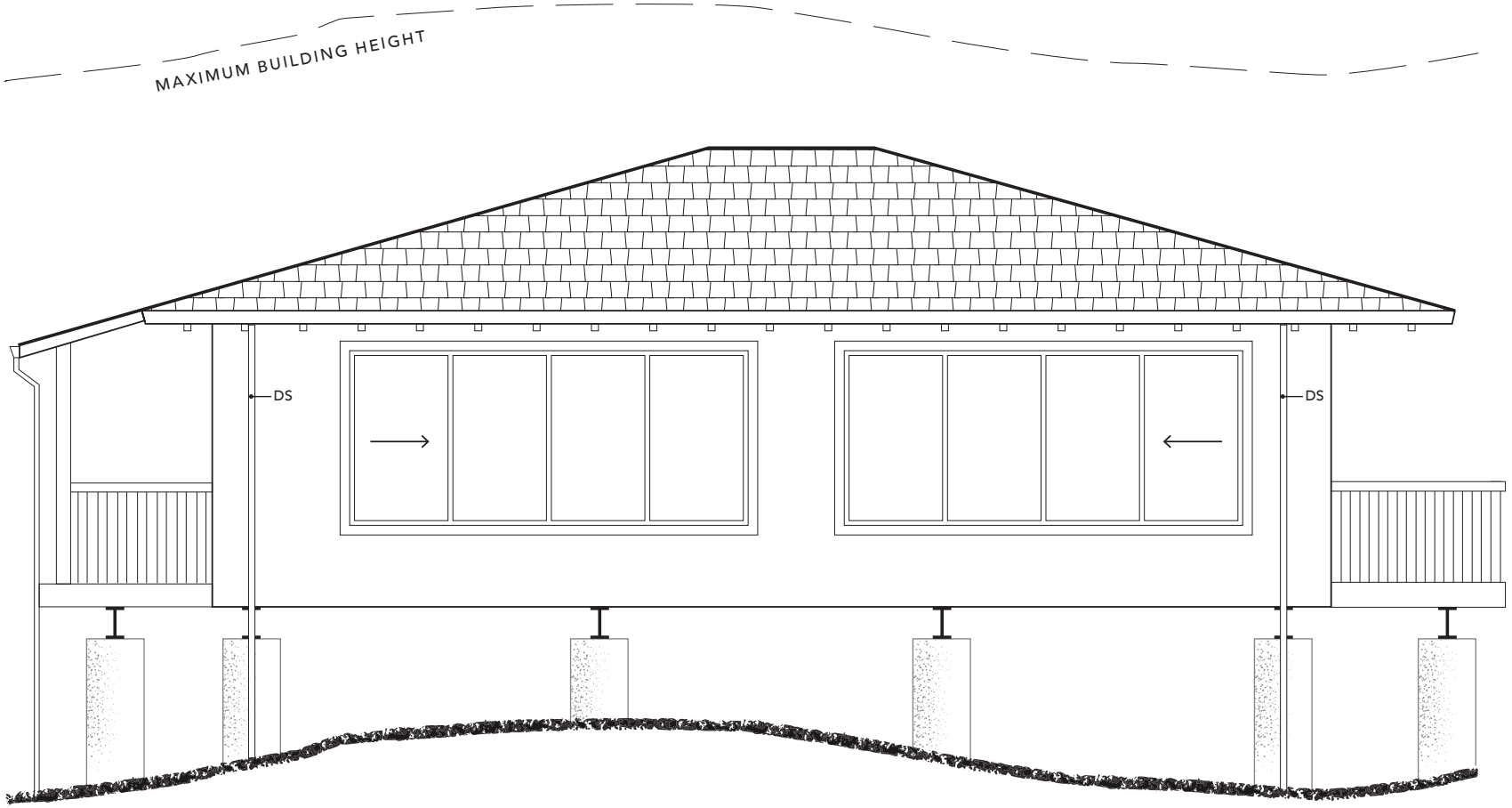


JOHNSON TRUST COASTAL PERMIT SUPPLEMENTAL ENVIRONMENTAL REVIEW

Figure 6

Source: CivicKnit, 2022

Proposed West Elevation

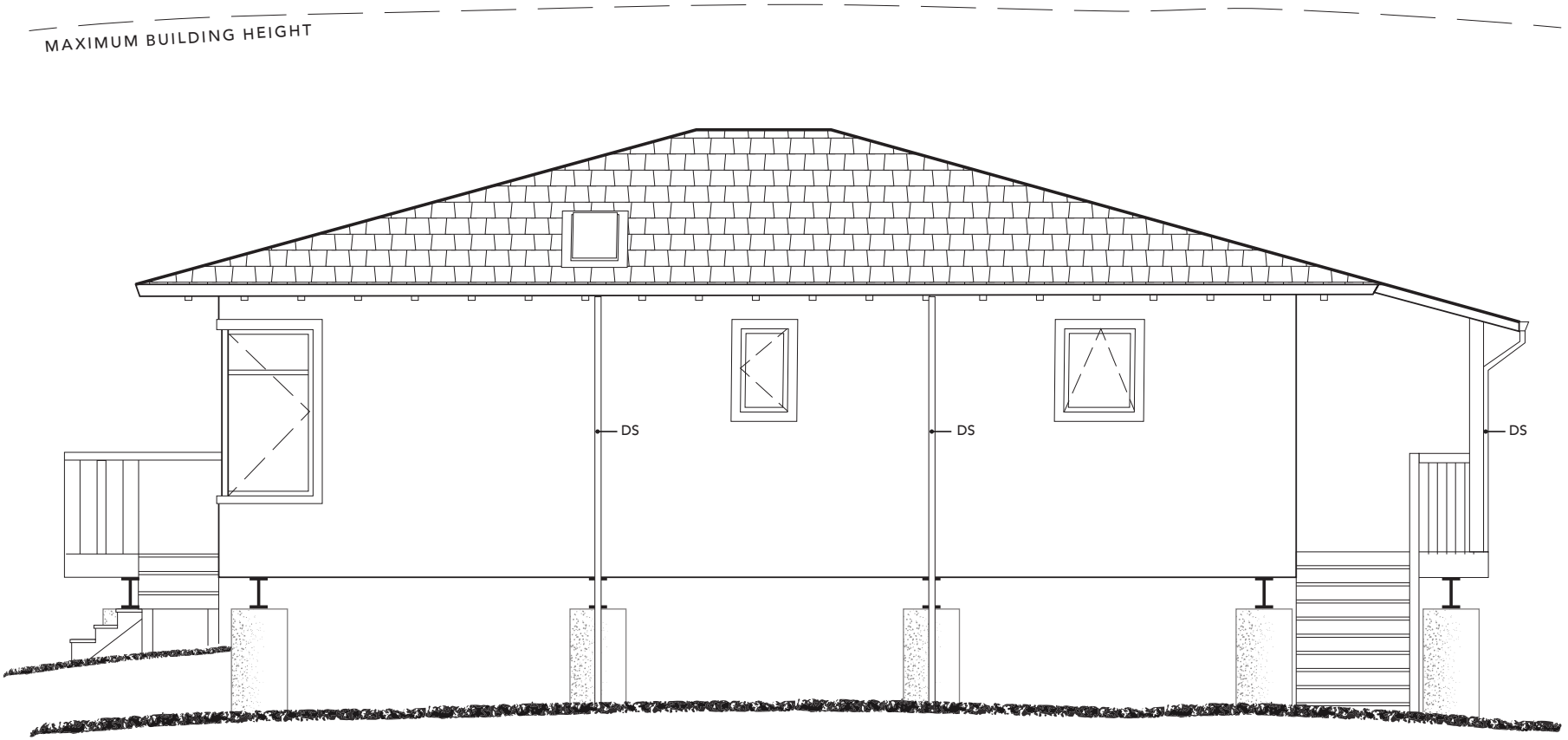


JOHNSON TRUST COASTAL PERMIT SUPPLEMENTAL ENVIRONMENTAL REVIEW

Figure 7

Source: CivicKnit, 2022

Proposed South Elevation

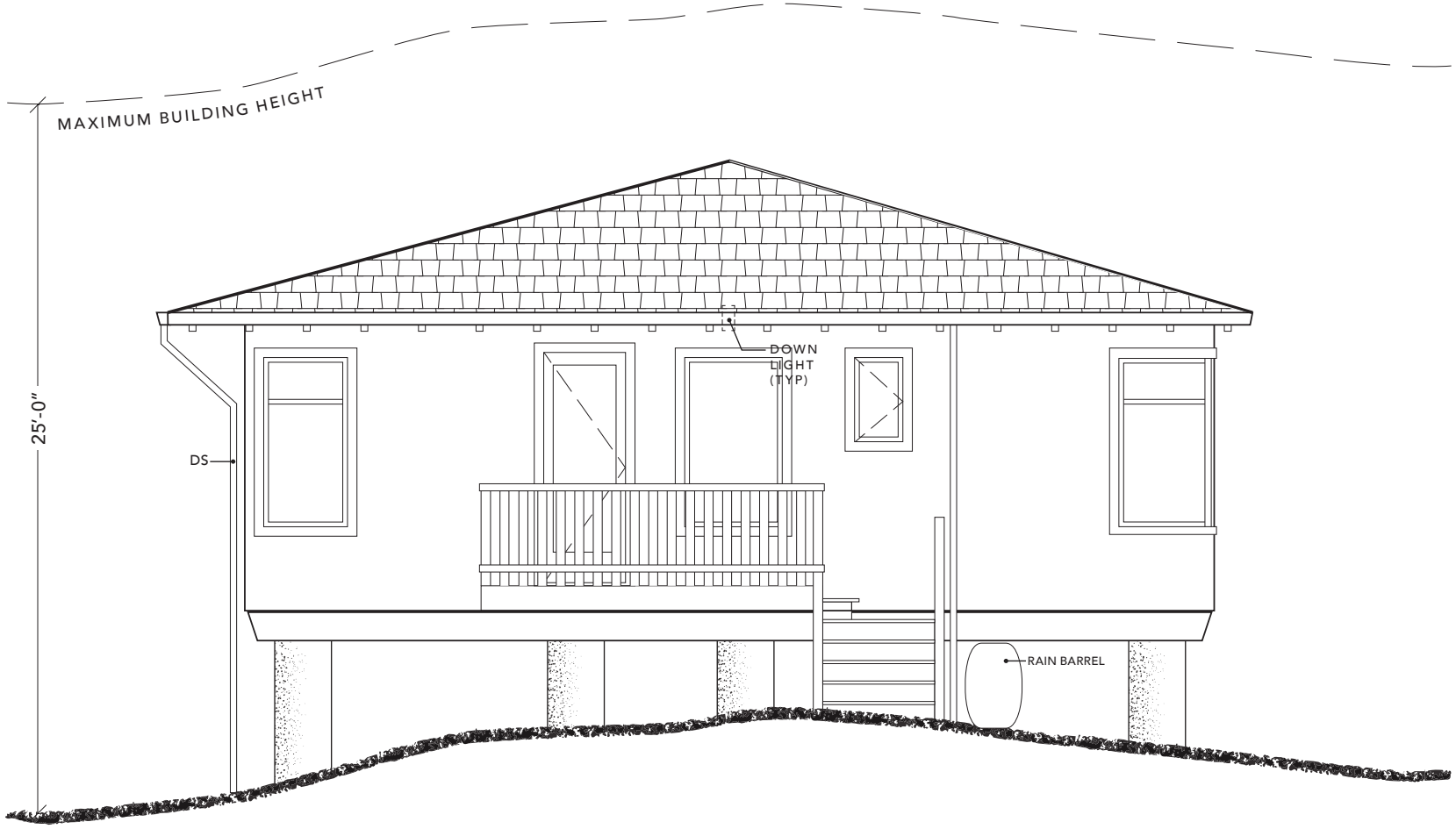


JOHNSON TRUST COASTAL PERMIT SUPPLEMENTAL ENVIRONMENTAL REVIEW

Figure 8

Source: CivicKnit, 2022

Proposed North Elevation



JOHNSON TRUST COASTAL PERMIT SUPPLEMENTAL ENVIRONMENTAL REVIEW

Figure 9

Source: CivicKnit, 2022

Proposed East Elevation

would provide parking for two cars. No garage or accessory structure is proposed. A 6-foot-tall fence would be constructed around portions of the residence. All ice plant would be removed. Landscaping using a mix of native and non-native plants would be installed over the septic system, and in the front and rear of the residence.

Project plans include several specifications for special construction techniques in a flood zone: an open foundation system to set the structure above Base Flood Elevation; building elements and enclosures below the elevated structure would use flood-resistant materials and would be designed and constructed to break away from the structure and not transfer any loads to the elevated building nor the foundation system; and all utilities and service equipment would be located above Base Flood Elevation (per 2016 California Residential Code § R322.1.6).

Construction of the Project would include grading of the Project site. Estimated earthwork quantities are 52.0 cubic yards (cy) of cut and 118.0 cy of fill, for a total of 170.0 cy of earthwork. The deficit of 66 cy of fill would be made up by importing suitable fill material from offsite. All excess soil material, stumps, and boulders would be removed and disposed of properly. Soil would be temporarily stockpiled near the center of the site, between the footprints for the residence and the septic system, and would be covered and contained with wattles.

The Project would result in 1,658 sf of impervious surface, including the residence, front and rear decks and stairs, and top of retaining walls (see below). Project plans include drainage facilities to collect and dissipate stormwater from impervious surfaces. These include a system of roof gutters and downspouts and a rain barrel, all leading to linear dissipators and swales located within the Project site.

The septic system is proposed to be placed in the northeastern portion of the property, as shown in Figure 5. The proposed design is a standard intermittent sand filter system with a 2,000-gallon septic tank, 2,000-gallon dual compartment sump tank, and sub-grade concrete retaining wall, designed to treat and disperse an average daily flow of 200 gallons, and a maximum daily flow of 300 gallons. The proposed design includes raised bed dispersal fields, with wastewater pretreatment in an intermittent sand filter. To protect septic system components from wave erosion, a concrete retaining wall would be constructed that would penetrate a minimum of 4 feet below grade and 3-6 inches above grade around all septic system components. A 115 volt, 20-amp, single-phase power source would provide power to the system. A pump would be installed with a hands-off auto switch and an audiovisual alarm and effluent sensing device to indicate high water conditions. The pump would be installed a minimum of eight inches from the bottom of the sump. The ground surface above the septic system would be planted with a lawn mix, consisting of native grasses and clover. Screens would be installed on all wastewater roof vents on the residence to prevent mosquito infestation of the septic tank.

The Project also includes extension of utilities, including water, electrical, phone, and cable, to the Project site. Utilities currently extend to the street in front of the Project site. A propane tank would be installed next to the driveway, near the existing chimney. All utilities would be brought to the house in a single, joint trench, with a branch of the trench for the pipe from the propane tank. Any existing water lines within ten feet of the septic system would be re-routed to avoid

having water and sewer lines cross one another. Where re-routing is not feasible, water and sewer lines within ten feet of each other would be sleeved with polyvinyl chloride (PVC). Electrical conduits and wastewater pipes throughout the system would be constructed of PVC and sealed with grout.

Project plans include specifications for erosion and sediment control during construction. Erosion control protection would be placed in disturbed areas and installed on any bare ground before the end of September, with the intent of preventing all silt laden water from leaving the Project site. Erosion control features include covering any material or debris stockpiles and enclosing them with wattles; maintaining a gravel accessway; monitoring erosion controls and removing accumulated sediment when it reaches ½ of the barrier height; minimizing the amount of earthwork exposed at any one time; and hydroseeding/mulching or hand mulching all exposed earth surfaces. The plans specify installing gravel base on the driveway area as soon as possible after rough grading, then using this area for concrete wash down. After driveway pavement is placed, the concrete washdown area would be moved to the soil stockpile area in the middle of the site. Building materials would also be stored in the middle of the site, between the footprints for the residence and the septic system.

To ensure coastal access for the public, the Project includes voluntary dedication of a minimum 40-foot-wide and 80-foot-long lateral public access easement to be located across the southwestern (seaward) portion of the property.

The Project also includes a voluntary dedication of a deed restriction against the title to the property that would serve to notify all current and future owners that the development authorized by the Coastal Permit, including the residential building and other development, would be removed when any government agency with legal jurisdiction has issued a final order determining that the structures are currently and permanently unsafe for occupancy or use due to coastal hazards, and that there are no measures that could make the structures suitable for habitation or use without the use of a shoreline protective device; or in the event that coastal hazards eliminate access to the site due to the degradation and eventual failure of Calle del Onda as a viable roadway. Marin County would not be required to maintain access and/or utility infrastructure to serve the development in such circumstances. The deed restriction would furthermore prevent the placement of any shoreline protective device on the property in perpetuity.

4. Required Approvals

The Project would require Coastal Permit approval by the Marin County Planning Commission. This approval could be appealed to the Marin County Board of Supervisors, and ultimately, to the California Coastal Commission.

In addition, if the Project is approved, site development, including construction of a residence and septic system, could only occur following issuance of a building permit by the Marin County Community Development Agency.

5. References

CivicKnit, 2020. Letter from Steve Kinsey, CivicKnit, to Ed Schmidt, General Manager, SBCWD, re: Recent FEMA and California Coastal Commission Guidance information. May 6, 2020. (Attachment B to CivicKnit, 2021a.)

CivicKnit, 2021a. Letter from Steve Kinsey, CivicKnit, to Sabrina Cardoza, Senior Planner, Marin County CDA re: 21 Calle del Onda – Stinson Beach CDP Completeness Response (Project IDP3049). June 4, 2021.

CivicKnit, 2021b. Letter from Steve Kinsey, CivicKnit, to Sabrina Cardoza, Senior Planner, Marin County CDA re: 21 Calle del Onda – Response to CDA's August 31, 2021 Comment Letter. October 4, 2021.

CivicKnit, 2022a. Letter from Steve Kinsey, CivicKnit to Sabrina Cardoza, Senior Planner, Marin County CDA, re: 21 Calle del Onda – Revised Project Design. January 12, 2022.

CivicKnit, 2022b. 21 Calle del Onda: Revised Design. June 10, 2022

Federal Emergency Management Agency (FEMA), 2022. Firmette map for 21 Calle del Onda, Stinson Beach. Based on map panel 06041C0444E, effective on 08/15/2017.

L.A. Stevens & Associates, Inc., 2020. Topographic Map of 21 Calle Del Onda, Stinson Beach, California. Updated 5/31/2020.

MarinMap, 2022a. MarinMap Viewer: 21 Calle del Onda, Stinson Beach. Accessed various dates.

MarinMap, 2022b. Urban Wildland Interface & Evacuation Routes. www.marinmap.org, accessed April 19, 2022.

Murray Engineers, Inc., 2021. Letter from Kristofer T. Korth, P.E. and William P. Carter, P.E., Murray Engineers, to Alyce & Brian Johnson re: Limited Preliminary Geotechnical Feasibility Study, New Residence, 21 Calle Del Onda, Marin County, California. January 14, 2021.

Noble Consultants, Inc., 2016. Letter from Ronald M. Noble, P.E., and Wenkai Qin, Ph.D., Noble Consultants, Inc., to Craig Nunes, re: Coastal Engineering Analysis For 21 Calle Del Onda, Stinson Beach, CA Assessor's Parcel No. 195-162-49. July 12, 2016. (Appendix C to WRA, 2020.)

R.M. Noble & Associates, 2021. Letter from Ronald M. Noble, P.E., R.M. Noble & Associates to Steve Kinsey, CivicKnit, re: Hazards from Easkoot Creek, 21 Calle del Onda, Stinson Beach, CA, Assessor's Parcel No. 195-162-49. May 13, 2021. (Attachment A to CivicKnit, 2021a.)

Stinson Beach County Water District (SBCWD), 2020a. Draft Resolution No. WW 2020-03 Granting a Variance to the Requirements of the Stinson Beach County Water District Wastewater Treatment Regulations Ordinance No. 2014-04 to Reduce Setback Requirements to a Water Body for Property Located At 21 Calle Del Onda, Stinson Beach.

Stinson Beach County Water District (SBCWD), 2020b. Notice of Determination, Mitigated Negative Declaration for 21 Calle del Onda Wastewater System Variance Request Project. SCH # 2019129048

Tom Origer and Associates, 2019. Cultural Resources Study for the 21 Calle del Onda Wastewater System Project, Stinson Beach, Marin County, California. Prepared by Kean Walker-Follett and Tom Origer. July 24, 2019. (Appendix B in WRA, 2020.)

USDA Natural Resources Conservation Service, 2022. Custom Soil Resource Report for Marin County, California, 21 Calle del Onda. April 19, 2022

WRA Environmental Consultants, 2019. Memo to Ed Schmidt, General Manager, Stinson Beach County Water District, re: Biological Site Assessment for 21 Calle del Onda, Stinson Beach, California. October 2019. Appendix A to WRA, 2020.

WRA Environmental Consultants, 2020. Final Initial Study/Mitigated Negative Declaration: 21 Calle del Onda Wastewater System Variance Request. Prepared for Stinson Beach County Water District. June 2020.

WRA Environmental Consultants, 2021. Letter to Sabrina Cardoza, Senior Planner, Marin County CDA, RE: Supplemental Information Request Response, Brian Johnson Trust Coastal Permit, 21 Calle Del Onda, Stinson Beach, Assessor's Parcel 195-162-49, Project ID P3049. October 1, 2021.

CHAPTER 2
Supplemental Environmental Review Checklist

The purpose of this checklist is to evaluate the proposed Johnson Trust Coastal Permit Project in order to determine, for each environmental issue, whether any changes (i.e., Project changes, changed circumstances, or new information of substantial importance) may result in a new or substantially more severe significant environmental impact, or otherwise trigger the requirement for a subsequent Environmental Impact Report (EIR) or a subsequent Negative Declaration or Mitigated Negative Declaration (ND or MND), pursuant to State CEQA Guidelines Sections 15162. For each environmental issue, the checklist asks whether there is any changed condition that pertains to that issue, and, if so, whether the changed condition would result in a new significant impact or a substantial increase in the severity of a significant impact that was previously identified in the Initial Study/Mitigated Negative Declaration (IS/MND).

1. Explanation of Checklist Questions

Where was this Impact Analyzed in the Previous Environmental Document?

The first question in the checklist asks for a cross-reference to the particular IS/MND document and impact number, section, or pages in which information and analysis that pertain to the environmental issue may be found. The IS/MND consists of the following document:

> WRA Environmental Consultants, 2020. Final Initial Study/ Mitigated Negative Declaration: 21 Calle del Onda Wastewater System Variance Request. Prepared for Stinson Beach County Water District. June 2020.

This document includes response to comments on the 2019 Draft Initial Study/Proposed Mitigated Negative Declaration and several technical appendices.

Do Proposed Project Changes Affect this Issue?

This checklist question asks whether the proposed changes to the Project could affect or have any bearing on the environmental issue. This question, along with the next two, determines whether it is necessary to continue with the analysis of each issue. If it is determined that proposed Project changes could not affect this environmental issue, the question is answered "no." A "yes" answer indicates the necessity to continue to evaluate impacts related to this environmental issue.

Are There Any Changed Circumstances that Affect this Issue?

This checklist question asks whether there have been changes in the circumstances under which the Project is undertaken that have occurred since adoption of the IS/MND that could affect the environmental issue. "Changed circumstances" include changes to the environmental setting and the regulatory setting for the Project. A "yes" answer indicates the necessity to continue to evaluate impacts related to this environmental issue.

Is There Any New Information of Substantial Importance Pertaining to this Issue?

This checklist question asks whether new information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence at the time the previous IS/MND was adopted has come to light that pertains to the environmental issue. New information may include, for example, new studies of the Project or the Project site, the results of mitigation monitoring of the Project, or new scientific studies or methods.

If Any of the Previous Three Questions Was Answered "Yes," Would the Changes or New Information Result in a New or Substantially More Severe Significant Impact?

This checklist question pertains only to those issues for which at least one of the previous three questions was answered "yes." A "yes" response to this question indicates that the supplemental environmental analysis has found that a new significant impact or substantial increase in the severity of a previously identified significant impact would occur. A "no" answer indicates that the analysis has concluded that no such impact would occur. If the previous three questions were all answered "no," this column is marked "not applicable" ("n/a"). In determining whether a new or substantially more significant impact would occur, the supplemental environmental analysis assumes the continuation of existing adopted mitigation measures and conditions of approval, unless stated otherwise.

Are there any New or Reconsidered Mitigation Measures or Alternatives that would Substantially Reduce Significant Impacts?

Pursuant to Section 15162(a)(3)(c) and (d) of the State CEQA Guidelines, this column asks whether new information of substantial importance has come to light, consisting of evidence that mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant impacts, or that new mitigation measures or alternatives which are considerably different from those previously analyzed would substantially reduce one or more significant impacts. A "yes" response indicates that the supplemental environmental analysis has developed new mitigation measures or alternatives, or reconsidered previous mitigation measures or alternatives, and found them to be feasible and capable of reducing a previously identified significant impact, or a newly identified significant impact, to less than significant. A "no" response indicates no such mitigation measures or

alternatives are available. “n/a” indicates that there was not previously, nor is there currently, a significant impact associated with this issue.

Discussion

A discussion of the elements of the checklist is provided under each environmental issue to clarify and substantiate the answers. The discussion provides information about each issue, how the proposed Project changes relate to the issue, any changed circumstances or new information resulting in new significant impacts or a substantial increase in the severity of previously identified significant impacts, and mitigation measures that apply to this issue.

Mitigation Measures

Applicable mitigation measures from the prior environmental review that are required to reduce or avoid impacts of the current Project are listed for each environmental issue. New mitigation measures and revisions to previously adopted mitigation measures are considered, if needed. Revisions are for clarity, for consistency with current regulations, or to make them applicable to the current Project. All proposed revisions to mitigation measures are also compiled in Chapter 3, Summary and Conclusion. Revisions are indicated by ~~strikethrough~~ and underline text.

Conclusions

At the end of each section, a discussion is provided that summarizes the conclusions resulting from the supplemental environmental analysis.

2. Supplemental Environmental Review Checklist

2.1 Aesthetics

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
1. Aesthetics. Would the Project:						
a) Have a substantial adverse effect on a scenic vista?	Section 4.1, Aesthetics, topic a.	Yes	No	Yes	No	N/A
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway?	Section 4.1, Aesthetics, topic b.	No	No	No	N/A	N/A
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?	Section 4.1, Aesthetics, topic c.	Yes	No	Yes	No	N/A
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Section 4.1, Aesthetics, topic d.	Yes	No	No	No	N/A

Discussion

2.1.a. Would the Project have a substantial adverse effect on a scenic vista?

The 2020 IS/MND, Section 4.1, Aesthetics, topic a, examines whether construction of the proposed septic system, and in addition, potential future construction of a 1,400 square foot (sf) single-family residence, would have an adverse effect on a scenic vista. The 2020 IS/MND states

that the construction of the proposed septic system would not alter public views of Upton Beach, Stinson Beach, or the Pacific Ocean, or views of the Project site from publicly available vantage points. The 2020 IS/MND also states that future construction of a single-family residence would alter the viewshed, reducing views of the ocean and the beach available from Calle del Onda, but reasons that, "…this effect would be minimal, given the already extensive presence of single-family residential development in the vicinity." The 2020 IS/MND also notes that the beach is not visible from Shoreline Highway in this location, due to dense vegetation on the west side of the highway, as well as existing development.

All of these statements are still true. In addition, The Project site is not located on or near a visually prominent ridgeline, and is not within a Countywide Plan-designated Ridge and Upland Greenbelt area. Views of Mount Tamalpais from the beach and ocean would not be substantially affected, as the proposed residence would only one story and would be set back from the seaward portion of the property and in alignment with the existing pattern of residential development in the neighborhood.

There are no changed circumstances and, other than the Project plans, no new information of substantial importance requiring evaluation. As concluded in the 2020 IS/MND, the current Project would not have a substantial adverse effect on a scenic vista; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

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

The 2020 IS/MND, Section 4.1, Aesthetics, Environmental Setting, states that Shoreline Highway (State Route 1) in Marin County is not an officially designated State scenic highway, but that it is eligible for listing. Nevertheless, for the purposes of the discussion of this topic, the 2020 IS/MND considers Shoreline Highway a scenic highway. The 2020 IS/MND notes that the Project site is not visible to motorists and cyclists along Highway 1, due to the dense vegetation and an existing fence that shield residences along Calle del Onda from view.

These points are still valid: the current Caltrans listing of designated and eligible Scenic Highways, still shows this section of Highway 1 as eligible for listing (Caltrans, 2022), and the Project site is not visible from Highway 1. There are no changed circumstances and no new information of substantial importance requiring evaluation, and the proposed Project is within the scope of the project analyzed in the 2020 IS/MND. As concluded in the 2020 IS/MND, the current Project would not substantially damage scenic resources within a State Scenic Highway; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

2.1.c. Would the Project 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 points). In an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The 2020 IS/MND states that public views of the project site include views from Calle del Onda and from Stinson and Upton Beaches, and that views from both vantage points prominently feature white sandy beaches as well as single-family residential development. The 2020 IS/MND also notes that the Project site is zoned for residential, two-family coastal development.

Other than the portion of the Project site that is on the beach, the site has few scenic qualities: it is currently a vacant lot covered in ice plant. As noted in the 2020 IS/MND, development of the proposed septic system and, later, a house, would be consistent with the area's zoning and with the existing visual character of the area, and visual changes associated with construction would be temporary and limited in scope. In Section 4.1, Aesthetics, Environmental Setting, the 2020 IS/MND states that Policy DES-4.1 of the Countywide Plan defines important scenic resources in Marin County to include ridgelines, upland greenbelts, hillsides, water, and trees, and that public views of the Project site feature water, but do not feature trees, ridgelines, upland greenbelts, or hillsides. All of these points are still valid. There are no changed circumstances and no new information of substantial importance requiring evaluation, and the proposed Project is within the scope of the project analyzed in the 2020 IS/MND. As concluded in the 2020 IS/MND, the current Project would have a less-than-significant impact with regard to substantially degrading the existing visual character or quality of public views of the site and its surroundings, and would not conflict with applicable zoning and other regulations governing scenic quality; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

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

The 2020 IS/MND, Section 4.1, Aesthetics, topic d states that construction of the proposed septic system would take place during allowable (daytime) construction hours, and so would not introduce a new source of nighttime light. The same is true of construction of the proposed residence. The 2020 IS/MND also states that, "[g]iven the small size of the potential future residence, new light sources would be insubstantial as to adversely affect day or nighttime views in the area and would be consistent in magnitude with other residential light sources in the neighborhood. Furthermore, any future residential development would be similar in size and lighting needs to nearby adjacent residences and would be consistent with the existing light environment.

All of these points are still valid. There are no changed circumstances and no new information of substantial importance requiring evaluation, and the proposed Project is within the scope of the project analyzed in the 2020 IS/MND. As concluded in the 2020 IS/MND, the current Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area, and, as concluded in the 2020 IS/MND, this impact would be less

than significant; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

Mitigation Measures

The 2020 IS/MND identified only less-than-significant impacts on aesthetics; no mitigation measures were required. As the current Project would also have only less-than-significant impacts on aesthetics, there is no mitigation required.

Conclusion

Other than the Project plans, there are no changed circumstances and no new information of substantial importance regarding aesthetics. The points made in the 2020 IS/MND to support the conclusion of less-than-significant impacts on aesthetics for the project then being evaluated are still valid; for the same reasons stated in the 2020 IS/MND, the current Project would have less-than-significant impacts on aesthetics. Therefore, the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact on aesthetics.

References

California Department of Transportation (Caltrans), 2022. List of eligible and officially designated State Scenic Highways. Excel file, dated August 2019, and downloaded from Caltrans website September 6, 2022). Available at https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways

2.2 Agriculture and Forestry Resources

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
2. Agriculture and Forestry Resources. Would the Project:						
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	Section 4.2, Agricultural and Forestry Resources, topic a.	No	No	No	N/A	N/A
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	Section 4.2, Agricultural and Forestry Resources, topic b.	No	No	No	N/A	N/A
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	Section 4.2, Agricultural and Forestry Resources, topic c.	No	No	No	N/A	N/A
d) Result in the loss of forest land of conversion of forest land to non-forest use?	Section 4.2, Agricultural and Forestry Resources, topic d.	No	No	No	N/A	N/A
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	Section 4.2, Agricultural and Forestry Resources, topic e.	No	No	No	N/A	N/A

Discussion

2.2.a-e. Would the Project:

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

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

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

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

e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

As stated in Section 4.2, Agricultural and Forestry Resources of the 2020 IS/MND, the Project site does not contain any farmland or agricultural land, and is classified as "urban/built-up land" by the California Department of Conservation's Farmland Mapping and Monitoring Program. The 2020 IS/MND therefore concluded that the project then being evaluated would not convert agricultural land or forest land to other uses, conflict with a Williamson Act contract or forest land zoning. These points are still valid. There are no changed circumstances and no new information of substantial importance requiring evaluation, and the proposed Project is within the scope of the project analyzed in the 2020 IS/MND. As concluded in the 2020 IS/MND for the project then being evaluated, the current Project would have no impact on agricultural or forestry resources; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

Mitigation Measures

The 2020 IS/MND concluded that the project then being evaluated would have no impact on agricultural or forestry resources; no mitigation measures were required. As the current Project would also have only less-than-significant impacts on agricultural and forestry resources, no additional mitigation is required.

Conclusion

As also concluded in the 2020 IS/MND for the project then being evaluated, the current Project would have no impact on agricultural or forestry resources. There is no new information of substantial importance and no changed circumstances pertaining to these resources affecting the Project. The current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact on these resources.

References

California Department of Conservation, 2018. Marin County Important Farmland, 2018. Map. Available at https://www.conservation.ca.gov/dlrp/fmmp/Pages/Marin.aspx

2.3. Air Quality

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
3. Air Quality. Would the Project:						
a) Conflict with or obstruct implementation of the applicable air quality plan?	Section 4.3, Air Quality, topic a.	Yes	No	No	No	N/A
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.	Section 4.3, Air Quality, topic b.	Yes	No	No	No	N/A
c) Expose sensitive receptors to substantial pollutant concentrations?	Section 4.3, Air Quality, topic c.	Yes	No	Yes	Yes	Yes
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Section 4.3, Air Quality, topic d.	Yes	No	No	No	N/A

Setting

The 2020 IS/MND, Section 4.3, Air Quality, includes a discussion of the environmental setting for the air quality analysis, describing the climate in Stinson Beach and the San Francisco Bay Area. This section states that the Bay Area Air Basin is in compliance with state and federal air quality standards, with the exception of ground-level ozone (O_3), respirable particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$). These circumstances are unchanged since adoption of the 2020 IS/MND (BAAQMD, 2022).

Discussion

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

The 2020 IS/MND, Section 4.3, Air Quality, topic a discusses consistency of the project then being evaluated with the Bay Area Air Quality Management District's (BAAQMD) 2017 Clean Air Plan (BAAQMD, 2017a), and finds that that project supported the primary goals of the Clean Air Plan, since the project was found not to result in any significant and unavoidable air quality impacts, would include applicable control measures from the Clean Air Plan, and would not disrupt or hinder implementation of any air quality plan control measures. The 2020 IS/MND considers both the proposed septic system and a future residence in reaching these conclusions. For the same reasons stated in the 2020 IS/MND, and as further discussed under the following topics, the current Project would not conflict with or obstruct implementation of the applicable air quality plan, and would have a less-than-significant impact of this kind; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

2.3.b. Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

The 2020 IS/MND, Section 4.3, Air Quality, topic b states that the project then being evaluated, including potential future development of a residence, would be well within the BAAQMD's screening criteria for single-family dwelling units for operation, meaning that that project would not have the potential to exceed the BAAQMD's significance thresholds for impacts related to emissions of criteria air pollutants. The same holds true for the current project: Table 3-1 in the 2017 BAAQMD CEQA Guidelines (BAAQMD, 2017b) shows the screening level for new single-family residences to be 325 dwelling units for operational criteria pollutants. The BAAQMD CEQA Guidelines state that if a project is within the screening criteria, operation of the project would result in a less-than-significant cumulative impact to air quality from criteria air pollutant and precursor emissions. Since the Project, with the development of one dwelling unit, would be well within the screening criteria, operational emissions would not be cumulative considerable, and therefore less than significant.

For construction emissions, the BAAQMD CEQA Guidelines state that if a project meets all of the following conditions, then construction-related emissions would be less than significant:

1. The project is below the applicable screening level size shown in Table 3-1; and

2. All Basic Construction Mitigation Measures would be included in the project design and implemented during construction; and

3. Construction-related activities would not include any of the following:

    a. Demolition;

b. Simultaneous occurrence of more than two construction phases (e.g., paving and building construction would occur simultaneously);

c. Simultaneous construction of more than one land use type (e.g., project would develop residential and commercial uses on the same site);

d. Extensive site preparation (i.e., greater than default assumptions used by the Urban Land Use Emissions Model [URBEMIS] for grading, cut/fill, or earth movement); or

e. Extensive material transport (e.g., greater than 10,000 cubic yards of soil import/export) requiring a considerable amount of haul truck activity.

The screening level size for single family dwelling units for construction-related emissions is 114 dwelling units. As discussed under the following topic, the Project would be required to include the BAAQMD's Basic Construction Mitigation Measures. As described in Chapter 1, Project Description, the Project would meet all of the other criteria, and therefore, construction-related emissions would not be cumulatively considerable and so would be less than significant; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

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

The 2020 IS/MND, Section 4.3, Air Quality, topic c finds that construction of a septic system could expose nearby residents to elevated dust levels, particularly during grading operations. The 2020 IS/MND finds this to be a significant impact, and imposes Mitigation Measure AIR-1, which would require the construction contractor to implement BAAQMD best management practices for reducing dust and other particulate emissions, including covering haul trucks transporting material off-site, capping idling time for equipment to five minutes (as required by California Code of Regulations (CCR) Title 13, Section 2485), maintaining and properly tuning all construction equipment, and posting a sign with contact information for dust complaints. Mitigation Measure AIR-1 was accepted by the Project Applicant and would be in effect during construction of the septic system, if the Project is approved.

Mitigation Measure AIR-1 mirrors the requirements of Marin County Development Code Section 22.20.040.C, which requires implementation of BAAQMD's Basic Construction Mitigation Measures for dust control for outdoor construction activities that are subject to environmental review, including:

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

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

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

4. All vehicle speeds on unpaved roads shall be limited to a maximum of 15 miles per hour.

5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California of Regulations). Clear signage shall be provided for construction workers at all access points.

7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified emissions evaluator.

With application of Development Code Section 22.20.040.C, which will be included as a standard Condition of Approval if the Project is approved, dust generation from Project construction would not be expected to expose sensitive receptors to substantial pollutant concentrations, and any such impact would be less than significant. Mitigation Measure AIR-1 from the 2020 IS/MND is duplicative and unnecessary.

With regard to toxic air contaminants (TACs), the 2020 IS/MND describes this class of pollutants in the Environmental Setting discussion in Section 4.3, but does not analyze the potential for the project then being evaluated to emit TACs. Substantial TAC emissions are not associated with the operational phase of residences, but diesel particulate matter and PM2.5 are TACs that would be generated during construction, particularly site preparation and grading.

The BAAQMD has established thresholds of significance for exposure to TACs based on the projected increase in human health risk. Projects that would result in increased cancer risk of greater than 10 in a million or increased non-cancer risk greater than a Hazard Index of 1.0 are considered to have a significant impact. In addition, an increase in annual average ambient PM2.5 concentrations in excess of 0.3 micrograms per cubic meter would be considered a significant impact. The BAAQMD recommends that lead agencies assess the incremental toxic air contaminant (TAC) exposure risk to all sensitive receptors within a 1,000-foot radius of a project's fence line. (BAAQMD, 2017b). Sensitive receptors include residences, hospitals, schools, day care facilities, and nursing homes.

Project operation (that is, residential use of the proposed new residence) would not result in substantial new TAC emissions. However, Project construction activities would result in emission of diesel particulate matter (DPM) from use of diesel-powered trucks and equipment. DPM is considered to be a TAC, with both carcinogenic and non-carcinogenic health effects.

The closest sensitive receptors to the Project site are neighboring residences on Calle del Onda and adjacent streets, some of which are adjacent to the Project site. Other than residences, the closest sensitive receptor to the Project site is the Stinson Beach School, an elementary school located on Shoreline Highway about 1 mile north of the Project site (Google Maps, 2022).

The dose to which receptors are exposed is the primary factor affecting health risk from exposure to TACs. Dose is a function of the concentration of a substance or substances in the environment

and the duration of exposure to the substance. According to the California Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, should be based on a 70-year exposure period when assessing TACs, such as DPM, that have only cancer or chronic non-cancer health effects. However, such health risk assessments should be limited to the duration of the emission-producing activities associated with the project (OEHHA, 2015).

Project construction is expected to occur for an approximately 1-year period, though the majority of DPM emissions would occur during site preparation and grading, which would likely last several days. Emissions modeling results (CalEEMod, 2022) indicate that daily unmitigated DPM emissions (Exhaust PM2.5) would be a maximum of 0.57 pounds per day during construction (.02 tons per year). Basic Construction Mitigation Measures numbers 5 and 6, listed above, would result in reduction of DPM emissions and PM2.5. Given the small amount of DPM emissions and the short exposure time, the Project would not be expected to substantially increase cancer or non-cancer health risks for nearby sensitive receptors. However, certain individuals, such as pregnant women and their fetuses, infants, and children, are more sensitive to toxic air contaminants than the population at large (OEHHA, 2015). Even short-term exposure to TACs could result in an increased risk of adverse health effects. The 2020 IS/MND, in considering whether the project then being evaluated would expose sensitive receptors to substantial pollutant concentrations, did not consider the effects of TAC emissions during project construction. TAC emissions would result in a substantial increase in the severity of a previously identified significant impact.

To address this impact, new Mitigation Measure AIR-2 is included below, requiring use of state-of-the-art Tier 4 diesel engines for off-road construction equipment. Together with the Basic Construction Mitigation Measures already required by the County Development Code, this would reduce DPM emissions by approximately 78 percent below unmitigated emissions, as shown in Table 2.3-1. With implementation of new Mitigation Measure AIR-2, exposure of nearby residents to TACs from construction equipment would be greatly reduced, and the resulting impact would be less than significant.

Table 2.3-1
Unmitigated and Mitigated DPM emissions

	Unmitigated	Mitigated	Percent Reduction
Exhaust $PM_{2.5}$ emissions – lbs/day	0.57	0.12	78%

Source: CalEEMod model run.

New Mitigation Measure AIR-2: Diesel Exhaust Emissions Reduction. During Project construction, all off-road diesel-powered equipment with engines greater than 25 horsepower shall meet Tier 4 emissions standards.

Monitoring Measure AIR-2: The Marin County Community Development Agency shall verify that the provisions of the measure have been implemented.

2.4.d. Would the Project Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The 2020 IS/MND, Section 4.3, Air Quality, topic d states that, "on-site wastewater disposal systems have the potential to create unpleasant odors, but regular maintenance… would assure that the system is maintained in good working order and does not create excessive odors. Furthermore, per [Stinson Beach County Water] District Regulation Title IV 4.07.720 the system would be subject to an inspection not less than every two (2) years. This inspection, per 4.07.732, would include the inspection for possible ponding, standing water, breakout and noticeable odors. Should such odors exist, the District would require the Applicant to have sludge or scum buildup removed, which would assure that buildup does not grow sufficiently large to create an odor nuisance." The 2020 IS/MND goes on to state that construction equipment could lead to some odors, but that these would be minor and temporary given the small size of the project and short duration of construction. The 2020 IS/MND therefore finds that the project then being evaluated would not result in odors or other emissions that would adversely affect a substantial number of people, and the impact would be less than significant.

These statements all remain valid and are applicable to the Project currently under review. In addition, the use of Tier 4 diesel equipment, as required by Mitigation Measure AIR-2, will further reduce odorous diesel emissions during construction. For these reasons, the Project will have only less-than-significant impacts with regard to odors and other emissions; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

Mitigation Measures

Mitigation Measure AIR-1 from the 2020 IS/MND is duplicative of County Development Code Section 22.20.040.C, which will be applied to the Project as a standard Condition of Approval, rendering Mitigation Measure AIR-1 unnecessary. The current analysis identifies a substantial increase in the severity of a previously identified significant impact associated with exposure of sensitive receptors to substantial pollutant concentrations. New Mitigation Measure AIR-2 will reduce this impact to less than significant.

The full text of all mitigation measures, including those required by the 2020 IS/MND and those identified or modified in this document, is included in Chapter 3, Summary and Conclusion.

Conclusion

The analysis above identifies a substantial increase in the severity of a significant impact previously identified in the 2020 IS/MND, from exposure of nearby sensitive receptors to substantial pollutant concentrations during Project construction. New Mitigation Measure AIR-2 would reduce this impact to less than significant.

References

Bay Area Air Quality Management District (BAAQMD), 2017a, Final 2017 Clean Air Plan, April 19, 2017. Available at: https://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans

BAAQMD, 2017b. CEQA Air Quality Guidelines, May 2017. Available at: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines

BAAQMD, 2022. Air Quality Standards and Attainment Status. Available at: http://www.baaqmd.gov/about-air-quality/research-and-data/air-quality-standards-and-attainment-status#five Accessed September 12, 2022.

California Emissions Estimator Model **(**CalEEMod), 2022. CalEEMod model run for Johnson Trust Coastal Permit, 9/14/22, using CalEEMod soft version 2022.1 CalEEMod is produced by the California Air Pollution Control Officers Association, 2022.

California Office of Environmental Health Hazard Assessment (OEHHA), 2015, Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments, February 2015. Available at: https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0

2.4. Biological Resources

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
4. Biological Resources. Would the Project:						
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Section 4, Biological resources, topic a.	Yes	No	No	No	N/A
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Section 4, Biological resources, topic b.	Yes	Yes	Yes	Yes	Yes
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Section 4, Biological resources, topic c.	No	No	No	N/A	N/A
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?	Section 4, Biological resources, topic d.	No	No	No	No	N/A

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
4. Biological Resources. Would the Project:						
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Section 4, Biological resources, topic e.	Yes	Yes	Yes	Yes	Yes
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?	Section 4, Biological Resources, topic f.	No	No	No	N/A	N/A

Discussion

4.a. Would the Project 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?

The 2020 IS/MND, Section 4.4, Biological Resources, topic a considers whether construction of the proposed septic system and single-family residence would have an adverse effect on special-status species. The analysis identifies 100 special-status plants in the project region and concludes that such species are absent from the Project site based upon inappropriate hydrologic, soil, topographic, and vegetative conditions. The history of site disturbance and ongoing human activity are also cited as contributing factors, including the dominance of invasive plant species on the site.

The 2020 IS/MND biological resource analysis relied upon the findings of a 2019 Biological Site Assessment (BSA; WRA 2019a) to conclude that the Project site does not provide habitat for special-status wildlife species. As summarized in the BSA, the Project site does not provide aquatic habitat and therefore does not provide habitat for special-status fish and stream-dwelling amphibians. Additionally, marine wildlife (marine mammals and sea turtles) are unlikely to use the site due to its disturbed condition and human presence. The BSA assessed site conditions for western snowy plover (*Charadrius alexandrines nivosus*), concluding that the Project site and adjacent beach are unlikely to be used by this species (WRA, 2019a). To avoid the likelihood of impacting active bird nests, the BSA stated that, "the Project proposes to conduct initial ground

disturbance and remove vegetation outside the nesting season (i.e., September 1 to January 31)." This approach will avoid impacts to actively nesting birds. The IS/MND also concludes that the Project site does not support roosts for special-status bats based on the absence of trees and structures. The 2020 IS/MND concludes that the project then being evaluated would have no impact on special status plants or wildlife.

The current review included an updated search of the California Natural Diversity Database (CDFW 2022) and California Native Plant Society Electronic Inventory (CNPS 2022) to examine special-status species records from the Project site and vicinity, and analysis of the following documents and resources:

- October 2019 Biological Site Assessment prepared by WRA (WRA 2019a)
- December 2019 Draft Initial Study/Proposed Mitigated Negative Declaration prepared by WRA Environmental Consultants for the Stinson Beach County Water District (WRA 2019b)
- October 1, 2021, Supplemental Information Request Response prepared by WRA (WRA 2021)
- Recent aerial photos of the Project site (Google Earth)

The current review found that three rare plant species are associated with coastal dune and coastal prairie habitat (CNPS, 2022; CDFW, 2022), none of which are expected on the Project site due to reasons cited in the 2020 IS/MND.

There are no more recent sightings of rare plants or wildlife on or near the Project site and no new information or changed circumstances have surfaced related to rare plants or wildlife that would change the conclusions of the 2020 IS/MND with regard to this topic. In addition, with site clearing scheduled to occur outside of the active avian nesting season, the Project would not result in a significant impact on nesting migratory birds, including raptors. The existing chimney on the site does not provide habitat for special-status roosting bats. Hence, the Project would not result in a new significant impact on special-status plants or wildlife. As the 2020 IS/MND identified no impact associated with this topic, the current Project would not result in a substantial increase in the severity of a previously identified significant impact.

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

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

Due to the interrelatedness of these resource topics, discussion of Project impacts to sensitive natural communities (topic 2.4.b) and conflicts with local policies protecting biological resources (topic 2.4.e) are combined in this analysis.

The 2020 IS/MND inventoried habitats on the Project site as roughly 106 sq ft of developed area, 0.20 acre of sand beach/dune, and 0.16 acre of ice plant mats. The 2020 IS/MND correctly states that the natural communities that occur on-site are not designated as sensitive by the California Department of Fish and Wildlife (CDFW) or the U.S. Fish and Wildlife Service (USFWS). The 2020 IS/MND describes the sand beach/dune community as "Environmentally Sensitive Habitat Area" (ESHA) under the Marin County Local Coastal Program (LCP) and concludes that the biological resource values of this sensitive natural community (sand dunes) would be slightly but not substantially reduced by the Project. The 2020 IS/MND therefore concludes that the impact of the project then being evaluated on sensitive natural communities and with respect to conflicts with any local policies or ordinances protecting biological resources, would both be less than significant.

This conclusion was reached based upon the prevalence of non-native species (i.e., ice plant), absence of special-status species, and existing recreational pressure on the site. In a March 16, 2021 interagency response letter to the County, however, the California Coastal Commission (Commission) commented that: a) the LCP considers coastal dunes as ESHA and as such, development is prohibited in dunes other than resource dependent uses, and; b) that the LCP requires that development be adequately setback from ESHA to prevent impacts that would significantly degrade the ESHA, and that development should be compatible with the continuance of the ESHA (CCC, 2021a). In the context of this analysis, coastal dunes are afforded status as a sensitive natural community based on the Commission's jurisdiction over coastal areas and protection as a unique habitat type that is afforded by the California Coastal Act and LCP, which are discussed below.

California Coastal Act section 30107.5 defines ESHA as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments." Coastal dunes on the Project site qualify as ESHA because such habitat is generally considered rare due to historical declines in its overall abundance. It has been reduced to a small fraction of its original range, but where present may occur in relatively large numbers or cover large local areas. Additionally, coastal dune habitat is particularly vulnerable to human disturbance or degradation. Hence, even in their degraded condition, coastal dunes on the Project site have intrinsic value as a protected native habitat. The LCP addresses terrestrial ESHAs, which are described as non-aquatic habitats that support rare and endangered species, with specific reference to coastal dunes. LCP Policy C-BIO-7 (Coastal Dunes) includes safeguards that "prohibit development in coastal dunes to preserve dune formations, vegetation, and wildlife habitats." As described in the Project Description and 2020 IS/MND, a portion of the proposed 1,658-sf development footprint would be sited in coastal dune habitat. Residential development can be expected to result in impacts to the ecological functioning of the dune system, including fragmentation of habitat and the prevention of sand movement, an essential feature of dune habitat systems. Use of the lot cannot avoid coastal dune habitat; hence, development would cause a physical impact to coastal dunes and would conflict with LCP Policy C-BIO-7.

There are no changed physical circumstances on the site involving new significant impacts or substantially more severe impacts to ESHA since the 2020 IS/MND. That analysis correctly

describes the relatively degraded on-site habitat and the absence of habitat for special-status plants and wildlife species. However, the 2020 IS/MND acknowledgment of coastal dunes as ESHA warranted a discussion of impacts to coastal dunes and of mitigation necessary to reduce or avoid those impacts; no such discussion was included in the 2020 IS/MND. In their March 16, 2021 and August 5, 2021 comment letters, the Commission provided new information of substantial importance that warranted a new analysis of potential physical impacts to coastal dunes and consideration of dune protection policies under the LCP (CCC, 2021a; 2021b). The recent certification of the Marin County LCP Implementing Program, which addresses impacts to ESHA, additionally constitutes a changed circumstance affecting the Project, as discussed below.

As proposed, the Project would result in a new structure and associated residential development on the site, which would be on the site for an estimated 50 years before being destroyed or rendered uninhabitable by sea level rise. Therefore, the impacts of the proposed residential use of the site would be extended into the future for as long as the new house remains on the site. The potential impacts of the proposed residential use on ESHA would be varied. First and foremost, would be the direct loss of dune ESHA on-site due to the development footprint of 1,658 sf for the home and appurtenant facilities, or approximately 10 percent of the 15,200-sf lot; approximately one-third of this area comprises coastal dune habitat.

The other significant on-site impact to ESHA would be due to the location of the residential use immediately in and adjacent to the remaining coastal dune habitat, without any buffers. The LCP, Policies C-Bio-2 and C-Bio-3, require the avoidance of ESHA and the use of buffers of 50 feet, subject to adjustment, but no less than 25 feet, to minimize the disruption of habitats from non-compatible uses. Such impacts include light and noise; shading of dune habitat; direct disturbance of habitat from activities of residents; and potential impacts on flora and fauna from domestic animals. Given the prevalence of ice plant on the Project site, the potential introduction of non-native plants and invasive species is not a potential Project impact.

The Project site, which is surrounded to the east, west, and north by residential development, supports a small, isolated wind-blown dune area that is not part of a greater dune system. As was the case with earlier beachfront development in the Stinson Beach area, direct impacts to adjacent habitat are not avoidable if a residential use of the site is allowed because much of the site supports ESHA. There is no feasible alternative location within the Project site for the proposed residence that would both avoid direct impacts to ESHA and also buffer ESHA not directly impacted. The extent of these impacts has been reduced by making the home design, more compact (smaller), compared to the 1,400-sf residence contemplated in the 2020 IS/MND, and the previously proposed 1,563 sf, two-story residence. The current proposal is for a one-story, 1,296-sf residence, which also reduces the deck and stair area from 528 sf to 252 sf and eliminates the previously proposed detached 288-sf accessory building/garage. The development is also proposed within a portion of the Project site that is mostly devoid of native vegetation. However, the overall impacts of the proposed residential use on on-site coastal dune habitat cannot be fully eliminated without eliminating the residential use of the property.

Strict application of LCP Policy C-BIO-7 would result in a denial of the proposed Project, which could be construed as a regulatory “taking” of the property owner’s development rights.

However, Marin County's recently certified Implementing Program for the LCP, Section 22.64.050(A)(1)(d), Habitat Mitigation, anticipates this situation, and requires a mitigation plan for proposed development that is a permissible use within ESHA, where there is no feasible alternative that can avoid significant impacts to ESHA.This regulation requires full mitigation of residual adverse impacts to ESHA, with priority given to on-site habitat mitigation. Mitigation Measure BIO-2, below, is added to provide site specificity to this existing regulatory requirement. Mitigation Measure BIO-2 includes maximizing ESHA protection for remaining coastal dune habitat on the Project site not directly disturbed by development of the proposed residence and appurtenant driveway, septic system and landscaped areas by preserving dune habitat, including through restoration and enhancement as necessary to ensure maximum feasible habitat value. This would be achieved through a dune restoration plan that would apply to the remainder of the site.

Aside from the LCP policy issues discussed above, and also as concluded in the 2020 IS/MND, the current Project would not conflict with any provisions of the Marin County Code nor with other regional or local plans or policies. The Project site is not within a portion of Stinson Beach where the LCP forbids development. The Project would also not conflict with requirements for protection of native and heritage trees contained in the LCP or other local policies or code sections protecting biological resources.

In summary, the Project site contains ESHA in the form of coastal dunes, and the proposed Project would occur within and encroach upon coastal dunes. Impacts to dunes would be a new significant impact of the Project, not previously identified in the 2020 IS/MND. The physical effect upon biological values can be mitigated to less than significant with the implementation of new Mitigation Measure BIO-2, which calls for the restoration and enhancement of remaining dune habitat on the site. The remaining conflict with LCP policies is not a physical environmental effect and can be resolved through the established approval process between the County and the Commission.

New Mitigation Measure BIO-2. Dune Restoration Plan

Consistent with Certified Implementation Program Section 22.64.050(A)(1)(d), Habitat Mitigation, the Applicant shall prepare a Dune Restoration Plan for County review and approval that provides for dune and related habitat enhancement for all vegetated coastal dune habitat located between the unvegetated sandy beach and non-dune ice plant mats located behind the dunes outside the approved building envelope. The Dune Restoration Plan shall be prepared by a qualified restoration biologist, shall meet all the requirements of Certified Implementation Program Section 22.64.050(A)(1)(d)(3), and at a minimum shall include the following elements:

a) Dune Inventory. Coastal dune habitat shall be inventoried on the Project site to depict dune impact and restoration areas. [1] The restoration area shall be enumerated and drawn onto a site plan similar to that presented in the 2020 IS/MND (see 2020 IS/MND Appendix A, Figure 5, Project Impacts to Biological Communities).

b) Dune Contours. Final contours of the site, after project grading, necessary to support dune restoration and development screening, shall be identified.

c) Ice plant Removal. To accommodate native plantings, non-native ice plant shall be removed from the site by means such as those described by the California Invasive Plant Council (CAL-IPC, 2022).

d) Native Dune Plants. All required plantings shall be native dune species from local stock appropriate to the Stinson Beach area and shall be maintained in good growing conditions during a 10-year review period and shall be replaced with new plant materials as necessary to ensure continued compliance with the restoration plan.

e) Initial Planting. Installation of all plants shall be completed prior to occupancy of the new home. Within 30 days of completion of initial native dune plant installation, the Applicant shall submit a letter to the County from the project biologist indicating that plant installation has taken place in accordance with the approved restoration plan, describing long-term maintenance requirements for the restoration, and identifying the five- and ten-year monitoring submittal deadlines (Measures g and i, below). At a minimum, long-term maintenance requirements shall include site inspections by a qualified biologist annually, or more frequently on the recommendation of the biologist, to identify and correct any restoration and maintenance issues.

f) Site Protection. During the initial plant establishment period, ropes or low-profile fencing shall be minimally used to screen planted areas from recreational users and dogs.

g) Monitoring. At five and ten years from the date of initial planting under the Dune Restoration Plan, the Applicant or his successors in interest shall submit, for the review and approval of the County, a restoration monitoring report prepared by a qualified specialist that certifies that the on-site restoration is in conformance with the approved Dune Restoration Plan, along with photographic documentation of plant species and plant coverage.

h) Remediation. If the restoration monitoring report or expert's inspection report indicates the restoration is not in conformance with or has failed to meet the performance standards specified in the approved Dune Restoration Plan, the Applicant shall submit a revised or supplemental restoration plan for the review and approval by the County. The revised restoration plan shall be prepared by a qualified restoration biologist and shall specify measures to remediate those portions of the original plan that have failed as identified in the restoration monitoring report or inspection report. These measures, and any

[1] As identified in California Coastal Commission comments (CCC, 2021, pg. 2), dune habitat extends further inland than depicted in the 2019 IS/MND. Aerial imagery from 2019 shows that some coastal dune habitat was mapped as iceplant mats (e.g., see California Coastal Records Project imagery from 2019; https://www.californiacoastline.org/cgi-bin/image.cgi?image=201906174&mode=big&lastmode=sequential&flags=0&year=current). Hence, a revised baseline habitat assessment showing the extent of coastal dune habitat is warranted.

subsequent measures necessary to carry out the approved Dune Restoration Plan, shall be carried out in coordination with the County until dune restoration is established in accordance with the Dune Restoration Plan's specified performance standards.

i) The restored dune areas shall meet the following minimum performance standards:

1. Density (perennial native species only): average 1 plant per 4 square feet.
2. Percent total cover (perennial native species only): 1 year: 15%; 2 years: 25%; 3 to 5 years and beyond: 35%.
3. Percent relative cover: all species are within normal range.
4. Composition: at least five native, perennial species.
5. Health and vigor: plants are in good health, exhibit normal flowering, and damage from people, deer, or pets is negligible.
6. Exotic species: within the restoration areas (i.e., not within outdoor living areas) invasive, non-native plants are few in number and not evident.
7. Provision for possible further action if monitoring indicates that initial restoration has failed.

Mitigation Monitoring Measure BIO-2

The Community Development Agency shall review and approve the Dune Restoration Plan, implementation report, and monitoring reports.

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

The 2020 IS/MND states that no State or federally protected wetlands occur on the Project site and that the Project would not directly impact any protected wetlands through removal or fill. Additionally, to minimize the likelihood of untreated wastewater coming into contact with seasonally high groundwater, the septic system was designed using intermittent sand filtration and raised bed dispersal fields to avoid indirectly affecting wetlands through source water pollution or other means. With this approach, the 2020 IS/MND concludes that a less-than-significant impact would occur to State or federally protected wetlands.

Each of these statements is still true; there are no changed circumstances and no new information of substantial importance requiring evaluation, and the proposed Project is within the scope of the project analyzed in the 2020 IS/MND. As concluded in the 2020 IS/MND, the current Project would not have substantial adverse effects on State or federally protected wetlands; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

4.d. Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The 2020 IS/MND states that the Project site is of limited utility as a migratory corridor or nursery site and that the project then being evaluated would not substantially interfere with wildlife movement or with the use of wildlife nursery sites; there would be only a less-than-significant impact of this kind. These observations remain true. The 2020 IS/MND also states that some common bird species could establish nests within on-site vegetation, and that impacts to active bird nests do not constitute a significant impact under CEQA. This statement was partially correct in 2020 under a Department of the Interior memorandum opinion designated M-37050; although the California Department of Fish Wildlife issued an advisory on November 29, 2018, that affirmed that California law continues to prohibit incidental take of migratory birds (CDFW, 2018). The federal opinion was vacated in August 2020; hence, impacts to active bird nests would be a significant impact under CEQA.

Despite regulatory changes since 2019 related to nesting birds, the Project would not impact active bird nests. The 2020 IS/MND includes Mitigation Measure BIO-1, which limits initial ground disturbance and vegetation removal to outside of the avian nesting season (i.e., September 1 to January 31). This approach, which remains valid, is consistent with Marin County Code, Title 22, Development Code, Sec. 20.040(G) (Nesting Bird Protection Measures), which requires a preconstruction survey if construction occurs during the bird nesting season (February 1 to August 15). No focused nesting bird survey is required for projects that occur outside of the nesting bird season. The approach required by Mitigation Measure BIO-1 reduces potential impacts to nesting birds to a less-than-significant level. There are no changed circumstances and no new information of substantial importance requiring evaluation, and the proposed Project is within the scope of the project analyzed in the 2020 IS/MND. No new information or changed circumstances have come to light since the 2020 IS/MND that would change this conclusion: the Project would not result in a significant impact to wildlife corridors or nursery sites; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

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

No habitat conservation plans, natural community conservation plans, or other approved local, regional, or state habitat conservation plans apply to the Project site. Thus, the 2020 IS/MND identified that the Project would not conflict with any such plans and no impact would occur. This is still the case. There are no changed circumstances and no new information of substantial importance requiring evaluation, and the proposed Project is within the scope of the project analyzed in the 2020 IS/MND. As concluded in the 2020 IS/MND, the current Project would not conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. There would be no new

significant impact and no substantial increase in the severity of a previously identified significant impact of this kind.

Mitigation Measures

The 2020 IS/MND identified one mitigation measure, Mitigation Measure BIO-1, which avoids the likelihood of encountering nesting birds during vegetation removal. New Mitigation Measure BIO-2 is additionally proposed to reduce physical impacts to coastal dune habitat on the Project site to less than significant.

The full text of all mitigation measures, including those required by the 2020 IS/MND and those identified or modified in this document, is included in Chapter 3, Summary and Conclusion.

Conclusion

As discussed above, the current Project would result in a new significant impact on coastal dune habitat, not previously identified in the 2020 IS/MND. With implementation of new Mitigation Measure BIO-2, this impact would be reduced to less than significant.

References

California Coastal Commission (CCC), 2021a. Letter to Sabrina Cordoza, County of Marin Community Development Agency entitled, "RE: Comments on lnteragency Referral for Brian Johnson Coastal Permit (P3049) - formerly Johnson (P1162) in Stinson Beach, CA." March 16, 2021.

California Coastal Commission, 2021b. Letter to Sabrina Cordoza, County of Marin Community Development Agency entitled, "Subject: P3049 Brian Johnson Trust Coastal Permit." August 5, 2021.

California Coastal Commission. 2018. Staffing Report: CDP Hearing, Application Number 3-18-0286 for residential development at 1355 Lighthouse Avenue, in the Asilomar Dunes neighborhood of Pacific Grove, Monterey County. Filed: 5/17/2018. https://documents.coastal.ca.gov/reports/2018/9/Th13a/Th13a-9-2018-report.pdf

California Department of Fish and Wildlife (CDFW). 2022. California Natural Diversity Data Base. Rarefind 5 report for the Johnson Trust Project site plus a 5-mile radius. September 6, 2022.

California Department of Fish and Wildlife. 2018. California Department of Fish and Wildlife and California Attorney General Xavier Becerra Advisory Affirming California's Protections for Migratory Birds, November 29, 2018 (https://oag.ca.gov/system/files/attachments/press-docs/20181129mbta-advisory3.pdf).

California Invasive Plant Council (CAL-IPC). 2022. IPCW Plant Report, *Carpobrotus edulis*. Accessed September 28, 2022. https://www.cal-ipc.org/resources/library/publications/ipcw/report25/

California Native Plant Society, Rare Plant Program. 2022. Rare Plant Inventory (online edition, v9-01 1.5). Website: https://www.rareplants.cnps.org. Accessed 7 September 2022.

Marin County. 2019. Staff Report to the Marin County Planning Commission, Brian Johnson Trust Coastal Permit Hearing Date: November 22, 2021

WRA. 2021. Correspondence to Sabrina Cardoza, Marin County Community Development Agency entitled, "Re: Supplemental Information Request Response, Brian Johnson Trust Coastal Permit, 21 Calle Del Onda, Stinson Beach, Assessor's Parcel 195-162-49, Project ID P3049." October 1, 2021.

WRA. 2019a. Correspondence to Ed Schmidt entitled, "Biological Site Assessment for 21 Calle del Onda, Stinson Beach, California." October 2019.

2.5. Cultural Resources

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
5. Cultural Resources. Would the Project:						
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	Section 4.5, Cultural Resources, topic a.	Yes	No	Yes	N/A	N/A
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	Section 4.5, Cultural Resources, topic b.	Yes	No	Yes	N/A	N/A
c) Disturb any human remains, including those interred outside of formal cemeteries?	Section 4.5, Cultural Resources, topic c.	Yes	No	Yes	N/A	N/A

Discussion

2.5.a and b. Would the Project Cause a substantial adverse change in the significance of a historical or archaeological resource pursuant to State CEQA Guidelines §15064.5?

The 2020 IS/MND, Section 4.5, Cultural Resources, is based on a Cultural Resources Study for the project then being evaluated, performed on behalf of the SBCWD by Tom Origer & Associates (Walker-Follett and Origer, 2019). This study included archival research at the Northwest Information Center, Sonoma State University, examination of the library and files of Tom Origer & Associates, Native American contact, and field inspection of the study area. No cultural resources were found within the study area. The study found a low potential for buried archaeological resources within the Project site. Based on the findings of this study, the 2020 IS/MND concluded that the Project would have No Impact on historical or archaeological resources. The discussion of archaeological resources cites State CEQA Guidelines Section 15064.5(f), which recommends that lead agencies adopt accidental discovery provisions for construction activities.

The 2020 IS/MND does not acknowledge that Marin County has adopted accidental discovery provisions as part of the Development Code. Development Code Section 22.20.040 (E) states that, "(i)n the event that archaeological, historic, or paleontological resources are discovered during any construction, construction activities shall cease, and the (Community Development)

Agency shall be notified so that the extent and location of discovered materials may be recorded by a qualified archaeologist, and disposition of artifacts may occur in compliance with State and Federal law. The disturbance of an Indian midden may require the issuance of an Excavation Permit by the Department of Public Works, in compliance with Chapter 5.32 (Excavating Indian Middens) of the County Code.

In preparation of this Supplemental Environmental Review, Tom Origer & Associates was tasked with reviewing the current Project and determining whether the current Proposal affected the conclusions reached in their 2019 Cultural Resources Study. After reviewing current Project plans and new site studies prepared for the Project, Origer concluded that, "[a]t the current time (November 2022), no new information suggests that the parcel at 21 Calle del Onda has the potential to contain surface or buried archaeological resources. Therefore, no changes to the 2019 report conclusions or recommendations are warranted (Origer, 2022).

There are no changed circumstances and no other new information of substantial importance requiring evaluation, and the proposed Project is within the scope of the project analyzed in the 2020 IS/MND. As concluded in the 2020 IS/MND for the project then being evaluated, the current Project would have no impact on historical or archaeological resources; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

2.5.c. Would the Project disturb any human remains, including those interred outside of formal cemeteries?

The 2020 IS/MND states that the Project site contains loose sandy soils and artificial fill which are unlikely to contain buried human remains, and cites the accidental discovery provisions of California Health and Safety Code Section 7050.5 and California Public Resources Code Sections 5097.5, 5097.9 et seq., which would require the construction contractor to halt construction in the vicinity of the find and contact the County coroner. Based on the low likelihood that the Project site may contain buried human remains, and the protective provisions of State law, the 2020 IS/MND concludes that the Project would have no impact with regard to disturbance of human remains.

These points are still valid and applicable to the current Project. There are no changed circumstances and no other new information of substantial importance requiring evaluation, and the proposed Project is within the scope of the project analyzed in the 2020 IS/MND. As concluded in the 2020 IS/MND for the project then being evaluated, the current Project would have no impact related to disturbance of human remains; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

Mitigation Measures

The 2020 IS/MND concluded that the project then being evaluated would have no impact on cultural resources; no mitigation measures were required. As the current Project would also have only less-than-significant impacts on cultural resources, no additional mitigation is required.

Conclusion

The 2020 IS/MND concluded that the project then being evaluated would have no impact on cultural resources. An update to the Cultural Resources Study prepared for that project is new information of substantial importance that supports the same conclusion for the current Project: the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact on cultural resources.

References

Origer, Tom, 2022. Memo from Tom Origer, Tom Origer & Associates, to Dan Sicular, Sicular Environmental Consulting, re: Cultural Resources 21 Calle del Onda. November 21, 2022.

Walker-Follett, Kean, and Tom Origer. Cultural Resources Study for the 21 Calle del Onda Wastewater System Project, Stinson Beach, Marin County, California. Prepared for WRA, Inc., July 24, 2019 by Tom Origer & Associates. Included as Appendix B in the 2020 IS/MND.

2.6. Energy

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
6. Energy. Would the Project:						
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Section 4.6, Energy, topic a.	Yes	No	No	No	N/A
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Section 4.6, Energy, topic b.	Yes	Yes	No	No	N/A

Discussion

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

The 2020 IS/MND, Section 4.6, topic a, states that the project then being evaluated would require energy use for the construction and maintenance of the wastewater disposal system, and could indirectly lead to future energy use if and when a residence is constructed on the Project site, but that the small size of the residence, energy-efficient design of the septic system, and California Code of Regulations, Title 24 (CalGreen) building energy efficiency standards would minimize energy consumption during construction and operation. The 2020 IS/MND concludes that the project then being evaluated would have a less-than-significant impact with regard to the wasteful, inefficient, or unnecessary consumption of energy resources.

The 2020 IS/MND does not discuss Marin County's Green Building Code (Title 19 Marin County Building Code, Subchapter 2 – Green Building), which includes additional energy efficiency provisions, beyond those required by CalGreen, for new residential design and construction. The Green Building Code was last updated in 2022.

There are no changed circumstances and no other new information of substantial importance requiring evaluation, and the proposed Project is within the scope of the project analyzed in the 2020 IS/MND. As concluded in the 2020 IS/MND for the project then being evaluated, and with

compliance with the mandatory energy efficiency requirements of CalGreen and the 2022 Marin County Green Building Code, the current Project would have a less-than-significant impact with regard to energy consumption. The current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

2.6.b. Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The 2020 IS/MND states that Marin County's 2015 Climate Action Plan and CalGreen were the primary local and state plans and policies on renewable energy and energy efficiency that applied to the project then being evaluated. Based on the same points as the previous topic, the 2020 IS/MND concludes that the project then being evaluated would not conflict with or obstruct a local or state plan for renewable energy or energy efficiency.

Since completion of the 2020 IS/MND, Marin County has updated its Climate Action Plan. Climate Action Plan 2030 (Marin County, 2020), which contains policies and programs pertaining to the unincorporated areas of the County, was approved by the Board of Supervisors in December 2020. Climate Action Plan 2030 contains numerical targets for greenhouse gas (GHG) reductions consistent with the Statewide goal, established by Senate Bill 32 of 2016, to reduce emissions 40 percent below 1990 levels by 2030. Strategies for achieving the targeted GHG reductions include many measures related to energy efficiency and renewable energy, including increasing use of zero emission vehicles, greater reliance on human-powered and public transit, increasing renewable energy generation including rooftop solar, waste reduction strategies, water conservation strategies, greater use of low-embodied emissions building materials, and others. Many provisions of CalGreen and the Marin County Green Building Code are consistent with and serve to implement Climate Action Plan 2030 strategies, such as requiring advanced energy efficiency design, construction, and use of on-site renewable energy generation.

There are no other changed circumstances and no new information of substantial importance requiring evaluation, and the proposed Project is within the scope of the project analyzed in the 2020 IS/MND. With compliance with the mandatory energy efficiency requirements of CalGreen and the 2022 Marin County Green Building Code, the current Project would be consistent with State and local plans for energy efficiency and renewable energy, and, as concluded in the 2020 IS/MND, any such impact would be less-than-significant; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

Mitigation Measures

The 2020 IS/MND concluded that the project then being evaluated would have less-than-significant impacts related to energy consumption and consistency with energy plans; no mitigation measures were required. As the current Project would also have only less-than-significant impacts on energy consumption and consistency with energy plans, no additional mitigation is required.

Conclusion

the 2020 IS/MND concluded that the project then being evaluated would have a less-than-significant impact with respect to energy consumption and consistency with energy efficiency and renewable energy plans. There is no new information of substantial importance affecting this topic. Changed circumstances include the adoption by Marin County of Climate Action Plan 2030. Taking this changed circumstance into consideration, the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact with respect to energy.

References

Marin County, 2020. Climate Action Plan 2030. Adopted by the Board of Supervisors December 2020. Available at: https://www.marincounty.org/depts/cd/divisions/sustainability/climate-and-adaptation.

2.7. Geology and Soils

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
7. Geology and Soils. Would the Project:						
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:						
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	Section 4.7, Geology and Soils, topic ai.	Yes	No	Yes	No	N/A
ii) Strong seismic ground shaking?	Section 4.7, Geology and Soils, topic a-ii.	Yes	No	Yes	No	N/A
iii) Seismic-related ground failure, including liquefaction?	Section 4.7, Geology and Soils, topic a-iii.	Yes	No	Yes	No	N/A
iv) Landslides?	Section 4.7, Geology and Soils, topic a-iv.	No	No	No	N/A	N/A
b) Result in substantial soil erosion or the loss of topsoil?	Section 4.7, Geology and Soils, topic b.	Yes	No	No	No	N/A
c) Be located on 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?	Section 4.7, Geology and Soils, topic a-iii.	Yes	No	Yes	No	N/A

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
7. Geology and Soils. Would the Project:						
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Section 4.7, Geology and Soils, topic d.	No	No	No	N/A	N/A
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?	Section 4.7, Geology and Soils, topic e.	No	No	No	N/A	N/A
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Section 4.7, Geology and Soils, topic f.	Yes	No	No	No	N/A

Discussion

2.7.a.i Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map?

The 2020 IS/MND, Section 4.7, Geology and Soils, topic a.i, examines whether the Project site is located in an Alquist-Priolo Fault Rupture Hazard Zone and concludes that the nearest zoned active fault, the San Andreas Fault Zone, is approximately 1.3 miles west of the Project site and thus, the Project site is not at risk of surface rupture. The 2020 IS/MND therefore identified this as a less-than-significant impact.

Since adoption of the 2020 IS/MND, Murray Engineers (Murray) completed a limited preliminary geotechnical feasibility study (Geotechnical Feasibility Study) for the Project site to support the proposed construction of a single-family residence and associated improvements, which includes the septic system. Murray determined that the active traces of the San Andreas fault and San Gregorio fault are 0.9 and 1.6 miles southwest, respectively, from the Project site (Murray Engineers, 2021). Murray also discusses a fault segment located east of the San Andreas fault and northwest of the Project site that abruptly terminates at the northwest end of the Bolinas Lagoon. Murray states that "some local geologic studies suggest this feature may be an extension

of the Golden Gate fault mapped to the southeast and have projected the fault across the lagoon but with a bend farther southeast." Murray concludes that based on these projections, it appears that the fault could be potentially located within a few hundred feet of the Project site, although the exact location of this fault is not precisely understood in the immediate site vicinity. Murray presumes that, although this fault is not zoned as an active fault under the Alquist-Priolo Act, based on its proximity to the San Andreas fault, it should be considered potentially active. An evaluation of the Golden Gate fault conducted for this SER revealed that the Golden Gate fault trends 33 degrees northwest from Lake Merced in San Francisco to converge with the San Andreas and San Gregorio faults in the Bolinas Lagoon (Bruns, et.al, 2002). The trace of the Golden Gate Fault trends past the Project site approximately 2,000 feet offshore.[2] The Golden Gate fault is not zoned as an active fault under the Alquist-Priolo Earthquake Fault Zoning Act nor is it identified by the California Geological Survey (CGS) as a fault with Quaternary (less than 1.6 million years) displacement (Jennings and Bryant, 2010). The San Andreas and the San Gregorio Fault Systems are comprised of multiple faults, including the Golden Gate fault, on which motion has occurred and these smaller faults can experience displacement when the main trace ruptures during an earthquake. The main trace of the San Andreas ruptured offshore of San Francisco in 1906 but it has not been established whether the Golden Gate fault experienced displacement during that event.

Considering the proximity of the Golden Gate fault to the San Andreas Fault Zone and the potential that it could experience displacement during an earthquake on the San Andreas or San Gregorio faults, identifying the Golden Gate fault as having the potential for displacement is not unreasonable. However, due to its limited length and lack of evidence of recent (Quaternary) displacement, the potential that the Golden Gate fault could produce rupture at the surface is low. Murray states that although there are no faults mapped across the Project site, it is still located very close to the active San Andreas and San Gregorio faults and there is a moderate to high potential for the formation of new rupture zones and creation of secondary ground deformation including ground warping and cracking that could adversely affect structures close to the fault.

The 2020 IS/MND concludes that because the Project site is not located in an Alquist-Priolo Earthquake Fault Hazard Zone, there is no impact associated with fault rupture. This conclusion is still essentially valid although evidence presented by Murray that the Golden Gate fault could be potentially active and is located less than a mile offshore, increases the risk of seismic activity to affect the Project site. While the Golden Gate fault would not cause surface fault rupture on the Project site, it could contribute to and potentially increase the seismic risk. This topic, however, only considers the potential for fault rupture, and thus this impact is considered less than significant: the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind. See, however, the following topic, 2.7.a.ii.

[2] The measurement of 2,000 feet is approximate, based on scaling from Figure 3 in Bruns, et.al, 2002.

2.7.a.ii. Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong ground shaking.

The 2020 IS/MND, Section 4.7, Geology and Soils, topic a.ii, examines whether the project then being evaluated would be subjected to severe seismic ground shaking, and characterizes the projected ground motion as potentially violent. The 2020 IS/MND concludes that although seismic ground shaking may occur at the Project site, the project would be designed and constructed consistent with the most current version of the California Building Code (CBC). The CBC sets forth specifications and design criteria to minimize damage from anticipated ground shaking and liquefaction. The 2020 IS/MND concludes that incorporation of these specifications and design criteria would reduce potential impacts associated with ground shaking to a less than significant level.

In its Geotechnical Feasibility Study, Murray evaluated the construction of a 1,488 square foot, two-story residence and a detached 288 square foot garage and concluded that strong to very violent ground shaking can be expected over the life of these structures during moderate to large earthquake events (Murray Engineers, 2021). Murray recommended that proposed site improvements be designed in accordance with current earthquake resistant standards, including the guidelines and design criteria set forth in the 2019 CBC, but points out that while adherence to CBC earthquake design guidelines would likely reduce the risk of structural collapse, it would not prevent structural damage.

Ground shaking is an inherent and unavoidable hazard associated with development at the Project site. There is a 72 percent probability for at least one magnitude 6.7 or larger earthquake in the San Francisco Bay Area before the year 2043 and the northern portion of the San Andreas fault is estimated to have a 6 percent probability of such an event (Murray Engineers, 2021). Ground shaking hazards can be addressed through adequate structural and foundation engineering and adherence to the CBC earthquake design guidelines, which, in the case of the proposed Project, would be incorporated following the completion of the design level geotechnical investigation. There are no changed circumstances and no new information of substantial importance requiring evaluation regarding seismic ground shaking, other than the preliminary geotechnical feasibility study described and cited above. Consistent with the conclusions in the 2020 IS/MND, impacts associated with earthquake-induced ground shaking would be less than significant; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

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

The 2020 IS/MND, Section 4.7, Geology and Soils, combined topic a.iii (ground failure and liquefaction) with checklist topic c (Be located on 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?) for analysis of the project then being evaluated, including installation and use of the septic system and potential future construction of

a single-family residence. The 2020 IS/MND stated that the Project site is in an area very susceptible to liquefaction[3] and thus, liquefied soils may cause building instability due to foundation damage and may cause buried septic tanks to float within the liquified soils. The analysis also concluded that lateral spreading[4] may occur and could be particularly damaging to underground tanks and utilities. The 2020 IS/MND concluded that, although seismic ground shaking may occur at the site, the project then being evaluated would be designed and constructed consistent with the most current version of the CBC and incorporation of its specifications and design criteria would reduce potential impacts associated with ground shaking to a less-than-significant level, and therefore, people or structures would not be exposed to substantial effects related to liquefaction.

Murray also determined in its Geotechnical Feasibility Study that the Project site and surrounding areas have a high potential for liquefaction and/or lateral spreading during a moderate to large seismic event (Murray Engineers, 2021). Murray concluded that the potential for liquefaction-induced ground failure could be reduced by supporting the new residence on a relatively rigid shallow foundation in combination with ground improvement[5], or alternatively, by using deep foundations, such as drilled piers, extending below the liquifiable materials. Murray recommended that, in any case, an analysis of liquefaction and lateral spreading displacement should be conducted as part of the design-level geotechnical investigation. Murray stated that regardless of the foundation type, the property owner must be willing to accept that a moderate to high risk is associated with these hazards, as they are inherent to the Project site's subsurface conditions and topography, and will remain (Murray Engineers, 2021).

Based on Murray's study, the current Project's impact with regard to the potential for risk of loss, injury, or death involving seismic-related ground failure, including liquefaction, is less than significant. There are no changed circumstances and no new information of substantial importance requiring evaluation of liquefaction, other than the Murray study, and the impacts of the currently proposed Project remain less than significant; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

2.7.a.iv. Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

The 2020 IS/MND, Section 4.7, Geology and Soils, topic a.iv, examines whether the project then being evaluated, specifically the septic tank installation, could be affected by landslides, and concluded that there would be no impact. The 2020 IS/MND based that conclusion on the observation that the Project site is in a flat, low-lying area with no potential debris flow sources

[3] Liquefaction occurs when saturated, well-graded granular materials such as sand, liquefy during ground shaking because the hydrostatic bonds that hold the grains together break. Liquefaction of the soil leads to secondary effects including loss of soil bearing strength, lateral spreading down slopes, sand boils, soil collapse, and settlement.

[4] Lateral Spreading refers to landslides that are associated with liquefaction that commonly form on gentle slopes and that have rapid fluid-like flow movement.

[5] Ground improvement techniques are those that improve the strength and density and reduce the potential for settlement and liquefaction in marginal to problematic soils and can include rammed aggregate piers, dynamic compaction, jet grouting, deep soil mixing, lime stabilization or prefabricated vertical drains.

and no history of landslides; the septic tank installation would not exacerbate landslide risks within the project site or in downslope areas.

Since adoption of the 2020 IS/MND, the Geotechnical Feasibility Study prepared by Murray Engineers (Murray Engineers, 2021) did not identify landslide hazards as a geotechnical constraint.

Given that the Project site is not on or adjacent to a slope and is relatively flat, there is no potential for landsliding. The proposed construction of the septic tank, as evaluated in the 2020 IS/MND, would not change this condition nor would construction of the residence proposed as part of the Project. Subsurface septic tank installation and the structural foundation work for the proposed residence would not alter the ground surface such that a slope would be created. Regarding landslide hazards, there are no changed circumstances and no new information of substantial importance requiring evaluation. Impacts associated with landslides would be less than significant; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

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

The 2020 IS/MND, Section 4.7, Geology and Soils, topic b, examines whether the project then being evaluated, would cause substantial soil erosion or loss of topsoil. The 2020 IS/MND states that the vegetation on the Project site would be removed during construction and, although this would increase its susceptibility to erosion, the area of disturbance would be relatively small. The soil erosion and loss of topsoil would not be considered substantial, especially considering that the contractor would use erosion control measures (e.g., placement of straw in disturbed areas) during construction. The 2020 IS/MND evaluated post-construction conditions and concluded that disturbed areas would be filled with native fill or medium loam soils, thereby slightly increasing the likelihood of soil erosion and loss of topsoil, as vegetation would no longer cover the project site. This denuded area would be approximately 0.16 acres in size and would be insufficiently large to create substantial soil erosion. The 2020 IS/MND also states that this area would remain denuded and no additional vegetation removal would be required in the future, so potential future projects would not result in any further exacerbation of soil erosion. It is assumed that the "future projects" the 2020 IS/MND referred to include the eventual construction of a residence on the project site. The 2020 IS/MND concluded that the project then being evaluated would not result in substantial soil erosion or loss of topsoil, and the impacts would be less than significant.

Project site conditions regarding vegetative cover and potential vegetation removal described in the 2020 IS/MND remain valid, although under the proposed Project, a larger area would be disturbed because of the construction of the residence. Vegetation removal would occur creating a temporary condition in which native soils could be susceptible to wind and rain erosion, most likely during the construction stages of the Project. The proposed Project includes specifications (see Section 1.2, Project Description) for erosion and sediment control applicable to the construction of the septic system and the one-story, 1,296 square foot residence. Erosion control Best Management Practices (BMPs) include covering and protecting material stockpiles,

maintaining a gravel accessway, monitoring erosion controls and removing accumulated sediment, minimizing the amount of earthwork exposed at any one time, and hydroseeding/mulching or hand mulching all exposed earth surfaces. As an additional schedule requirement, erosion control would be in place before the end of September.

While the 2020 IS/MND addressed the potential for erosion and topsoil loss due to the construction of the septic system and intimated that additional site development could occur in the future, the proposed Project entails the construction of both the septic system and construction of the house and provides, as part of the Project, adequate protection to reduce the potential for erosion and topsoil loss. Site conditions, as described in the 2020 IS/MND, the limited extent of soil disturbance, and the current Project plans, which include erosion control BMPs during construction, support the conclusion that the current Project would have less-than-significant impacts with respect to erosion and loss of topsoil; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

2.7.c. Would the Project be located on 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?

As stated in item 2.7.a.iii above, the 2020 IS/MND, Section 4.7, Geology and Soils, combined checklist topic a.iii (ground failure and liquefaction) with checklist topic c (Be located on 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?). However, the 2020 IS/MND analysis for this topic only focused on liquefaction occurring during the construction of the septic system. The analysis in this SER separates these two topics because the Geotechnical Feasibility Study prepared for the Project by Murray (Murray Engineers, 2021) further addresses ground failure, including seismic-induced differential settlement[6] of surficial sands. Based on its experience in the area, Murray concluded that there is a relatively high potential for ground failure during a moderate to large seismic event because of the presence of beach and dune sand deposits, shallow groundwater, and proximity to active faults. While the underlying materials would likely not become unstable as a result of the residential construction, the site improvements could be damaged by the soil failure if not properly supported by an adequate foundation. As discussed in topic 2.7 (a.iii) above, Murray determined that liquefaction-induced ground failure could be reduced by supporting the new residential structure on a rigid shallow foundation (i.e., rigid grid of footings or mat slab) in combination with ground improvement or alternatively by using a deep foundation such as auger cast piles or drilled piers extending below the liquefiable materials. Murray also concluded that ground shaking during a moderate to large earthquake could cause soft or loose natural or fill soils to densify and consolidate unevenly throughout the site (Murray, 2021). Based on its experience in the area, Murray stated that loose surficial sands may be present above the water table and could be susceptible to some degree of differential settlement. If this is confirmed through a future design-level geotechnical investigation, Murray concluded that near-surface

[6] Settlement refers to the densification of soft or loose, natural or fill soils that become densified and consolidate, sometimes occurring in different location (i.e., differential settlement).

ground improvement would provide an adequate remedy to reduce potential hazards associated with differential settlement.

Murray concluded from its Geotechnical Feasibility Study that potential ground failure at the Project site could be remedied by some type of ground improvement in addition to a rigid foundation that is tied into piers that extend into the subsurface soils. However, Murray recommended that a design-level geotechnical investigation be conducted to verify subsurface conditions, which could include seismic cone penetration testing, geotechnical engineering analysis to evaluate liquefaction potential, and the preparation of a geotechnical report. The design-level geotechnical investigation would provide the site-specific information regarding site conditions (e.g., composition of subsurface materials, depth to groundwater), which is necessary to inform the design specifications of the ground improvement and foundation type. The geotechnical treatments that would be employed to stabilize the soils and structure and reduce the potential for failure during an earthquake would be standard industry-accepted geotechnical ground improvement remedies that are used successfully throughout California.

The 2020 IS/MND addressed ground failure due to liquefaction as it applies to the construction and use of the septic system and its conclusions remain valid. In its Geotechnical Feasibility Study, Murray expanded the discussion to address the construction of a residence on the Project site, assessed the potential for ground failure during an earthquake, and provided preliminary recommendations for possible treatments to reduce the risk of earthquake ground failure. The design-level geotechnical investigation, which was recommended by Murray and which would be required by the County as part of the building permit process, will characterize the subsurface conditions, complete necessary soils testing, and provide final foundation design specifications, in accordance with the CBC, to ensure that the residence could withstand the earthquake ground motion projected for this area and avoid catastrophic structural collapse. Given that potential geologic and seismic hazards can be reduced or eliminated through appropriate geotechnical analysis and adequate foundation design and construction, this impact would, as concluded in the 2020 IS/MND, be less than significant; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

2.7.d. Would the Project be located on expansive soil, as defined in Table 18 1 B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

The 2020 IS/MND, Section 4.7, Geology and Soils, topic d, examines whether the Project site is underlain by soils that would be categorized as expansive. Soils containing certain amounts of clay can expand in size when saturated with water and if not properly controlled, the expansion can exert pressures on foundation, pavements, and utilities causing structural damage. Soils susceptible to expansion contain larger fractions of expansive clay. The soils beneath the Project site are composed of fine- to coarse-grained dune and beach sand with little to no clay. As stated in the 2020 IS/MND, the Project site contains loose, sandy soils that percolate quickly and do not absorb water. Murray, in its Geotechnical Feasibility Study (Murray Engineers, 2021), did not identify expansive soils as a geotechnical constraint. The 2020 IS/MND concluded that because

Project site soils are not expansive, the project then being evaluated would not create substantial direct or indirect risks to life or property due to expansive soil. This conclusion remains valid and there are no changed circumstances and no new information of substantial importance requiring evaluation of expansive soils. As also concluded in the 2020 IS/MND, the current Project would have no impact associated with expansive soils; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.**2.7.e. Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

The 2020 IS/MND, Section 4.7, Geology and Soils, topic e, examines whether the soils underlying the Project site are adequate to support the proposed septic system and states that while soils that rapidly percolate water, similar to the sandy soils underlying the Project site, may not be well-suited for wastewater disposal systems, the project was designed with a septic system that accounts for and remedies that constraint. As described in the 2020 IS/MND and discussed in the Project Description in this SER, the proposed intermittent sand filter system includes raised bed dispersal fields and pre-treatment in an intermittent sand filter. These design features would reduce the strength of wastewater and make up for the loss of wastewater treatment due to fast percolating sands, resulting in 40-90 percent reductions in wastewater constituents of concern relative to comparable systems absent intermittent sand filters. The proposed septic system has been designed with features that make it compatible with on-site soil types. This assessment of the septic system presented in the 2020 IS/MND remains valid and there are no changed circumstances and no new information of substantial importance requiring evaluation in regard to the capability of the soils beneath the site to accommodate the septic system. Therefore, the current Project would not result in environmental impacts associated with soils incapable of adequately supporting use of septic tanks and this impact would be less than significant; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

2.7.f. Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The 2020 IS/MND, Section 4.7, Geology and Soils, topic f, examines whether the proposed project could destroy a unique paleontological resource or unique geological feature. The 2020 IS/MND analysis addresses the construction of the septic system only and does not consider the development of a future residence. The 2020 IS/MND states that there are no unique paleontological resources or unique geologic features known to exist within the Project site and notes that paleontological resources would have likely already been discovered during the previous residential construction on the property. The geologic units underlying the Project site are mapped as Quaternary-age dune and beach sand and alluvial deposits that were deposited in the Holocene Epoch, sometime between 10,000 years ago and present time.[7] Fossil remains are

[7] In geologic time, the Quaternary period extends from about 2.6 million years ago to present time. Within the Quaternary Period, the Pleistocene Epoch extends from 2.6 million years before present to 11,700 years ago and the Holocene Epoch extends from 11,700 years ago to present time. Historic time, or 200 years ago to present time, is included in the Holocene Epoch and is often used to define the age of active fault activity.

typically not found in Quaternary deposits such as beach and dune sand because these deposits are too young and unconsolidated to contain remains that have undergone fossilization. Fossil remains on beaches in California typically occur in the older terraced bluffs behind the beach. The remains can erode from these bluffs and be deposited on the beach. This would not be the case at the Project site because there are no bluffs adjacent to the beach. Soil disturbance associated with the construction of the proposed residential structure and the excavation of the septic system would extend several feet beneath the site, but these excavations would remain within the Holocene-age dune sand and beach deposits and would not contain fossil remains. This would also likely be the case if the structural foundation design for the proposed residence required driving or drilling deep piers. The dune and beach sand, and alluvial deposits extend to a depth of at least 60 feet below the ground surface based on exploratory soil probes advanced during geotechnical investigations conducted in this area of Stinson Beach (Murray Engineers, 2021). Piles or piers, if required for the foundation, would extend to depths shallower that 60 feet and would encounter only Holocene deposits and thus would not encounter fossilized remains. The 2020 IS/MND concluded that there is no impact because there are no unique paleontological resources or sites of unique geological features at the project site. This conclusion and level of significance remains valid and there are no changed circumstances and no new information of substantial importance requiring evaluation in regard to paleontological and unique geologic resources; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

Mitigation Measures

The 2020 IS/MND concluded that the project then being evaluated would have either no impact or less than significant impacts on issues related to geology and seismicity and thus, no mitigation measures were required. As the current Project would also have no impact or less-than-significant impacts regarding geology and seismicity, no additional mitigation is required.

Conclusion

The 2020 IS/MND concluded that the project then being evaluated would have no impact or less-than-significant impacts associated with geology and soils. There are no changed circumstances affecting this topic. New information of substantial importance, including Project plans and the Geotechnical Feasibility Study (Murray Engineers, 2021), support the same conclusion: the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact with respect to geology and soils.

References

Murray Engineers, Inc. (Murray), 2021. A Limited Preliminary Geotechnical Feasibility Study, New Residence, 21 Calle Del Onda, Marin County, California. Prepared for Alyce and Brian Johnson, January 14, 2021.

Bruns, T. R., Cooper, A. K., Carlson P. R., McCulloch D. S., 2002. Structure of the Submerged San Andreas and San Gregorio Fault Zones in the Gulf of the Farallones off San Francisco, California, from High Resolution Seismic-Reflection Data. *In* Crustal Structure of the Coastal and Marine San Francisco Bay Region, California. U.S. Geological Survey Professional Paper 1658, Tom Parsons, Editor. US Government Printing Office.

Jennings, C. W., and Bryant W. A., 2010. Fault Activity Map of California. California Geological Survey, California Geologic Data Map Series. Map No. 6.

2.8. Greenhouse Gas Emissions

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
8. Greenhouse Gas Emissions. Would the Project:						
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Section 4.8, Greenhouse Gas Emissions, topic a.	Yes	Yes	Yes	Yes	Yes
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Section 4.8, Greenhouse Gas Emissions, topic b.	Yes	Yes	Yes	Yes	Yes

Discussion

2.8.a. Would the Project Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

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

The 2020 IS/MND, section 4.8, Greenhouse Gas Emissions, states that the project then being evaluated would result in a small increase in greenhouse gas (GHG) emissions during construction and operation of the proposed septic system, and eventually, the construction and use of a single-family residence. The 2020 IS/MND finds that because of its small scale and requirement to comply with Title 24 (CalGreen) building efficiency standards, the project's contribution to cumulative GHG emissions and global climate change would not be cumulatively considerable, and would therefore be less than significant.

The 2020 IS/MND also discusses the consistency of the project then being evaluated with applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions, including AB 32 and Marin County's 2015 Climate Action Plan. The 2020 IS/MND finds that compliance with CalGreen energy efficiency requirements and consistency with the emphasis in the 2015 Climate Action Plan on in-fill development would avoid conflict with GHG reduction plans, policies, and regulations, resulting in a less-than-significant impact.

Since completion of the IS/MND, the BAAQMD has revised its significance thresholds for GHG emissions and climate change impacts (BAAQMD, 2022). This is considered a "changed circumstance" affecting the evaluation of the Project's GHG emissions and contribution to climate change. Rather than a "bright line" limit on mass emissions of GHGs, the BAAQMD now requires land use projects to demonstrate a "fair share" contribution to meeting the State's 2045 carbon neutrality goal, established by Governor Brown in Executive Order B-55-18, and more recently codified by Governor Newsom's signing of AB 1279 in September 2022. The BAAQMD's new threshold states that a project's fair share of implementing the carbon neutrality goal must can be met by demonstrating either A or B in the following:

A. Projects must include, at a minimum, the following project design elements:

1. Buildings

a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).

b. The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines [Energy analysis].

2. Transportation

a. Achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA:

i. Residential projects: 15 percent below the existing VMT per capita

ii. Office projects: 15 percent below the existing VMT per employee

iii. Retail projects: no net increase in existing VMT

b. Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.

B. Projects must be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).

The BAAQMD's justification report for this policy (BAAQMD, 2022) states that, "If a project is designed and built to incorporate these design elements, then it will contribute its portion of what is necessary to achieve California's long-term climate goals—its "fair share"—and an agency reviewing the project under CEQA can conclude that the project will not make a cumulatively considerable contribution to global climate change. If the project does not incorporate these design elements, then it should be found to make a significant climate impact because it will hinder California's efforts to address climate change."

Since completion of the 2020 IS/MND, Marin County has updated its Climate Action Plan for the unincorporated area of the County. Climate Action Plan 2030 contains numerical targets for greenhouse gas (GHG) reductions consistent with the Statewide goal, established by Senate Bill 32 of 2016, to reduce emissions 40 percent below 1990 levels by 2030. Strategies for achieving the targeted GHG reductions include the same measures for building energy efficiency and GHG reduction and transportation as required by the new BAAQMD thresholds. For building energy efficiency and GHG reduction, these include accelerating installation of solar and other renewable energy systems, including rooftop solar, and accelerating electrification of building systems and appliances. For reducing GHG emissions from transportation, Climate Action Plan 2030 includes several strategies that are applicable to the project: increasing use of zero emission vehicles, (ZEVs) and VMT reduction measures such as promoting bicycling, walking, and public transportation; establishing safe routes for walking to school; encouraging working remotely from home (teleworking); and promoting land use and development policies that prioritize infill housing.

The building efficiency, electric vehicle charging, and GHG reduction strategies are met through compliance with Marin County's Green Building Code, which incorporates and exceeds the requirements of CalGreen. Beginning January 1, 2023, the Green Building Code requires all new residential, multifamily, and commercial buildings to be all-electric. While Project plans include new gas lines and a propane tank to serve the proposed new residence, the all-electric requirement will apply and will be enforced through the building permit process. The Green Building Code also requires compliance with the CalGreen Tier 2 electric vehicle charging standard (A4.106.8.1) for all new one- and two-family dwellings and townhouses. This standard includes installation of a dedicated 208/240-volt branch circuit with an overcurrent protective device rated at 40 amperes minimum per dwelling unit for future EV charging. This requirement will apply to the Project. As discussed in Section 2.6, Energy, compliance with the Green Building Code will ensure that the Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.

The applicable VMT reduction strategies included in Climate Action Plan 2030 are more general, County-wide programs. To the extent that these are implemented throughout the unincorporated area, including Stinson Beach, they would facilitate and encourage VMT reduction, consistent with the 15% VMT reduction target included in the BAAQMD threshold.

Compliance with Green Building Code requirements for all-electric construction, electric vehicle charging readiness, and energy efficiency, together with the VMT reduction strategies specified in Climate Action Plan 2030 and being employed throughout the County, will ensure that the Project contributes its fair share toward meeting the State's carbon neutrality goals, and will therefore meet the BAAQMD threshold, resulting in a less-than-significant impact. The Project would not have a new significant impact or a substantial increase in the severity of a previously identified significant impact with respect to GHG emissions and climate change.

Mitigation Measures

The 2020 IS/MND found that the project then being evaluated would have only less-than-significant impacts on GHG emissions and climate change; no mitigation was required. The same conclusion is reached for the current Project, and so no mitigation is required.

Conclusion

The 2020 IS/MND concluded that the project then being evaluated would have a less-than-significant impact on GHG emissions and climate change. Since adoption of the MND, changed circumstances have included adoption by the BAAQMD of a new threshold for determining impacts of GHG emissions, adoption by Marin County of Climate Action Plan 2030, and revisions to the County's Green Building Code. Considering these changed circumstances in light of new information on the Project, specifically, the proposed design for a single-family residence, the Project would not result in a significant impact with respect to GHG emissions and climate change. Therefore, the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact on GHG emissions and climate change.

References

Bay Area Air Quality Management District (BAAQMD), 2022. Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans. April 2022. https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines

Marin County, 2020. Climate Action Plan 2030. Adopted by the Board of Supervisors December 2020. Available at: https://www.marincounty.org/depts/cd/divisions/sustainability/climate-and-adaptation.

2.9. Hazards and Hazardous Materials

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
9. Hazards and Hazardous Materials. Would the Project:						
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Section 4.9, Hazards and Hazardous Materials, topic a.	Yes	No	No	No	N/A
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?	Section 4.9, Hazards and Hazardous Materials, topic b.	Yes	No	No	No	N/A
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Section 4.9, Hazards and Hazardous Materials, topic c.	No	No	No	N/A	N/A
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?	Section 4.9, Hazards and Hazardous Materials, topic d.	No	No	No	N/A	N/A
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	Section 4.9, Hazards and Hazardous Materials, topic e.	No	No	No	N/A	N/A

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
9. Hazards and Hazardous Materials. Would the Project:						
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Section 4.9, Hazards and Hazardous Materials, topic f.	Yes	No	No	No	N/A

Discussion

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

2.9.b. Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

2.9.c. Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The 2020 IS/MND, Section 4.9, evaluates topics a, b, and c, relating to hazardous materials use, release, and transport, including near existing or proposed schools. The 2020 IS/MND states that a small quantity of hazardous materials would be used during the construction phase of the proposed septic system. Use, transport, and disposal of hazardous materials, including any contents of the existing abandoned on-site septic system, would comply with applicable local, State, and federal standards associated with the handling, transportation, and storage of hazardous materials. The 2020 IS/MND also states that operation of the septic system, as well as residential use of a potential future residence, would not involve regular or substantial use, transport, or release of hazardous materials. The 2020 IS/MND further states that the Project site is not within ¼ mile of an existing or proposed school. The 2020 IS/MND therefore concludes that the project then being evaluated would result in a less-than-significant impact with respect to topics 2.9a and 2.9b, and no impact with respect to topic 2.9c.

The same points made with regard to these topics in the 2020 IS/MND are all valid and applicable to the current Project. The 2020 IS/MND did not evaluate hazardous materials use, storage, transport, or release during construction of a future residence, but the same points apply

to that aspect of the current Project: construction of a single-family residence would not involve the routine use, transport, storage, or release of hazardous materials, and any such activities would be subject to all applicable local, State, and federal standards.

As stated in the 2020 IS/MND, the closest school to the Project Site, Stinson Beach Elementary School, is approximately 1 mile north.

In conclusion, for the same reasons stated in the 2020 IS/MND, the current Project would have a less-than-significant impact with respect to topics 2.9a and 2.9b, and no impact with respect to topic 2.9c; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

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

The 2020 IS/MND presented the results of a search of State hazardous materials site databases (Cortese List resources), which showed that the Project site was not listed as a known hazardous materials site and was not in close proximity to any such site. Consequently, the 2020 IS/MND concluded that there would be no impact of this kind.

Cortese List resources were again searched for the current Project, and the results of the previous search were confirmed: the Project site is not a known hazardous materials site, and there would therefore be no impact of this kind; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

2.9.e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

As discussed in the 2020 IS/MND, the Project site is not located within an airport land use plan or within two miles of a public airport or public use airport. The closest airport to the Project site is the San Rafael Airport, which is about 10 miles to the northwest. As concluded in the 2020 IS/MND, there would be no impact of this kind; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

2.9.f. Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The 2020 IS/MND states that the project then being evaluated would not lead to any long-term changes in emergency response or evacuation and would not impede any roadways or public rights of way important for emergency response. There would be a small increase in vehicular traffic along Calle del Onda and Highway 1 for septic system construction and system

maintenance, and potentially in the future for construction and use of a single-family residence. The 2020 IS/MND states that, given the small scope of the project then being evaluated, and the limited potential for increased roadway demand, any impact on emergency response or evacuation would be less than significant.

These points are all valid and applicable to the current Project. Due to its limited scale, limited potential for increasing traffic levels, and non-interference with existing access and roadways, the Project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan, and any such impact would be less than significant; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

Mitigation Measures

The 2020 IS/MND concluded that the project then being evaluated would have less-than-significant impacts related to hazards and hazardous materials; no mitigation measures were required. As the current Project would also have only less-than-significant impacts related to hazards and hazardous materials, no mitigation is required.

Conclusion

The 2020 IS/MND concluded that the project then being evaluated would have a less-than-significant impact on hazards and hazardous materials. There is no new information of substantial importance and there are no changed circumstances affecting this topic. The current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact with respect to hazards and hazardous materials.

References

California Environmental Protection Agency, 2022. Cortese List Resources. Search of all lists and databases listed at https://calepa.ca.gov/sitecleanup/corteselist/, completed September 19, 2022.

2.10. Hydrology and Water Quality

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
10. Hydrology and Water Quality. Would the Project:						
a) Violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality?	Section 4.10, Hydrology and Water Quality, topic a.	Yes	No	Yes	No	N/A
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Section 4.10, Hydrology and Water Quality, topic b.	No	No	Yes	No	N/A
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;	Section 4.10, Hydrology and Water Quality, topic c.i.	Yes	No	Yes	No	N/A
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	Section 4.10, Hydrology and Water Quality, topic c.ii.	Yes	No	Yes	No	N/A
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	Section 4.10, Hydrology and Water Quality, topic c.iii.	Yes	No	Yes	No	N/A

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
10. Hydrology and Water Quality. Would the Project:						
iv) Impede or redirect flood flows?	Not analyzed in the 2020 IS/MND.	Yes	No	Yes	No	N/A
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Section 4.10, Hydrology and Water Quality, topic d.	Yes	No	Yes	No	N/A
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Not analyzed in the 2020 IS/MND.	Yes	No	Yes	No	N/A

Discussion

The 2020 IS/MND, Section 4.10, Hydrology and Water Quality, includes a discussion of the environmental setting for the hydrology and water quality analysis, describing the key surface water bodies and regulatory jurisdictions related to water quality. These circumstances are unchanged since adoption of the IS/MND. Since adoption of the IS/MND, engineering, flood hazard, and sea level rise analyses have been completed and/or updated to support environmental review under CEQA. Such studies include the following:

- An Easkoot Creek Hazards Analysis prepared by R.M. Noble Consultants, Inc. (Noble, 2021).
- A Noble Consultants, Inc. update of its 2016 Coastal Engineering Analysis that incorporates the 2018 Ocean Protection Council Sea Level Rise Guidance report scenarios, accompanying a May 6, 2020 CivicKnit letter to SBCWD (Noble, 2020).
- A Limited Preliminary Geotechnical Feasibility Study prepared by Murray Engineers, Inc. (Murray Engineers, 2021).
- An updated plan set prepared by CivicKnit, including Coastal Guidance and Constraints Map (Sheet 12), Drainage Plan (Sheet C3), and Erosion and Sediment Control Plan (Sheet C4) (CivicKnit, 2021, 2022).
- A response to a data request related to the proposed Project description (Kinsey, 2022). The data request response, item 4, confirms that flood zone requirements detailed on

Sheet 3 of the prior plan set (June 2021) remain relevant to the revised project except that the minimum elevation of any structural member is revised to be at 19.1 NAVD88 or higher.

To support the assessment of impacts associated with hydrology and water quality, the above supporting studies were reviewed by the County's environmental consultant for accuracy and to determine whether the methodologies employed and assumptions regarding hydrologic conditions were defensible and appropriate and that the results were valid. Where applicable, the results and findings of the supporting technical studies were used to support conclusions regarding the Project's potential environmental impacts, as discussed below.

2.10.a. Would the Project violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality?

During construction activities, stormwater runoff from disturbed soils is a common source of pollutants (mainly sediment) to receiving waters. Earthwork activities can render soils and sediments more susceptible to erosion from stormwater runoff and result in the migration of soil and sediment in stormwater runoff to storm drains and downstream water bodies. Excessive and improperly managed grading or vegetation removal can lead to increased erosion of exposed earth and sedimentation of watercourses during rainy periods.

The 2020 IS/MND, Section 4.10, Hydrology and Water Quality, topic a, examines whether construction and operation of the proposed septic system would violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. The 2020 IS/MND concluded that, with implementation of Mitigation Measure HYDRO-1, construction-related impacts to water quality and the potential for construction to adversely affect the quality of the receiving waters would be less than significant. Mitigation Measure HYDRO-1 prohibits construction during wet conditions, requires erosion control and soil stabilization measures (e.g., erosion control fabric) to be installed until vegetation is established on-site, and requires that sediment be prevented from migrating off-site or into storm drain inlets through the use of fiber rolls, gravel bags, berms, and silt fences. The 2020 IS/MND describes that, following the completion of construction, the septic system would not violate any water quality standards or waste discharge requirements as the system has been designed to avoid impacts to surface and groundwater quality through the use of raised bed dispersal fields, an intermittent sand filter pretreatment unit, and the use of watertight tanks.

The 2020 IS/MND examined construction and occupancy of a future 1,400 square foot (sf) single family residence in general terms only, since there was no design nor construction plans for a residence at that time. Construction of the proposed single-story, 1,296-sf residence and associated septic system, driveway/parking pad, and landscaped areas is reduced in scale as compared to the 1,400-sf single-family residence described in the 2020 IS/MND. The proposed Project includes specifications for erosion and sediment control during construction (see Chapter 1, Project Description for details). Erosion control protection would be placed in disturbed areas and installed on any bare ground before the end of September to avoid and/or minimize sediment

and other pollutants associated with construction being transported off-site in stormwater runoff. Additionally, soil stockpiles would be covered and contained with wattles.

Following the completion of construction, stormwater runoff from impervious surfaces would be retained on-site. As described in the Project Description, the proposed Project includes drainage facilities to collect, retain, and dissipate stormwater for infiltration into on-site soils. Stormwater runoff from proposed impervious surfaces would be managed through the use of rain barrels connected to gutters and downspouts as well as linear dissipators and swales located within the Project site. Excess stormwater that exceeds the capacity of rain barrels would be discharged to on-site, well-drained sandy soils via linear dissipaters that would minimize the potential for localized soil erosion at the point of discharge.

Sea level rise (SLR) is expected to elevate the groundwater level in coastal communities such as Stinson Beach, potentially intersecting underground septic systems and degrading local groundwater quality. Current estimates for SLR are between 0.6-2.7 feet in the next 50 years (CCC, 2018). For the most conservative estimate, assuming the groundwater level will elevate at the same magnitude as the future sea level rise, the groundwater rise at the site of the proposed residence will not exceed 0.6-2.7 feet in the next 50 years (Noble, 2016). Groundwater testing at the Project site found no groundwater down to 6 feet (Noble, 2016), which is consistent with other nearby properties where groundwater is typically encountered at 7-10 feet below site grades (Noble, 2016). Therefore, the future groundwater level will likely be more than 3.5-5.4 feet under the ground in the next 50 years after considering the high and the low SLR projection (Noble, 2016). The 2020 IS/MND describes that, following the completion of construction, the septic system has been designed to avoid impacts to surface and groundwater quality through the use of raised bed dispersal fields, an intermittent sand filter pretreatment unit, and the use of watertight tanks to increase separation between the wastewater system and seasonal and future high groundwater.

The Project plan set (see Project Description) provides new information of substantial importance that supports a conclusion of less than significant for construction and operation (i.e., occupancy) of the proposed Project. The implementation of Mitigation Measure HYDRO-1 during construction of the septic system assessed in the 2020 IS/MND, along with the newly provided Project plans detailing erosion control, drainage, and stormwater management would be sufficient to reduce water quality impacts associated with construction and occupancy of the proposed Project to less than significant. No new impacts related to water quality standards or the degradation of water quality would occur and no previously identified significant impact would increase in severity.

2.10.b. Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The 2020 IS/MND, Section 4.10, Hydrology and Water Quality, topic b, examines whether construction of the proposed septic system and a 1,400-sf residence would have an adverse effect on groundwater supplies and/or recharge. The 2020 IS/MND concluded that the project then

being evaluated would not decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

Water supplied to the Project site by the Stinson Beach County Water District, while primarily sourced from groundwater, is accounted for in Stinson Beach's population growth estimates, including estimates used to determine the District's groundwater supply needs. Under existing conditions, rainfall on the site infiltrates into underlying soils. Following the completion of construction, the proposed stormwater system would capture, retain, and infiltrate site stormwater from impervious surfaces on-site via rain barrels and linear dissipators. No stormwater runoff would be discharged off-site. The proposed plans for the residence, which include plans for stormwater management (see topic 2.10.a, above), constitute new information of substantial importance that demonstrates that the current Project would not interfere with groundwater recharge or impede sustainable groundwater management of the basin in a manner that would result in a significant impact. No new impacts related to groundwater would occur and no previously assessed impact would increase in severity.

2.10.c.i. Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?

The 2020 IS/MND, Section 4.10, Hydrology and Water Quality, topic c.i, examines whether construction and use of the proposed septic system would alter drainage patterns in a manner that results in substantial on-site or off-site erosion or siltation. The 2020 IS/MND evaluated the impacts of stripping vegetation and disturbing soils, which could potentially increase the rate of erosion on-site by exposing bare soils to erosive forces such as from waves during high water events. As described in the 2020 IS/MND, high water events with the potential to exert erosive forces on the Project site are relatively rare, although such events will become more frequent as sea levels rise. The 2020 IS/MND concluded that impacts relating to erosion or siltation on- or off site due to altered drainage patterns would be less than significant: the proposed septic system is designed to withstand erosive forces and is set back over 75 feet from the ocean, and would therefore have a minimal effect on coastal erosion.

Topic 4.10.c.i in the 2020 IS/MND did not assess construction and occupancy of the proposed single-story, 1,296-sf residence, driveway/parking pad, and landscaped areas. Coastal management often requires future projections of shoreline change, based on observed rates of erosion, recession, and shoreline retreat over time. Erosion and shoreline retreat will result in a beach and surf zone that is inland of where it is today. The disturbed area for the proposed Project is set back from the property line approximately 100 feet to the southwest (seaward; Figure 5). The unknown response of the shoreline under conditions relating to sea level rise contributes to an inherent uncertainty in predicting future shoreline recession or erosion rates. In the absence of the Project and surrounding existing residences along the shoreline, the coastline would be expected to retreat inland due to continued coastal erosion due to wave action, which may be exacerbated by projected rising sea levels.

Coastal engineering analysis of the Project evaluated in the 2020 IS/MND, and updated for the current Project, has confirmed uncertainty regarding the future shoreline recession rate in the vicinity of the proposed Project (Noble, 2016; CivicKnit, 2021). To assess coastal flooding and flood risks from storm surge, shoreline erosion, and sea level rise (SLR) hazards, Noble Consultants, Inc. (Noble) prepared a Coastal Engineering Analysis in June 2016 (Noble, 2016). Their report was reviewed and updated in 2020 and again in 2021 to review previous findings and to include analysis of wave runup, overtopping and overland wave propagation to determine wave conditions at the Project site based on the 100-year storm event in the year 2070, including consideration of the effects of SLR (Noble, 2021). The 2020 IS/MND (p. 48) presented an analysis of projected coastal erosion of up to 80 feet of shoreline recession landward over the coming 50 years based on current estimates for SLR scenarios (Table 2.10-1).

Table 2.10-1
Shoreline Recession Distance in Response to Sea Level Rise

Time Period	Sea Level Rise (feet)	Shoreline Recession Distance (feet)
In 50 years (2016-2066)	0.6-2.5[8]	20-80
In 75 Years (2016-2091)	1.2-4.3	40-130

Source: Noble 2016; CivicKnit, 2021.

As described in the 2020 IS/MND, the Project's incremental contribution to coastal erosion resulting from vegetation removal within the Project site would be negligible. Other than the septic system containment barrier (addressed below), no permanent armoring is proposed, and no seawall is proposed for protection of the residence from coastal erosion, coastal flooding, or wave runup. The proposed 1,296 square foot residence would be constructed on concrete piers to elevate it above existing grade such that the minimum height of any structural member (other than foundation piers) would be 19.1 feet amsl to meet FEMA and Marin County development standards (CivicKnit, 2021). Elevating the proposed residence structure on foundation piers above calculated flood elevations would ensure that on-site drainage patterns, including wave runup processes, are not substantially changed and that shoreline erosion patterns relating to wave runup and shoreline recession processes over the projected 50-year life of the Project are not altered in a manner that would result in a significant impact.

As described in Chapter 1, Project Description, a concrete retaining wall would be constructed around all septic system components that would penetrate a minimum of 4 feet below grade and 3-6 inches above grade. The purpose of the proposed retaining wall is to increase separation from seasonal high groundwater and to protect the proposed septic system dispersal field from potential wave erosion. The septic system is proposed to be located on the most landward portion of the Project site, set back from the shoreline to the greatest extent possible. Consistent with Marin County Interim Code Section 22.56.130I.K regulating shoreline protection, the proposed construction of a protective septic containment barrier does not result in the reduction of public

[8] The coastal hazard analyses presented by Noble (2016) were updated following a request by the Coastal Commission (CCC March 16, 2021) in June 2020. The update by Noble of its Coastal Engineering Analysis incorporates the 2018 Ocean Protection Council Sea Level Rise Guidance report scenarios, accompanied by a May 6, 2020 CivicKnit letter to SBCWD (CivicKnit, 2021). The revised SLR scenarios included an increase in projected SLR by 2066 by 0.2 feet for a revised range of 0.6-2.7 feet of SLR by 2066.

access or restrict navigation or other coastal uses and is not located in any wetlands or other significant resource, or habitat area. Additionally, given the constraints of the site, there is no other nonstructural alternative that is practical or preferable for the location of the septic system. The updated coastal engineering analysis completed for the proposed Project, which included a hazard analysis of shoreline erosion, flood condition, and wave runup (described above), concluded that while the septic system may be inundated in 50 years during a 100-year storm event as a result of wave runup (based on SLR projections), it will not be directly exposed to wave action (and therefore erosive mechanical forces) from the ocean. Therefore, the proposed construction of a protective septic containment barrier would not change on-site drainage patterns or shoreline erosion patterns relating to wave runup and shoreline recession processes over the projected 50-year life of the Project in a manner that would result in a significant impact.

Further, because the proposed retaining wall would extend only 3-6 inches above existing grade, and because of its landward location, the retaining wall would not act as a shoreline protective device: the retaining wall, while designed to withstand wave run-up forces and protect the septic system from localized erosion during inundation, is not designed or intended to arrest shoreline or bluff erosion or coastal retreat (the intended function of seawalls and riprap armoring). Neither would it redirect wave energy in a manner that would create erosion, geologic instability, or destruction of the site or neighboring properties due to altered on-site conditions. The proposed Project would not arrest natural coastal erosion or coastline recession resulting in substantially altered landforms. For these reasons, the proposed septic system barrier would not result in physical impacts that conflict with California Coastal Act Section 30253(b)[9] related to shoreline protection. In addition, as described in Chapter 1, Project Description, the Applicant has proposed recording a deed restriction that prohibits future shoreline protection and requires removal of the structure at such time as a legally authorized public agency issues an order to do so.

As presented in the 2020 IS/MND, the septic system is designed to withstand erosive forces and would have a minimal contribution to coastal erosion. The design of the proposed Project as well as the additional analysis related to coastal erosion and SLR (Noble, 2021; CivicKnit, 2021) represents new information of substantial importance and supports the finding that the current Project would not result in substantial erosion or siltation on- or off-site. No new impacts related to on- or off-site erosion or siltation from altered drainage patterns would occur and no previously assessed impact would increase in severity.

2.10.c.ii. Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

The 2020 IS/MND, Section 4.10, Hydrology and Water Quality, topic c.ii, examines whether construction and use of the proposed septic system and a potential future 1,400 square foot residence would alter drainage patterns in a manner that results in on-site or off-site flooding,

[9] CCA Section 30253(b) states "Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs."

including from increased impervious surfaces. The 2020 IS/MND states that the project then being evaluated would not result in the alteration of drainage patterns in a manner which would result in increased on- or off-site flooding due to the proposed septic system being covered with native soil and the development of the parcel being confined to 1,400 square feet, and concluded that any such impact would be less than significant.

The proposed Project would not result in substantially altered on-site drainage patterns. Stormwater runoff would continue to be infiltrated on-site, as occurs under existing conditions. As described above under topic 2.10.a, the stormwater system proposed for the Project would capture, retain, and infiltrate all stormwater runoff generated from on-site impervious surfaces and no off-site discharges are proposed. Therefore, peak stormwater discharge rates and volumes from the Project site would remain at or below the existing conditions. For the same reasons stated in the 2020 IS/MND, the current Project would not alter drainage patterns in a manner that results in on-site or off-site flooding; any such impact would be less than significant. The current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

2.10.c.iii. Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would 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?

The 2020 IS/MND, Section 4.10, Hydrology and Water Quality, topic c.iii, examines whether construction and use of the proposed septic system would alter drainage patterns to an extent that would exceed the capacity of stormwater drainage systems and/or create polluted runoff. For the reasons stated in the 2020 IS/MND, proposed erosion control measures described in the 2020 IS/MND Project Description (placement of straw and vegetation seeding in disturbed areas) in combination with Mitigation Measure HYDRO-1 would avoid and/or minimize the potential for polluted runoff during the construction of the septic system. Following construction of the septic system, the 2020 IS/MND concludes that use of the septic system in combination with a potential future 1,400-sf residence on-site would present little change in surface water pollution and would not exceed the capacity of stormwater drainage systems. As such, a less-than significant impact would occur.

As described under topic 2.10.a, above, the plans for the current Project detailing erosion control measures to be implemented during construction would be sufficient to reduce polluted runoff and/or water quality impacts associated with construction of the proposed Project. Following the completion of construction, the Project's proposed drainage system, comprised of stormwater capture, on-site retention, and infiltration into on-site soils via linear dissipators, would ensure pollutants are not mobilized and transported to downgradient waters off-site (see topic 2.10.a, above). As described in detail under topics 2.10.a and 2.10.c.i, the proposed Project would not result in new sources of pollutants that could be transported via storm runoff. The proposed drainage system for new impervious surfaces would ensure stormwater would be retained on-site

and infiltrated into underlying sandy soils via linear dissipaters, avoiding erosion and the potential for sediment to be transported off-site.

For the same reasons stated in the 2020 IS/MND, impacts related to exceeding stormwater conveyance infrastructure or creating additional sources of polluted runoff would be less than significant for the current Project. The proposed Project design, including the proposed erosion control measures and stormwater system design, is new information of substantial importance that supports the conclusion presented in the 2020 IS/MND. No new impacts related to exceeding stormwater conveyance infrastructure or creating additional sources of polluted runoff would occur and no previously assessed impact would increase in severity.

2.10.c.iv. Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?

The 2020 IS/MND did not specifically evaluate this topic.

The Project site is located within a 100-year[10] flood hazard zone designated by the Federal Emergency Management Agency (FEMA). The majority of the Project site is mapped as FEMA flood zone VE,[11] meaning that the Project is within a coastal area with a 1% or greater annual chance of flooding and that there is an additional hazard associated with storm waves. The portions of the Project site where the proposed septic system, parking area, and garden are proposed (Figure 5 in Chapter 1, Project Description) is mapped as FEMA flood zone AO, representing areas with a 1% or greater annual chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from 1 to 3 feet.

Easkoot Creek Flood Hazards

Noble Consultants, Inc. (Noble) assessed potential flooding and inundation impacts from Easkoot Creek, which is on the inland side (northeast side) of the subject property, incorporating the findings of the Stinson Beach Watershed Program Flood Study and Alternatives Assessment prepared for the Marin County Flood Control and Water Conservation District by O'Conner Environmental, Inc. (OEI, 2014; Noble, 2021). OEI performed detailed numerical modeling studies for several flooding scenarios of the lower portion of Easkoot Creek, which included the Calle del Onda properties. The flooding scenarios included the severe December 2005 flood and the projected 100-year flood, including impacts during high tides and projected SLR.

The analyses and flood mapping by OEI, utilized by Noble (2021) for the assessment of flood hazards at the Project site, demonstrate that the Project site is not subject to flooding from Easkoot Creek. The lowest site grade elevation of the property on its inland side is above +12 feet NAVD88. The reported modeled flood elevation along Calle del Onda during the 2005 flood was 8.6 feet NAVD88, while the modeled 100-year flood was approximately +10 feet NAVD88 at Calle del Onda (OEI, 2014; Noble, 2021). Therefore, the Project site's design flood condition is

[10] Areas subject to inundation by the 1-percent-annual-chance flood event.
[11] Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.

associated with coastal flooding (discussed above), not flooding from Easkoot Creek, and impacts relating to impeding or redirecting flood flows from Easkoot Creek would be less than significant. No new impacts related to flooding or flood hazards from Easkoot Creek would occur, and the proposed Project would not increase the severity of previously identified significant impacts. There are no changed circumstances and no new information of substantial importance requiring evaluation, and the proposed Project is within the scope of the project analyzed in the 2020 IS/MND.

Coastal Flood Hazards

The current 100-year flood elevation, or the Base Flood Elevation (BFE), at the Project site is 15.6 feet, NAVD88 and the Extreme Still Water Level (SWL) elevation is 9.1 feet NAVD88[12] (Noble, 2016). Considering a SLR of 0.6-2.7 feet, the 1-percent annual chance (100-year) BFE in 50 years (2066) is approximately 19.1 feet, NAVD88 (Noble, 2016; CivicKnit, 2021). The proposed residence would be constructed on concrete piers to elevate it above grade a maximum of 6 feet 6 inches, such that the minimum height of any structural member (other than foundation piers) would be 19.1 feet amsl, and the height of the subfloor would be 21.0 feet amsl, to place it above future BFE.

Therefore, a portion of the ground under the proposed residence would be inundated during a 100-year flood under the current condition, and part of, or the entire ground under the proposed residence would be inundated during a 100-year flood in 50 years after considering conservative future SLR scenarios (Noble, 2016). As described under topic 2.10.ci, above, the proposed 1,296 square foot residence would be constructed on concrete piers to elevate it above the BFE. Additionally, all enclosed spaces below base flood elevation would be constructed with flood openings.[13] Based on the proposed design feature of an elevated structure mounted on foundation piers above calculated flood elevations, the proposed Project would not alter drainage patterns in a manner that would impede or redirect flood flows, and impacts relating to impeding or redirecting flood flows would be less than significant.

The proposed septic system would not experience coastal flooding under existing conditions (Noble, 2016). The 100-year flood elevation in 50 years (with SLR) may increase to +19.1 feet NAVD88, meaning that it is possible that the septic system would be inundated in 50 years during a 100-year coastal flood event. However, the septic system would not be directly exposed to wave action or wave force from the ocean (Noble, 2016; CivicKnit, 2020), and as such would not impede or redirect flood flows associated with waves or wave runup. Further, the proposed septic system would not increase the base flood levels in the surrounding area because of its relatively minor elevated volume relative to the entire Stinson Beach shoreline where flooding would be occurring (CivicKnit, 2020); therefore, the Project would not redirect floodwaters off-site.

[12] These 100-year flood elevations are identical with the values FEMA ultimately adopted for its 2017 FIRM map of Stinson Beach, resulting in no change to flooding calculations presented in the 2016 Coastal Engineering Analysis (Noble, 2020).

[13] California Residential Code § R322.2.2 and Marin County Code § 23.09.034(c)(4)

Summary

The proposed Project design is consistent with design requirements for development within a flood zone (CivicKnit, 2022). The majority of the Project site is mapped as FEMA Flood Zone VE, with a portion of the site in FEMA Flood Zone AO (associated with Easkoot Creek). However, Easkoot Creek's estimated flood elevation during a 100-year event would not exceed 10'NAVD88, while the lowest elevation of the property is 12.2'NAVD88 (CivicKnit, 2022).

The Project would not 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 impede or redirect flood flows; the impact would be less than significant. New information, that is, the specific Project design, as well as additional study by Noble supports the finding that the proposed Project would not have a significant impact with respect to impeding or redirecting flood flows; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

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

As discussed in the 2020 IS/MND, Section 4.10, Hydrology and Water Quality, topic d, the Project site is in an area at risk of coastal flooding and tsunami due to its close proximity to the Pacific Ocean. Should the proposed septic system become inundated, the wastewater system watertight tanks would ensure pollutants are contained and the raised bed dispersal fields and intermittent sand filter pretreatment unit would potentially release only a negligible contribution to receiving water pollutant concentrations. Additionally, as discussed under topic c.ii, above, the proposed 1,296 square foot residence would be constructed on concrete piers to elevate it above existing grade, such that the minimum height of any structural member (other than foundation piers) would be 19.1 feet amsl and the height of the subfloor would be 21.0 feet amsl, to place it above 100-year Base Flood Elevation. Elevating the residence on piers would avoid and/or minimize the potential for inundation and subsequent release of pollutants in floodwaters. The 2020 IS/MND finds that the project then being evaluated would not risk release of pollutants due to inundation due to flood, tsunami, and seiche, and impacts would be less than significant. There are no changed circumstances and the new information of substantial importance relating to this topic. The proposed Project, like the project analyzed in the 2020 IS/MND, would have a less-than-significant impact of this kind, and would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

2.10.e. Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The 2020 IS/MND did not specifically evaluate this topic. As discussed above under topics 2.10.a, 2.10.b, and 2.10.c, The 2020 IS/MND found that the project then being evaluated, as mitigated, would not result in significant polluted runoff, water quality degradation, or groundwater impacts. Similarly, and as discussed above, the proposed Project would have a less-than-significant impact on on-site and off-site water quality during construction and occupancy of

the site. The proposed drainage system for new impervious surfaces would ensure stormwater would be retained on-site and infiltrated into underlying sandy soils via linear dissipaters (see topic 2.10.a, above), avoiding erosion and the potential for sediment to be transported off-site. For these reasons, the proposed Project would not conflict with or obstruct water quality objectives or beneficial uses identified in the Water Quality Control Plan for the San Francisco Bay Basin (RWQCB, 2017) or in the California Ocean Plan (SWRCB, 2019), representing the Regional and State Board's respective master water quality control planning documents for all regional terrestrial surface water bodies (e.g., creeks, rivers, streams, and lakes), groundwaters, coastal drainages, estuaries, coastal lagoons, enclosed bays, and coastal waters. The proposed Project would not reduce groundwater recharge or require groundwater withdrawals in excess of those accounted for in Stinson Beach's population growth estimates, including estimates used to determine the District's groundwater supply needs (see topic 2.10.b). Impacts relating to conflict or obstruction of implementation of a water quality control plan or sustainable groundwater management plan from implementation of the proposed Project would be less than significant. No impacts related to conflict or obstruction of implementation of a water quality control plan or sustainable groundwater management plan would occur; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

Mitigation Measures

Mitigation Measure HYDRO-1 from the 2020 IS/MND, which prohibits construction during wet conditions, requires erosion control and soil stabilization measures be installed until vegetation is established on-site, and requires that sediment be prevented from migrating off-site or into storm drain inlets through the use of fiber rolls, gravel bags, berms, and silt fences, would apply to the current Project, including during construction of the proposed septic system. As no new or substantially more severe impact related to hydrology and water quality would occur with the proposed Project, no additional mitigation is required.

The full text of all mitigation measures, including those required by the 2020 IS/MND and those identified or modified in this document, is included in Chapter 3, Summary and Conclusion.

Conclusion

The 2020 IS/MND concluded that, with implementation of Mitigation Measure HYDRO-1, the project then being evaluated would have a less than significant impact on hydrology and water quality. For the current Project, Mitigation Measure HYDRO-1, in addition to the proposed specifications for erosion and sediment control during construction, would also reduce impacts to less than significant. Therefore, the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact with respect to hydrology and water quality.

References

California Coastal Commission (CCC), 2018. California Coastal Commission, Sea Level Rise Policy Guidance, adopted on August 12, 2015. Science Update adopted on November 7, 2018.

CivicKnit, 2021. 21 Calle del Onda, Stinson Beach CDP Completeness response (Project IDP3049).

CivicKnit, 2020. Recent FEMA and California Coastal Commission Guidance information.

Kinsey, Steve, 2022. Email from Steve Kinsey, CivicKnit, to Chelsea Hall, Michelle Levenson (Marin County Community Development Agency) and Dan Sicular (Sicular Environmental consulting) re: 21 Calle del Onda. May 3, 2022.

Murray Engineers, Inc. (Murray), 2021. A Limited Preliminary Geotechnical Feasibility Study, New Residence, 21 Calle Del Onda, Marin County, California. Prepared for Alyce and Brian Johnson, January 14, 2021.

R.M. Noble and Associates (Noble). 2021. Letter from R.M. Noble to Steve Kinsey, CivicKnit, re: Hazards from Easkoot Creek, 21 Calle del Onda, Stinson Beach, CA Assessor's Parcel No. 195-162-49. May 13, 2021.

Noble Consultants, Inc., 2016. Letter R.M. Noble and Wenkai Qin to Mr. Craig Nunes re: Coastal Engineering Analysis for 21 Calle Del Onda, Stinson Beach, CA. Assessor's Parcel No. 195-162-49.

O'Connor Environmental, Inc. (OEI), 2014. Stinson Beach Watershed Program Flood Study and Alternatives Assessment. Prepared for: Marin County Flood Control and Water Conservation District.

Regional Water Quality Control Board (RWQCB), 2006. San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan). Incorporating all amendments approved by the Office of Administrative Law as of 2021. Accessed online, September 19, 2022 at: https://www.waterboards.ca.gov/sanfranciscobay/basin_planning.html

State Water Resources Control Board (SWRCB), 1972. California Ocean Plan (Revised 2019). Accessed online, September 19, 2022 at: https://www.waterboards.ca.gov/water_issues/programs/ocean/docs/oceanplan2019.pdf

2.11. Land Use and Planning

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
11. Land Use and Planning. Would the Project:						
a) Physically divide an established community (including a low-income or minority community)?	Section 4.13, Land Use and Planning, topic a.	No	No	No	N/A	N/A
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Section 4.13, Land Use and Planning, topic b.	Yes	No	Yes	No	N/A
c) Result in substantial alteration of the character or functioning of the community, or present planned use of an area?	Section 4.13, Land Use and Planning, topic b.	Yes	No	Yes	No	N/A
d) Conflict with applicable Countywide Plan designation or zoning standards?	Not discussed in the 2020 IS/MND	Yes	No	Yes	No	N/A

Discussion

2.11.a. Would the Project physically divide an established community (including a low-income or minority community)?

The 2020 IS/MND, Section 4.13, Land Use and Planning, topic a, states that the Project site is on a vacant parcel at the end of the street within an existing residential community; that the Project site previously contained a single-family residence but has sat vacant since the home burned down in the mid-1980s; and that the proposed septic system is sized for a single-family residence, and therefore, the project then being evaluated would have no impact with regard to physically dividing an established community.

For the same reasons stated in the 2020 IS/MND, the current Project would have no such impact and therefore would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

2.11.b. Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The 2020 IS/MND, Section 4.13, topic b, discusses the consistency of the project then being evaluated with several policies contained in the Marin Countywide Plan (CWP), Local Coastal Program, Unit 1 (LCP), and Stinson Beach Community Plan (SBCP), including several policies protecting public access to Stinson Beach, maintaining the rural/residential character of the Stinson Beach community, guiding safe wastewater system development, encouraging infill development, and maintaining public access to the beach. The 2020 IS/MND states that the project then being evaluated, including potential future development of a single-family residence, would not conflict with any of these policies, and that there would be no impact of this kind. Also, as discussed in Section 2.4, Biological Resources, topic e, the 2020 IS/MND states that the project then being evaluated would be consistent with LCP policies requiring a biological site assessment for development proposals within or adjacent to Environmentally Sensitive Habitat Areas (ESHA), and with policies requiring protection of ESHA, including dunes and beaches.

Since adoption of the 2020 IS/MND, Marin County Planning staff, in reviewing the larger version of the Project (as described in Chapter 1, Project Description), determined that the Project is consistent with applicable zoning and development regulations contained in the LCP Implementation Plan, as well as applicable policies contained in the CWP, LCP Land Use Plan, and SBCP (Marin County Community Development Agency, 2021).[14] The only exception to this consistency determination was staff's finding that certain aspects of the Project would conflict with restrictions on development within the Zone AO floodplain of Easkoot Creek, as mapped by FEMA. As discussed in Section 2.10, Hydrology and Water Quality, however, Easkoot Creek's estimated flood elevation during a 100-year event would be below the lowest elevation of the Project site; therefore, despite inconsistency with this policy, no adverse physical impact associated with floodplain development would occur, and so the impact would be less than significant.

California Coastal Commission staff have indicated that they consider the proposed septic system retaining wall to be a shoreline protective device, and therefore inconsistent with LCP policies restricting the use of such devices.[15] As discussed in Section 2.10, Hydrology and Water Quality, however, the proposed retaining wall would not result in a physical impact related to erosion or future coastal recession. Therefore, any such policy inconsistency would be a less-than-significant impact.

Though not identified in the previously cited staff report, the Biological Resources discussion in the current Supplemental Environmental Review (Section 2.4) identifies a conflict of the project with LCP Policy C-BIO-7, which prohibits development in coastal dunes. As discussed under topic 2.4.b and 2.4.e, the physical impact underlying this policy conflict is resolved through

[14] The final determination of a Project's consistency with County policies is made by County decision-makers, i.e., the Planning Commission and Board of Supervisors, and, in the case of LCP policies, by the California Coastal Commission.

[15] Email from Stephanie Rexing, California Coastal Commission, to Sabrina Cardoza, Marin County CDA, re: 3rd Transmittal Re: P3049 Brian Johnson Trust Coastal Permit. November 22, 2021.

application of Certified Implementing Program regulation 22.64.050(A)(1)(d), Habitat Mitigation, and Mitigation Measure BIO-2, requiring restoration of dune habitat within undeveloped portions of the Project site. With implementation of Mitigation Measure BIO-2, the physical impact of the Project on sensitive dune habitat classified as ESHA would be mitigated to less than significant, though the policy conflict would remain. Because it would lack an underlying impact on the physical environment, this policy conflict would be a less than significant impact.

In conclusion, the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact with respect to conflicts with land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect.

2.11.c Would the Project result in substantial alteration of the character or functioning of the community, or present planned use of an area?

The 2020 IS/MND, Section 4.13, Land Use and Planning, topic b, states that the project then being examined was consistent with CWP, LCP, and SBCP policies regarding land use, including several for conservation of existing community character. These include CWP Policy DES-3.1 Promote Infill: Encourage the development of vacant and underutilized parcels consistent with neighborhood character; and LCP Visual Resource Policy 21 and SBCP Land Use Policy F, both of which limit maximum height of new construction to 25 feet. Since the 2020 IS/MND found no inconsistency with these or other applicable plans and policies adopted for the purpose of avoiding or mitigating an environmental effect (see previous topic), it concluded there would be no impact of this kind, including no impact with regard to alteration of community character or function.

In addition to the policies cited in the 2020 IS/MND, the LCP includes a policy specifically addressing maintenance of the character of the Stinson Beach Community:

> Policy C-SB-1 Community Character of Stinson Beach. Maintain the existing character of residential, small-scale commercial and visitor-serving recreational development in Stinson Beach. New development must be designed to be consistent with community character and protection of scenic resources.

The design of the proposed single-family residence is consistent with the generally small, low-profile residences in the Calles neighborhood, and, as discussed in Section 2.1, Aesthetics, would not have a significant impact on scenic resources. The Project would therefore be consistent with Policy C-SB-1, and would have no impact with regard to altering the character or functioning of the community; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

2.11.d. Would the Project conflict with applicable Countywide Plan designation or zoning standards?

This topic is not specifically addressed in the 2020 IS/MND, though the Countywide Plan designation and zoning are identified.

The Project site has a CWP land use designation of C-MF2 (Coastal, Multi-family, 1-4 units/acre) and is zoned C-R2 (Coastal, Residential, Single-family, 7,500 square-foot minimum lot size). The recently certified LCP Implementing Program states that, "The C-R2 zoning district provides areas for attached two-family housing units, detached single-family homes consistent with Land Use Plan Policy C-CD-23, and similar and related compatible uses.[16] The C-R2 zoning district is consistent with the Multi-Family Residential 2 land use category of the Marin County Land Use Plan.

Policy C-CD-23 states:

> C-CD-23 Multi-family Residential Development in Multi-family Zones. Require multi-family development in certain multi-family zoning districts consistent with the C-MF2, C-MF3 and C-NC land use designations, including the C-R2, C-RMP and C-RMPC zoning districts, if parcel size and density permit. Prohibit development of single-family dwellings in multi-family zones unless the Director finds that multi-family development is infeasible or impractical based on physical site constraints, environmental constraints, or significant incompatibility with neighborhood character.

While Policy C-CD-23 appears to prohibit development of single-family dwellings on the Project site, given the size of the parcel, single-family residences are a "principally permitted" use pursuant to Marin County LCP Implementation Program, Table 5-2-C. The Project is therefore consistent with the CWP Land Use Designation and zoning for the Project site, and therefore, there would be no conflict with these standards, and no such impact.

Mitigation Measures

The 2020 IS/MND identified no significant impacts of the project then being evaluated with respect to land use and planning. Similarly, the current Project would have no significant impacts of this kind, and no mitigation is required.

Conclusion

The 2020 IS/MND concluded that the project then being evaluated would not have a significant impact on land use and planning. Similarly, the current Project would not result in a significant impact with respect to land use and planning. Therefore, the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact with respect to land use and planning.

[16] Recent changes to State law allow for development of accessory dwelling units in most areas zoned for single-family dwellings.

References

Marin County Community Development Agency, 2021. Staff Report To The Marin County Planning Commission, Brian Johnson Trust Coastal Permit. Hearing Date: November 22, 2021.

2.12. Mineral Resources

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
12. Mineral Resources. Would the Project:						
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	Section 4.12, Mineral Resources, topic a	No	No	No	N/A	N/A
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?	Section 4.12, Mineral Resources, topic b	No	No	No	N/A	N/A

Discussion

2.12.a. Would the Project Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

2.12.b. Would the Project Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

The 2020 IS/MND, Section 4.12, Mineral Resources, states that the Project site is not itself, nor is it in proximity to, an active mining site, a site designated by the State as having significant mineral resources, or a site designated or permitted by the County as a mineral resource extraction site. The 2020 IS/MND also states that the project then being evaluated would not preclude future extraction of oil or minerals, should such resources be found. The 2020 IS/MND therefore concludes that the project then being evaluated would have no impact on mineral resources.

A review of the State Mining and Geology Board report, "Updated Designation of Regionally Significant Aggregate Resources in the North San Francisco Bay Production-Consumption Region, Marin, Napa, Sonoma, and Southwestern Solano Counties, California" (SMGB, 2018) confirms that the Project site is not within or nearby any designated regionally significant

aggregate resource areas. Likewise, a review of County Land Use Policy Map for Southwest Marin County (Map 19m) does not show any Mineral Resource Area in or around Stinson Beach.

There are no changed circumstances and no other new information of substantial importance regarding mineral resources. The points made in the 2020 IS/MND to support the conclusion of no impact are still valid; for the same reasons stated in the 2020 IS/MND, the current Project would have no impact on mineral resources and so would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

Mitigation Measures

The 2020 IS/MND concluded that the project then being evaluated would have no impact on mineral resources; no mitigation measures were required. As the current Project would also have no impact on mineral resources, no additional mitigation is required.

Conclusion

As also concluded in the 2020 IS/MND for the project then being evaluated, the current Project would have no impact on mineral resources. Therefore, the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact on mineral resources.

References

State Mining and Geology Board (SMGB), 2018. Updated Designation of Regionally Significant Aggregate Resources in the North San Francisco Bay Production-Consumption Region, Marin, Napa, Sonoma, and Southwestern Solano Counties, California. Department of Conservation, Natural Resources Agency, January 2018. SMGB Designation Report No. 17.

2.13. Noise

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
13. Noise. Would the Project result in:						
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Section 4.13, Noise, topic a.	Yes	No	Yes	No	N/A
b) Generation of excessive groundborne vibration or groundborne noise levels?	Section 4.13, Noise, topic b.	Yes	No	Yes	Yes	Yes
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	Section 4.13, Noise, topic c.	No	No	No	N/A	N/A

Discussion

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

In its discussion of the Noise Setting for the project then being evaluated, the 2020 IS/MND states that The Marin County Municipal Code (Section 6.70.030(5)) designates allowable noise levels during construction and normal project operation. Per the Municipal Code, construction is permitted Monday through Friday 7 am to 6 pm and Saturday 9 am to 5 pm. Noise-generating construction activity is prohibited on Sundays and holidays. Loud equipment such as backhoes, generators, and jackhammers are only permitted from 8 am to 5 pm Monday through Friday. The 2020 IS/MND goes on to state that construction of the proposed septic system would generate

temporary noise from equipment use, including earth-moving equipment and trucks, but that construction would occur during the allowable times stated in the Municipal Code, and would occur within a small area over a limited period of time. The 2020 IS/MND states that there would be little, if any, noise from operation and the occasional maintenance of the septic system, and that future development of a single-family residence would generate noise consistent with the existing noise environment, and would not constitute a substantial noise increase. Nevertheless, the 2020 IS/MND identifies the potential for a significant construction noise impact on neighboring properties, in excess of noise standards established in the Marin Countywide Plan. The 2020 IS/MND includes Mitigation Measure NOISE-1, requiring the construction contractor to implement best management practices for noise reduction throughout project construction. Mitigation Measure NOISE-1 requires use of the following noise-reducing practices:

- Construction hours shall be clearly posted on a sign at the entrance to the Project site at least 48 hours prior to the commencement of construction activities;
- The [Stinson Beach County Water] District or the Contractor shall be responsible for responding to any noise complaints. Contact information for representatives of both parties shall be posted on the construction site;
- All construction equipment used on-site shall be muffled and maintained in good working order. All internal combustion engine-driven equipment shall be fitted with mufflers in good condition; and
- Unnecessary idling of internal combustion engines shall be prohibited, and all equipment shall be turned off when not in use.

The 2020 IS/MND concludes that Mitigation Measure NOISE-1 would reduce this impact to less than significant.

The same points regarding noise generation made in the 2020 IS/MND are applicable to the current Project, though the construction of the proposed residence will occur over a longer period of time and will involve more earth moving and other noisy activities. Applying Mitigation Measure NOISE-1 to construction not only of the septic system, but of the entire residence, would similarly reduce construction noise of the proposed new residence to less than significant, and the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

2.13.b. Would the Project result in Generation of excessive groundborne vibration or groundborne noise levels?

The 2020 IS/MND found no impact associated with this topic, since groundborne vibration is generally associated with blasting operations, use of pile drivers, and large-scale demolition activities, none of which were proposed for construction or operation of the project then being evaluated.

As discussed in Section 2.7, Geology and Soils, the Preliminary Geotechnical Feasibility Study prepared for the Project (Murray Engineers, 2021) recommends supporting the proposed new

residence on rammed earth aggregate piers, or similar ground improvement technology, in order to reduce the potential for liquefaction-induced ground failure to impact the structure. While this study states that the depth of the ground improvement should be determined based on a future design-level investigation, it would likely need to be on the order of 30 feet or more below grade.

Use of rammed earth aggregate piers or similar system would require a technology similar to pile driving, with use of a mandrel vibrated vertically into the ground to emplace and compact the earth aggregate material. This system would cause groundborne vibration that could affect neighboring residences. The closest neighboring residence is a backyard cottage located at 26 Calle del Sierra. This cottage is directly across the Project site's southeastern property line. The proposed residence would be set-back 26 feet from the southeastern property line (Chapter 1, Project Description, Figure 5), and therefore 26 feet from the cottage. Several other structures are within 100 feet of the footprint of the proposed residence.

Caltrans' "Transportation and Construction Vibration Guidance Manual" (Caltrans, 2020) includes a methodology for calculating and evaluating the impact of groundborne vibration from pile driving and other construction activities. Using equation 10 in the Caltrans Guidance Manual, and assuming use of vibratory pile driving equipment, the maximum peak particle velocity (PPV) at the location of the neighboring cottage would be as high as 0.62 inches/second. The Caltrans Guidance Manual recommends a threshold for preventing vibration damage for older residential structures from continuous/frequent intermittent sources, such as vibratory pile drivers, as 0.3 inches/second, and for transient sources, such as impact pile drivers, as 0.5 inches/second (Caltrans, 2020, Table 19). Above these levels, typical older residential structures may suffer structural damage, such as cracking of floor slabs, foundations, columns, beams, or wells; or cosmetic architectural damage, such as cracked plaster, stucco, or tile. In addition, Continuous/frequent intermittent vibration above 0.4 inches/second can be expected to elicit a "severe" human response (Caltrans, 2020, Table 20). Therefore, even though of limited duration, use of vibratory pile driving or similar methods during construction of the proposed residence could result in a significant impact with respect to generation of excessive groundborne vibration. This would be a new significant impact not previously identified in the 2020 IS/MND. New Mitigation Measure NOISE-2, which requires use of vibration-limiting equipment and construction methods, and which also requires monitoring to detect any damage to nearby structures, is identified below. With implementation of new Mitigation Measure NOISE-2, the Project's impact with respect to generation of groundborne vibration will be reduced to less than significant.

New Mitigation Measure NOISE-2: Use vibration-reducing pile driving equipment, or select other method for ground improvement. During construction of the foundation for the proposed residence, the construction contractor shall use equipment and methods for ground improvement that will produce groundborne vibration with a maximum PPV of less than 0.30 inches/second at the property line if equipment is selected that generates continuous/frequent intermittent vibration, or less than 0.50 inches per second if equipment that generates transient vibration is selected. Vibratory equipment capable of achieving the 0.30 inches/second standard may include, for example, a resonance-free vibrator or variable eccentric moment vibrator (Caltrans, 2020, section 8.2), or drilled piers.

If a construction method capable of producing substantial groundborne vibration is selected, the construction contractor shall conduct vibration monitoring at the property line during construction, and shall conduct pre- and post-construction crack monitoring of all structures within 100 feet of the foundation footprint. Crack monitoring shall be accomplished by the use of photographs, video tape, or visual inventory. The purpose of the crack monitoring is to document pre-construction condition of nearby structures, so that any actual vibration damage from the construction operation may be accurately attributed. The construction contractor shall be bonded to cover any liability from damage of nearby structures.

Mitigation Monitoring Measure NOISE-2: The Project sponsor shall provide construction specifications demonstrating that the equipment and methods used for ground improvement will achieve the applicable performance standard. The Community Development Agency, or a technical expert engaged by the Community Development Agency at the Applicant's expense, will verify the adequacy of the construction specifications, will determine whether vibration monitoring and a crack survey are required, and will verify that any required monitoring measures are implemented successfully.

2.13.c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

As discussed in the 2020 IS/MND, the Project site is not located within an airport land use plan or in the vicinity of an airport, and therefore the project then being evaluated would have no impact of this kind. The closest airport to the Project site is the San Rafael Airport, which is about 10 miles to the northwest. As concluded in the 2020 IS/MND, there would be no impact of this kind.

Mitigation Measures

Mitigation Measure NOISE-1 from the 2020 IS/MND, which would require the construction contractor to use best management practices for construction noise reduction, would apply to the current Project, including during construction of the proposed septic system and residence. In addition, new Mitigation Measure NOISE-2 is added to ensure that Project construction will not expose sensitive receptors to substantial groundborne vibration during construction of the foundation for the residence.

The full text of all mitigation measures, including those required by the 2020 IS/MND and those identified or modified in this document, is included in Chapter 3, Summary and Conclusion.

Conclusion

New information of substantial importance, specifically the use of rammed earth aggregate piers or similar construction methods for supporting the proposed residence recommended in the Preliminary Geotechnical Feasibility Study prepared for the Project (Murray Engineers, 2021), indicates the potential for a significant impact, not previously identified in the 2020 IS/MND, from generation of groundborne vibration that could damage neighboring structures. New

Mitigation Measure NOISE-2, identified above, would reduce this impact to less than significant. Together with application of Mitigation Measure NOISE-1, identified in the 2020 IS/MND, the Project, as mitigated, would have only less-than-significant noise impacts.

References

California Department of Transportation (Caltrans), 2020. Transportation and Construction Vibration Guidance Manual. California Department of Transportation, Division of Environmental Analysis, Environmental Engineering, Hazardous Waste, Air, Noise, & Paleontology Office. April 2020. https://dot.ca.gov/programs/environmental-analysis/noise-vibration/guidance-manuals

Murray Engineers, Inc., 2021. A Limited Preliminary Geotechnical Feasibility Study, New Residence, 21 Calle Del Onda, Marin County, California. Prepared for Alyce and Brian Johnson, January 14, 2021.

2.14. Population and Housing

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
14. Population and Housing. Would the Project:						
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	Section 4.14, Population and Housing, topic a	No	No	No	N/A	N/A
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	Section 4.14, Population and Housing, topic b	No	No	No	N/A	N/A
c) Increase density that would exceed official population projections for the planning area within which the project site is located as set forth in the Countywide Plan and/or community plan?	This topic not evaluated in the 2020 IS/MND	No	No	No	N/A	N/A
d) Displace existing housing, especially affordable housing?	This topic not evaluated in the 2020 IS/MND	No	No	No	N/A	N/A
e) Result in any physical changes which can be traced through a chain of cause and effect to social or economic impacts?	This topic not evaluated in the 2020 IS/MND	No	No	No	N/A	N/A

Discussion

2.14.a. Would the Project Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

2.14.b. Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

2.14.c. Would the Project increase density that would exceed official population projections for the planning area within which the project site is located as set forth in the Countywide Plan and/or community plan?

2.14.d. Would the Project displace existing housing, especially affordable housing?

The 2020 IS/MND, Section 4.14, Population and Housing, topics a and b, reiterates that the Project site is a currently vacant lot zoned and designated for coastal residential use. As such, the 2020 IS/MND finds that the project then being evaluated, including septic system development and potential future development of a 1,400 square foot, single-family residence, would not directly or indirectly lead to substantial population growth. The 2020 IS/MND makes the point that the Project site is located within a residential neighborhood, so development of the site would not require construction of any new growth-inducing infrastructure such as roads or utilities, apart from the proposed septic system, which would serve only one residence. The 2020 IS/MND also states that the project then being evaluated, including septic system development and potential future development of a residence, would not necessitate removal or displacement of any existing people or housing, or necessitate the construction of replacement housing elsewhere, since there is currently no housing within the Project site. The 2020 IS/MND concluded that for the two Population and Housing topics evaluated, there would be no impact.

All of these points are still valid, and are applicable to consideration of topics 2.14.a, 2.14.b, 2.14.c, and 2.14.d: the Project site is still a vacant lot, the proposed Project is consistent with site zoning and Countywide Plan designation, and therefore consistent with population projections and density calculations for the area; the Project would not displace existing residents nor housing, including affordable housing; and would not require replacement housing to be constructed elsewhere. In summary, the Project would have no impact, and therefore would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

2.14.e. Would the Project result in any physical changes which can be traced through a chain of cause and effect to social or economic impacts?

This topic was not examined in the 2020 IS/MND.

The proposed Project is consistent with existing uses in the surrounding neighborhood, and would not result in a physical change that could be traced through a chain of cause and effect to result in a social or economic impact, such as promoting neighborhood blight or economic decline. There would be no impact of this kind; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

Mitigation Measures

As it identified no impact of the project then being evaluated on population and housing, the 2020 IS/MND included no mitigation measures were required for this issue. Likewise, the current Project would have no impact on population and housing, so no mitigation measures are required.

Conclusion

There are no changed circumstances and no new information of substantial importance regarding population and housing. The points made in the 2020 IS/MND to support the conclusion of no impact are still valid; for the same reasons stated in the 2020 IS/MND, the current Project would have no impact on population and housing. The current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact on population and housing.

References

No citations for this section.

2.15. Public Services

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
15. Public Services.						
Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:						
Fire protection?	Section 4.15, Public Services, topic a.i	No	No	Yes	N/A	N/A
Police protection?	Section 4.15, Public Services, topic a.ii	No	No	No	N/A	N/A
Schools?	Section 4.15, Public Services, topic a.iii	No	No	No	N/A	N/A
Parks?	Section 4.15, Public Services, topic a.iv	No	No	No	N/A	N/A
Other public facilities, including roads?	Section 4.15, Public Services, topic a.v	No	No	No	N/A	N/A

Discussion

2.15. Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: fire protection, police protection, schools, parks, other public facilities, including roads?

The 2020 IS/MND states that in the unincorporated community of Stinson Beach, where the Project site is located, police protection is provided by the Marin Sheriff's Department. The Stinson Beach community is within the Bolinas-Stinson Union School District for kindergarten through 8th grade, and Tamalpais Union High School District for high school. Parks near the Project site include the Golden Gate National Recreation Area, which includes Stinson Beach, and Upton Beach, a County park adjacent to the Project site. The 2020 IS/MND erroneously identifies the State agency, CAL FIRE, as responsible for fire protection services; in fact, fire protection is provided by the Stinson Beach Fire Protection District (MarinMap, 2022).

The 2020 IS/MND states that the project then being evaluated, being limited to development of a septic system and potentially one single-family residence, would not substantially increase population in the area, and so would not substantially increase demand for public services. The 2020 IS/MND concludes that the project then being evaluated would cause negligible increases in demand for public services and would not lead to adverse physical effects associated with the construction of new or expanded police, fire, school, park, or other public service facilities. The 2020 IS/MND therefore identifies a less-than-significant impact on public services.

All of these points are still valid for the current Project. There are no changed circumstances and no new information of substantial importance affecting this issue. The current Project is within the scope of the project analyzed in the 2020 IS/MND, and would have only less-than-significant impacts on public services; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

Mitigation Measures

As it identified only a less-than-significant impact of the project then being evaluated on public services, the 2020 IS/MND included no mitigation measures related to this issue. Likewise, the current Project would have a less-than-significant impact on public services, so no mitigation measures are required.

Conclusion

There are no changed circumstances and no new information of substantial importance regarding public services affecting the Project. The points made in the 2020 IS/MND to support the conclusion of a less-than-significant impact are still valid; for the same reasons stated in the 2020 IS/MND, the current Project would have a less-than-significant impact on public services. Therefore, the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact on public services.

References

MarinMap, 2022. Parcel report for 21 Calle del Onda, APN 195-162-49. Downloaded 9/26/22. www.marinmap.org

2.16. Recreation

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
16. Recreation.						
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Section 4.16, Recreation, topic a.	No	No	No	N/A	N/A
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?	Section 4.16, Recreation, topic b.	No	No	No	N/A	N/A

Discussion

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

2.16.b. Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The 2020 IS/MND, Section 4.16, Recreation, examines these two topics, and concludes that the project then being examined, including potential future development of one single-family residence, would not substantially increase use of existing parks and recreational facilities, including Upton Beach and Stinson Beach, and would not require construction or expansion of recreational facilities. The 2020 IS/MND also states that the project then being evaluated would not restrict public access to the beaches. The 2020 IS/MND therefore concludes that the project then being evaluated would have a less-than-significant impact on recreation. For the same reasons, the current Project would have a less-than-significant impact on recreation; the current

Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

Mitigation Measures

As the 2020 IS/MND identified only a less-than-significant impact on recreation, no mitigation was required. The same is true of the current Project.

Conclusion

There are no changed circumstances and no new information of substantial importance regarding recreation affecting the Project. The points made in the 2020 IS/MND to support the conclusion of a less-than-significant impact are still valid; for the same reasons stated in the 2020 IS/MND, the current Project would have a less-than-significant impact on recreation. Therefore, the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact on recreation.

References

No references were cited in this section.

2.17. Transportation/Traffic

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
17. Transportation/Traffic. Would the Project:						
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Section 4.17, Transportation, topic a.	No	No	No	N/A	N/A
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	Section 4.17, Transportation, topic b.	No	No	No	N/A	N/A
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Section 4.17, Transportation, topic c.	No	No	No	N/A	N/A
d) Result in inadequate emergency access?	Section 4.17, Transportation, topic d.	No	No	No	N/A	N/A

Discussion

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

The 2020 IS/MND, Section 4.17, Transportation, topic a, describes Marin Countywide Plan transportation policies that are intended to reduce vehicle miles traveled (VMT) and single-occupancy vehicle trips; enhance bicycle and pedestrian infrastructure; and maintain West Marin's rural character by enhancing bicycle and pedestrian infrastructure while not allowing for road widening that may accommodate more through traffic on Highway 1. The 2020 IS/MND finds that the project then being evaluated would not conflict with any plan or policy on bicycle, transit, or pedestrian facilities, as it would not interfere with the use or expansion of any such facilities; but that the project would lead to minor increases in vehicle miles traveled, which would be inconsistent with the Marin Countywide Plan's transportation policies. The 2020 IS/MND concludes that increased vehicle trips would be minor in quantity due to the small nature of the project, and would therefore only present "mild inconsistencies" with applicable transportation plans. The 2020 IS/MND concluded, therefore, that the

impact related to conflicts with a program, plan, policy, or ordinance addressing the circulation system would be less than significant.

There are no changed circumstances or new information of substantial importance pertaining to this topic, and the current Project is within the scope of the project analyzed in the 2020 IS/MND, since it proposed development of only one single-family residence in a developed neighborhood. For the same reasons stated in the 2020 IS/MND, the Project would have a less-than-significant impact related to conflicts with a program, plan, policy, or ordinance addressing the circulation system; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

2.17.b. Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

The 2020 IS/MND, Section 4.17, Transportation, topic b, summarizes CEQA Guidelines section 15064.3, subdivision (b), which requires lead agencies to use increase in VMT associated with a project, rather than traffic delay, to evaluate transportation impacts. The 2020 IS/MND states that the small scale of the project then being evaluated, including construction and operation of a septic system, and potential future development of one single-family residence, would not lead to a substantial increase in VMT, and so would have a less-than-significant impact with respect to this topic.

The 2020 IS/MND does not review the "Technical Advisory on Evaluating Transportation Impacts in CEQA," issued by the Governor's Office of Planning and Research in December 2018 (OPR, 2018). This guidance document recommends a "screening threshold" to quickly identify when a project should be expected to cause only a less-than-significant impact, without conducting a detailed study: projects that generate or attract fewer than 110 new vehicle trips per day generally may be assumed to cause a less-than-significant transportation impact.

Typical trip generation rates are about 10 trips per day for a detached single-family dwelling (ITE, 2012). The one-bedroom, single-family residence proposed under the Project would not have the potential to generate 110 new vehicle trips per day. Therefore, as concluded in the 2020 IS/MND, the Project would have a less-than-significant impact with regard to conflicts or inconsistencies with CEQA Guidelines section 15064.3, subdivision (b). The current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

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

The 2020 IS/MND, Section 4.17, Transportation, topic c states that the project then being evaluated would not physically modify any roadways, and as such would not increase hazards due to a geometric design feature; and also states that construction and maintenance of the proposed septic system would generate limited traffic, including large construction vehicles, that would be accommodated by existing roadways without major conflict. For these reasons, the 2020 IS/MND finds that the project then being evaluated would have a less-than-significant impact with respect to this topic.

There are no changed circumstances or new information of substantial importance pertaining to this topic, and the current Project is within the scope of the project analyzed in the 2020 IS/MND. For the same reasons stated in the 2020 IS/MND, the Project would have a less-than-significant impact related to roadway hazards and incompatible uses; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

2.17.d. Would the Project result in inadequate emergency access?

The 2020 IS/MND, Section 4.17, Transportation, topic d, discusses the potential for the project then being evaluated to interfere with or otherwise result in inadequate emergency access. The 2020 IS/MND states that the project would not lead to any long-term changes in emergency access and would not impede any roadways or public rights of way important for emergency access. Given the small scope of the project and the limited potential for increased roadway demand, the project would not be sufficient to result in inadequate emergency access. The 2020 IS/MND therefore concludes that the project would not result in inadequate emergency access, and a less-than-significant impact would occur.

For the same reasons stated in the 2020 IS/MND, the current project would not result in inadequate emergency access. The impact on emergency access would be less than significant ; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

Mitigation Measures

The 2020 IS/MND identified only less-than-significant impacts on transportation; no mitigation was required. The current Project would also have only less-than-significant impacts on transportation, and so no mitigation is required.

Conclusion

There are no changed circumstances and no new information of substantial importance regarding transportation affecting the Project. The points made in the 2020 IS/MND to support the conclusion of less-than-significant impacts on transportation are still valid; for the same reasons stated in the 2020 IS/MND, the current Project would have less-than-significant impacts on transportation. Therefore, the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact on transportation.

References

Governor's Office of Planning and Research, 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. December 2018.

Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th edition, 2012 for Single Family Detached Housing (ITE Landuse #210).

2.18. Tribal Cultural Resources

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
18. Tribal Cultural Resources. Would the Project:						
a) 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)?	Section 4.18, Tribal Cultural Resources, topic ai.	Yes	No	Yes	No	N/A
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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Section 4.18, Tribal Cultural Resources, topic aii.	Yes	No	Yes	No	N/A

Discussion

2.18.a.i. Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe,

and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

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

The 2020 IS/MND, Section 4.18, Tribal Cultural Resources, cites a Cultural Resources Study prepared by Tom Origer and Associates (Origer) for the project then being evaluated (Walker-Follett and Origer, 2019). As part of the Study, Origer contacted the California Native American Heritage Commission (NAHC) to request contact information for potentially interested Native American individuals and tribes and information from the Sacred Lands File for the project site. The Sacred Lands File for the site indicated that there are no known sacred lands within the project site. Search results for interested parties yielded contact information for one potentially interested tribe—the Federated Indians of Graton Rancheria (FIGR). Origer sent several FIGR Tribal officers a letter to notify them of the proposed project. On July 18, 2019, FIGR responded, requesting to be provided the results of Origer's research. This contact did not constitute formal consultation or an offer of consultation pursuant to AB 52, but was intended to inform the Tribe of the project. There is no record of a subsequent request by FIGR for consultation, nor a formal offer of consultation by the Stinson Beach County Water District.

The 2020 IS/MND also states that the Cultural Resources Study found that the Project site has low potential for buried remains due to the types and ages of soils present, and that excavation would occur in an area previously disturbed by the construction of the previous residence and septic system. The 2020 IS/MND states that, in the event of accidental discovery of archaeological resources or human remains that may have tribal significance, the construction Contractor would be required to comply with State law, which calls for work stoppages and contact with a qualified archaeologist and/or the County coroner.

Based on the findings of the cultural resources study's finding that there are no known Tribal Cultural Resources present, the low likelihood of buried tribal cultural resources, and the protections for accidentally discovered resources afforded by State law, the 2020 IS/MND concluded that the project then being evaluated would not adversely affect any Tribal Cultural Resources pursuant to Public Resources Code sections 5020.1(k) or 5024.1 and therefore no impact would occur.

The Cultural Resources Study includes in an appendix Origer's correspondence with NAHC and FIGR. In informing the NAHC and FIGR of the project, Origer described the project as a septic tank replacement. There was no mention of potential future development of a single-family residence. Furthermore, while the correspondence includes FIGR's request for Origer's research

results and recommendations, there is no record of these having been provided to FIGR. Neither is there any record of a follow-up response to this request.

The current Project includes specific plans for a single-family residence not available at the time the 2020 IS/MND was prepared. Since previous contacts did not include any mention of development of a single-family residence, and because there was no formal offer of consultation, on October 5, 2022 the County sent formal letters to the Tribes that have previously expressed interest in projects in the area, to inform them of the currently proposed Project, including both septic system replacement and the construction of a single-family residence; and to inquire whether they wished to consult with the County on the Project's potential to impact Tribal Cultural Resources. FIGR's Tribal Historic Preservation Officer (THPO) responded requesting consultation, and a consultation meeting was held on December 6, 2022. FIGR's THPO stated in the consultation meeting that the Tribe is aware of unrecorded archaeological sites close by the Project site, and requested subsurface testing prior to ground disturbance associated with Project construction, including installation of foundation piers.

The information provided by FIGR during the consultation meeting did not identify any cultural resources within the Project site that would potentially be impacted by Project-related ground-disturbing activities. Additionally, none of the information provided contradicted the findings of the cultural resources study prepared for the Project (Origer, 2022) which determined that there is a low potential for buried archaeological resources within the Project site. Therefore, there remains no identified impact of the Project on Tribal Cultural Resources and no mitigation measures are required for Tribal Cultural Resources. However, the County acknowledges FIGR's concerns regarding the protection of Tribal Cultural Resources and will therefore voluntarily recommend that a Secretary of the Interior-qualified archaeologist conduct a cultural resources awareness training for the construction crew at the Project site prior to the start of Project-related ground disturbance. FIGR will be notified in advance of this cultural resource awareness training and will be invited to participate at their discretion.

Mitigation Measures

The 2020 IS/MND identified no impact of the project then being evaluated on Tribal Cultural Resources, and so included no mitigation measures. Following formal Tribal consultation, this SER has reached the same conclusion of no impact on Tribal Cultural Resources, and so no mitigation measures are required.

Conclusion

The 2020 IS/MND concluded that the project then being evaluated would not have a significant impact on Tribal Cultural Resources. New information of substantial importance notwithstanding, the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact on Tribal Cultural Resources.

References

Murray Engineers, Inc., 2021. A Limited Preliminary Geotechnical Feasibility Study, New Residence, 21 Calle Del Onda, Marin County, California. Prepared for Alyce and Brian Johnson, January 14, 2021.

Origer, Tom, 2022. Memo from Tom Origer, Tom Origer & Associates, to Dan Sicular, Sicular Environmental Consulting, re: Cultural Resources 21 Calle del Onda. November 21, 2022.Walker-Follett, Kean, and Tom Origer. Cultural Resources Study for the21 Calle del Onda Wastewater System Project, Stinson Beach, Marin County, California. Prepared for WRA, Inc., July 24, 2019. Included as Appendix B in the 2020 IS/MND.

2.19. Utilities and Service Systems

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
19. Utilities and Service Systems. Would the Project:						
a) Require or result in the relocation or construction of new or expanded water, wastewater or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Section 4.19, Utilities and Service Systems, topic a.	No	No	No	N/A	N/A
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	Section 4.19, Utilities and Service Systems, topic b.	Yes	Yes	Yes	No	N/A
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Section 4.19, Utilities and Service Systems, topic c.	No	No	No	N/A	N/A
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Section 4.19, Utilities and Service Systems, topic d.	Yes	No	No	No	N/A
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Section 4.19, Utilities and Service Systems, topic e.	Yes	No	No	No	N/A

Discussion

2.19.a. Would the Project require or result in the relocation or construction of new or expanded water, wastewater or storm water drainage, electric power, natural gas, or

telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

The 2020 IS/MND, Section 4.19, Utilities and Service Systems, states that the Stinson Beach County Water District is the water provider for the Stinson Beach community, and also regulates on-site wastewater management. The District serves a population of about 2,000, with a projected build-out population of 2,100. The source of drinking water is groundwater, supplemented by local creeks. The 2020 IS/MND also states that the Project site already has existing utility lines running to it, though the exact location of lines within the Project site are not known. The 2020 IS/MND does not identify the solid waste collector. Recology Sonoma- Marin is the collector, providing weekly garbage, recycling, and compostable materials collection to the community.

The 2020 IS/MND states that the project then being evaluated would not require the expansion, relocation, or construction new or expanded water, stormwater drainage, or telecommunications facilities. That project included development of a new on-site wastewater treatment system, intended to support future development of a single-family residence within the Project site. The 2020 IS/MND therefore concludes that the project then being evaluated would not have a significant environmental effect with respect to the need for new or expanded utility systems or facilities. The 2020 IS/MND does, however, find that, because the exact location of existing utilities such as sewer and water lines within the Project site is unknown, there is the potential for wastewater lines to cross water supply lines during installation of the septic system, thereby threatening the integrity of the area's water supply. The 2020 IS/MND includes Mitigation Measure UTILITIES-1, which requires the construction contractor to determine the location of existing utilities prior to construction and to implement measures to avoid contact between the wastewater system and existing waterlines. The 2020 IS/MND finds that, with implementation of this measure, this potential issue would be avoided, and the impact would be reduced to less than significant.

There are no changed circumstances or new information of substantial importance pertaining to this topic. Since locating existing utility lines and eliminating the potential for crossing of wastewater and water supply lines would apply to both septic system construction and construction of the proposed residence, Mitigation Measure UTILITIES-1 would avoid this potential impact for the entire development currently proposed; as concluded in the 2020 IS/MND, the impact would be less than significant. The current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

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

The 2020 IS/MND states that the District has water supply to serve the planned population growth in the Stinson Beach community. Since any future development would not exceed projected population growth, the 2020 IS/MND concludes that the District would have adequate water supplies and oversight capacity to serve the project, and a less than-significant impact would occur.

In August 2021, in the face of an historic drought, the District adopted a Water Rationing Ordinance that includes rules and regulations for restricted water use allotments, a drought excess water use charge, and fines for exceeding the allowed allotment (Stinson Beach County Water District, 2021). The District, however, is committed to providing water service to the Project site (Souza, 2022). The incremental increase in demand would not have a substantial impact on water supply to the community, even in a dry year, and the impact would be less than significant; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

2.19.c. Would the Project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Because the Project would develop an on-site wastewater system, and would not be served by a wastewater treatment provider, this topic is not applicable to the Project. There would be no impact of this kind; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

2.19.d. Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

2.19.e. Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The 2020 IS/MND states that the project then being evaluated, i.e., replacement of a septic system, would generate a limited amount of solid waste during construction, and none during operation; and that the small amount of solid waste from a potential future residence would be disposed of at Redwood Landfill, near Novato in Marin County. Redwood Landfill has a permitted daily capacity of 2,300 tons, and the future residence would add incrementally, but not substantially, to existing disposal volumes, and so would not generate solid waste in excess of local infrastructure nor impair attainment of solid waste reduction goals; the 2020 IS/MND concludes that the project then being evaluated would have a less-than-significant impact with respect to solid waste generation. The 2020 IS/MND also states that the project would comply with all applicable federal, state, and local waste management and reduction statutes and regulations, as legal required, and so would have no impact of this kind.

Recology Sonoma-Marin (Recology) provides weekly solid waste, recycling, and compostable organics collection within the community of Stinson Beach. Recology utilizes Redwood Landfill for disposal of solid waste and compostables from residential sources, and its own facility in Santa Rosa for processing recyclables. Compostables from commercial sources are delivered to composting facilities in Contra Costa and Napa counties.

The small incremental increase in generation of these materials could, as concluded in the 2020 IS/MND, be handled by existing collection, processing, and disposal infrastructure, and would not result in a significant impact with respect to waste generation. Marin County is in compliance

with State goals for reduction of landfilled solid waste, and is in the process of implementing SB 1383, which bans landfill disposal of compostable materials, including food waste. In accordance with SB 1383, Recology requires all residents and businesses in Stinson Beach to separate compostable organic materials for separate collection and processing (Recology Sonoma-Marin, 2022). Since the new residence proposed by the Project would be served with this existing solid waste system, the Project would be in compliance with applicable federal, state, and local management and reduction statutes and regulations related to solid waste, and there would be no impact of this kind; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

Mitigation Measures

The 2020 IS/MND identified one significant impact of the project then being evaluated on utilities and service systems, but found that, with implementation of Mitigation Measure UTILITIES-1, this impact would be reduced to less than significant. The foregoing analysis concluded that the current Project would have no new or substantially more severe significant impact of this kind; no additional mitigation is required.

The full text of all mitigation measures, including those required by the 2020 IS/MND and those identified or modified in this document, is included in Chapter 3, Summary and Conclusion.

Conclusion

The 2020 IS/MND concluded that, with implementation of Mitigation Measures UTILITIES-1, the project then being evaluated would have less-than-significant impacts on utilities and services systems. There are no changed circumstances or new information of substantial importance related to this topic. The current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact with respect to utilities and service systems.

References

Recology Sonoma-Marin, 2022. The Recology Resource (customer newsletter) for Stinson Beach, Spring 2022. https://www.recology.com/recology-sonoma-marin/stinson-beach/newsletter/?source=onsite-search-result

Souza, Rich, 2022. Email from Rich Souza, District Engineer, Stinson Beach County Water District to Dan Sicular, Sicular Environmental Consulting re: 21 Calle del Onda. October 3, 2022.

Stinson Beach County Water District, 2021. Ordinance No. GB-2021002, Water Rationing Ordinance. Adopted by the Board of Directors August 21, 2021.

2.20. Wildfire

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
20. Wildfire. Would the Project:						
a) 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?	Section 4.20, Wildfire, topic b.	Yes	No	Yes	No	N/A
b) 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?	Section 4.20, Wildfire, topic c.	Yes	No	Yes	No	N/A
c) 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?	Section 4.20, Wildfire, topic d.	Yes	No	Yes	No	N/A
d) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Section 4.20, Wildfire, topic b.	Yes	No	Yes	No	N/A

Environmental Setting

The 2020 IS/MND states that the Project site and surrounding neighborhood are classified by the California Department of Forestry and Fire Protection (CAL FIRE) as a moderate fire hazard severity zone, and that much of the land surrounding the community of Stinson Beach, including areas within about .13 miles of the Project site, is classified as a high fire hazard severity zone. The 2020 IS/MND erroneously states that the Project site is within the State Responsibility Area; in fact, the Project site is within the Stinson Beach Fire Protection District, not the State Responsibility Area. Also not stated in the 2020 IS/MND is the fact that the Project site is within the designated Wildland-Urban Interface (WUI), and therefore development within the site is subject to the requirements and restrictions of the WUI ordinance (California Building Code

Section 7a, Materials and Construction Methods for Exterior Wildfire Exposure), which requires fire-resistant building materials and methods. The Project is also subject to the requirements of the Marin County Fire Code, which requires developments within the WUI to prepare and implement a Vegetation Management Plan (VMP) consistent with Marin County Fire Standard 220. The VMP must include a fire hazard risk assessment, plan for creation and maintenance of defensible space, and specify the species and spacing of landscape plants. Standard 220 includes a list of prohibited, highly flammable plants that includes many common invasive species.

Discussion

2.20.a. Would the Project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

The 2020 IS/MND addresses this topic in Section 4.21, Wildfire, topic b), where it states that the Project site is in a relatively flat coastal area with winds that blow primarily off of the Pacific Ocean. The 2020 IS/MND finds that construction and use of the proposed septic system, as well as a potential future development of a single-family residence, would slightly, but not significantly, increase wildfire risk, and so would not expose project occupants to pollutants from a wildfire or the uncontrolled spread of a wildfire.

All of these points are still valid. For the same reasons, and in addition because the proposed residence would be required to comply with the special provisions for building and landscaping within the WUI, the current Project would have a less-than-significant impact of this kind; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

2.20.b. Would the Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

The 2020 IS/MND, Section 4.21,Wildfire, topic c addresses this issue, and states that the project then being evaluated would not require installation or maintenance of any associated infrastructure such as roads, fuel breaks, emergency water sources, power lines, or other utilities that may exacerbate fire risk or otherwise impact the environment. The 2020 IS/MND concludes that the project then being evaluated would have a less-than-significant impact of this kind.

These points are still valid, and for the same reasons, the current Project would have a less-than-significant impact of this kind; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

2.20.c. Would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

The 2020 IS/MND, Section 4.21, Wildfire, topic d addresses this issue. That discussion recounts that the Project site is located in a low-lying, relatively flat area, including beach area, and that there are no downstream or downslope areas that would be at risk of flooding or landslides due to runoff, post-fire slope stability, or drainage changes. Therefore, the 2020 IS/MND concludes that the project then being evaluated would not expose people or structure to risk of flooding or landslides due to wildfire, and there would be no impact of this kind.

These points are still valid, and for the same reasons, the current Project would have a less-than-significant impact of this kind; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

2.20.d. Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

As discussed above under topic 2.20.a, the 2020 IS/MND finds that construction and use of the proposed septic system, as well as a potential future development of a single-family residence, would slightly, but not significantly, increase wildfire risk. Also as stated above under the same topic, for the same reasons as stated in the 2020 IS/MND, and in addition because the proposed residence would be required to comply with the special provisions for building and landscaping within the WUI, the current Project would have a less-than-significant impact of this kind; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

Mitigation Measures

The 2020 IS/MND identified only less than significant impacts of the project then being evaluated with respect to wildfire, and so no mitigation measures were included. As discussed above, the current Project would not have a new or substantially more severe impact with respect to wildfire, and so no mitigation is required.

Conclusion

There are no changed circumstances or new information of substantial importance related to this topic, other than the additional and corrected information provided in the setting discussion regarding the local fire authority and applicable State and local requirements for developments within the WUI. As concluded in the 2020 IS/MND, the current Project would not have a significant impact with respect to wildfire, and therefore, the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact.

References

Marin County, 2022. MarinMap: Wildland-Urban Interface, and Fire Hazard Severity layers. Accessed October 1, 2022. www.marinmap.org

California Board of Forestry and Fire Protection, 2022. State Responsibility Area Map Viewer. Accessed October 1, 2022. https://bof.fire.ca.gov/projects-and-programs/state-responsibility-area-viewer/

2.21. Mandatory Findings of Significance

Environmental Issue Area	Where Was this Issue Analyzed in the Previous Environmental Document?	Do Proposed Project Changes Affect this Issue?	Are There Any Changed Circumstances that Affect this Issue?	Is There Any New Information of Substantial Importance Pertaining to this Issue?	If Any of the Previous Three Questions Was Answered "Yes," Would Changes or New Information Result in a New or Substantially More Severe Significant Impact?	Are there any New or Reconsidered Mitigation Measures or Alternatives that Would Substantially Reduce Significant Impacts?
21. Mandatory Findings of Significance.						
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	Section 4.21, Mandatory Findings of Significance, topic a.	Yes	No	No	No	N/A
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	Section 4.21, Mandatory Findings of Significance, topic b.	Yes	No	No	No	N/A
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	Section 4.21, Mandatory Findings of Significance, topic c.	Yes	No	No	No	N/A
d) Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	This topic not analyzed in the 2020 IS/MND.	Yes	No	No	No	N/A

Discussion

2.21.a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

The 2020 IS/MND, Section 4.21, Mandatory Findings of Significance, topic a states that the analysis presented in the IS/MND demonstrates that the project then being evaluated would not have any 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, or reduce the number or restrict the range of a rare or endangered plant or animal, and that, furthermore, the Project site does not contain any resource listed in, or determined to be eligible by, the State Historical Resource Commission and does not contain a resource included in a local register of historic resources or identified as significant in a historical resource survey. Additionally, the Project site does not contain any object, building, structure, site, area, place, record, or manuscript that a lead agency determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. The 2020 IS/MND therefore finds that the project then being evaluated would have a less-than-significant impact with respect to this topic.

As discussed above in Section 2.3, Cultural Resources, and Section 2.4, Biological Resources, the same conclusions are reached for the current Project; there would be no impact, or only less-than-significant impacts, with respect to this topic: the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

2.21.b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

The 2020 IS/MND states that there were no then-current or ongoing projects in the vicinity of the Project site with the potential to combine with the project then being evaluated in a cumulative manner. The 2020 IS/MND goes on to state that the project then being evaluated would be "mildly growth-inducing," and could lead to the construction of one residence on the Project site in the future, but that this possibility was examined throughout this IS/MND, and no cumulatively significant impacts were identified. The 2020 IS/MND therefore concludes that the project then being evaluated would not have any individually limited, but cumulatively considerable impacts, and so would have only less-than-significant cumulative impacts.

Current projects requiring County approval in unincorporated Stinson Beach listed by the Marin County Community Development Agency are shown in Table 2.21-1.

Table 2.21-1
Current Projects Requiring County Approval in Stinson Beach

Project Name	CDA Project Number	Location	Description	Distance to Project Site	Status
Julie S. Munro 2018 Revocable Trust Coastal Permit	P3749	161 Seadrift Road	Coastal Permit approval to replace an existing single-family dwelling with a new 2,725 sf single-family dwelling and to construct a new deck and dock on a developed lot in Stinson Beach.	.85 miles	Initial Review
Carter Coastal Permit, Variance and Design Review Amendment	P3274	228 Seadrift Road	Coastal Permit Amendment to amend conditions of approval to change height above base flood elevation a new 2,583-sf residence and 286-sf garage on a developed lot in Seadrift/Stinson Beach. Project also includes demolition of existing residence	1.2 miles	Merits Review
Dragge Coastal Permit, Variance and Design Review	P3103	310 Seadrift Road	Coastal Permit, Variance and Design Review approvals to demolish an existing 834-sf garage and construct an approximately 620-sf garage with 479 sf of family room and bedroom addition on the second floor	1.65 miles	Approved
Bull Trust Coastal Permit/Design Review	P3098	183 Seadrift Road	Coastal Permit and Design Review approvals to demolish the existing 1,843-square-foot single-family residence, and construct a new 2,530-square-foot single-family residence and 911-square-foot garage/storage space.	1 mile	Approved
Stinson Sandpiper LLC Coastal Permit and Design Review	P3549	7 Jose Patio	Coastal Permit and Design Review approvals to demolish the existing 2,260-square-foot single-family residence, and construct a new 2,393-square-foot single-family residence 653-square-foot garage, 62-square-foot storage and 612-square-foot deck	.3 miles	Initial Revies
Stinson Beach County Water District Coastal Permit	P3489	Vacant property located northeast of Shoreline Highway, Stinson Beach	Coastal Permit approval to replace an existing failing water well with a new water well within the Stinson Beach County Water District service area that provides domestic water for the community of Stinson Beach.	.75 miles	Initial Review

Source: Marin County Community Development Agency, Projects by Geographical Location (https://www.marincounty.org/depts/cd/divisions/planning/projects)

As shown in Table 2.21-1, all but one current and recently approved projects in Stinson Beach requiring County approval involve Coastal Permit and other approvals for small projects. These projects include demolition of existing residences and construction of new residences and residential additions. One project involves the replacement of a water well to serve the

community of Stinson Beach. The closest of these projects is .3 miles away from the Project site. All but one are located in the Seadrift development within Stinson Beach.

Between June 30, 2021 and July 1, 2022, the Stinson Beach County Water District (the District) approved 19 variances for on-site wastewater systems, as shown in Table 2.21-2. All but one of these approvals was for a setback variance or an alternative wastewater system, or both. Like the Project, most or all of these projects are for new septic systems or septic system replacements serving single-family residences. Replacement of older and poorly functioning septic systems provides environmental benefits, including benefits to ground and surface water quality.

Table 2.21-2
Stinson Beach County Water District Approved Projects, 6/30/21 to 7/1/22

Location	SBCWD Title IV Code Section(s)
116 Seadrift Rd	Section 4.19.010 Use of Alternative System
17 Calle del Olema	Section 4.19.010 Use of Alternative System
228 Seadrift Rd	Section 4.19.010 Use of Alternative System
2 Alameda Patio	4.15.100 Site Criteria – Setback, Section 4.19.010 Use of Alternative System
125 Laurel Ave	Section 4.19.010 Use of Alternative System
141 Calle del Arroyo	(3) 4.15.100 Site Criteria – Setback, Section 4.19.010 Use of Alternative System
3755 Panoramic Hwy	(2) 4.15.100 Site Criteria – Setback, Section 4.19.010 Use of Alternative System
2 Jose Patio	Section 4.19.010 Use of Alternative System
15 Marine Wy	Section 4.19.010 Use of Alternative System
340 Seadrift Rd	4.15.100 Site Criteria – Setback, Section 4.19.010 Use of Alternative System
3 Walla Vista	4.15.100 Site Criteria – Setback, Section 4.19.010 Use of Alternative System
161 Seadrift Rd	(2) 4.15.100 Site Criteria – Setback, Section 4.19.010 Use of Alternative System
17 Calle del Sierra	4.15.100 Site Criteria – Setback, Section 4.15.121 Soil Depth, Section 4.19.010 Use of Alternative System
7000 Panoramic Hwy	Section 4.19.010 Use of Alternative System
Laurel Ave (Vacant Lot)	4.15.635 Subsurface Flows, Section 4.19.010 Use of Alternative System
187 Dipsea Rd	4.15.100 Site Criteria – Setback, Section 4.19.010 Use of Alternative System
283 Seadrift Rd	(2) 4.15.100 Site Criteria – Setback, Section 4.19.010 Use of Alternative System
490 Calle del Mar	4.15.640 Dispersal Field, Section 4.19.010 Use of Alternative System
183 Seadrift Rd.	(2) 4.15.100 Site Criteria – Setback, Section 4.19.010 Use of Alternative System

Source: Souza, 2022

The community of Stinson Beach is nearly built-out. As stated in Section 2.14, Population and Housing, population projections estimate only a small future increase in the population of Stinson Beach. Furthermore, as discussed in Section 2.11, Land Use and Planning, the proposed Project is consistent with the site's zoning and Countywide Plan/Local Coastal Plan land use designation, which has been approved by the California Coastal Commission. Furthermore, as described throughout this Supplemental Environmental Review, the environmental impacts of the proposed Project would be limited in geographic extent, and, with the incorporation of mitigation measures

previously identified in the 2020 IS/MND and additional mitigation measures put forth in the current document, all impacts would be less than significant.

Given the limited number, small scale, and distance of other current, recent, and reasonably foreseeable future projects in the area requiring County approval; the limited nature and general environmental benefits accruing from District projects approving new or replacement septic systems; the consistency of the current Project with site zoning and designation; and the limited, less-than-significant impacts of the Project as mitigated, there is little potential for the Project to combine with other projects in a cumulative manner, and, if this were to occur, for the Project to make a considerable contribution to any such cumulative impact. The Project's cumulative impacts, are, therefore, less than significant. Therefore, the current Project would not result in a new significant cumulative impact or a substantial increase in the severity of a previously identified significant cumulative impact.

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

The 2020 IS/MND states that, with implementation of the various Best Management Practices included as part of the project then being evaluated and mitigation measures identified in the 2020 IS/MND, that project would not result in substantial adverse effects on human beings, either directly or indirectly.

The current document examines the potential for the proposed Project to have environmental effects which may cause a substantial direct or indirect adverse effect on human beings, including geologic hazards (Section 2.7, Geology and Soils), flooding and other hydrologic hazards (Section 2.10, Hydrology and Water Quality), exposure to hazardous materials (Section 2.9, Hazards and Hazardous Materials), and exposure to toxic air contaminants (Section 2.3, Air Quality). One significant impact is identified, from potential exposure of nearby residents to diesel emissions from construction equipment. New Mitigation Measure AIR-2 is identified in Section 2.3 to reduce this impact to less than significant. In addition, groundborne vibration from pile driving or similar construction activities could impact nearby human residents, though this impact would be short-lived. New Mitigation Measure NOISE-2 would reduce this impact to less than significant. With incorporation of these mitigation measures, the Project would not cause substantial adverse effects on human beings, either directly or indirectly; the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact of this kind.

2.21.d. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?

This topic was not discussed in the 2020 IS/MND.

The proposed Project would provide several short-term benefits, consistent with environmental goals, especially those expressed in the Countywide Plan and Local Coastal Program (LCP). As discussed in Section 2.11, Land Use and Planning, these include providing in-fill housing development consistent with existing uses and neighborhood character, use of an on-site

wastewater system consistent with LCP requirements, and maintaining existing public access to Upton Beach. In addition, through implementation of Mitigation Measure BIO-2, the Project would result in restoration of dune habitat, which is currently absent from the Project site.

Long-term, the proposed residence, like others along the shoreline and in other low-lying areas in the Stinson Beach community, is likely to be destroyed or rendered uninhabitable or inaccessible by the rising sea. When this occurs, the remnants of the development may act as shoreline armoring, which is prohibited by the LCP, and those portions of the structure washed away or destroyed may have the potential to pollute surface waters. As described in Chapter 1, Project Description, however, the Project includes a voluntary dedication of a deed restriction against the title to the property that would serve to notify all current and future owners that the development authorized by the Coastal Permit, including the residential building and other development, would be removed when any government agency with legal jurisdiction has issued a final order determining that the structures are currently and permanently unsafe for occupancy or use due to coastal hazards, and that there are no measures that could make the structures suitable for habitation or use without the use of a shoreline protective device; or in the event that coastal hazards eliminate access to the site due to the degradation and eventual failure of Calle del Onda as a viable roadway. Marin County would not be required to maintain access and/or utility infrastructure to serve the development in such circumstances. The deed restriction would furthermore prevent the placement of any shoreline protective device on the property in perpetuity. With this provision in place, the Project, though meeting short-term environmental goals to some extent to the detriment of long-term environmental goals, would have a less-than-significant impact of this kind, and would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact.

Mitigation Measures

No mitigation measures, other than those cited in other sections, are required for any of the topics discussed in this section.

Conclusion

The Project, as mitigated, would not have a significant impact with respect to any of the topics discussed in this section. Therefore, the current Project would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact with respect to the mandatory findings of significance.

References

Souza, Rich, 2022. Email from Rich Souza, District Engineer, Stinson Beach County Water District to Dan Sicular, Sicular Environmental Consulting re: 21 Calle del Onda. October 3, 2022.

CHAPTER 3
Summary and Conclusion

1. Summary Findings of Checklist

Table 3-1 provides a summary of the conclusions for each environmental topic reached in Chapter 2, Checklist for Supplemental Environmental Review. The table indicates for each topic whether the Project would result in a new significant impact or a substantially more severe significant impact than identified in the 2020 IS/MND, and if so, whether existing or revised mitigation measures would reduce the impact to less than significant.

As shown in the table, the Project would result in new significant impacts to biological resources and noise not previously identified in the 2020 IS/MND. The Project would also result in a substantial increase in the severity of a significant air quality impact previously identified in the 2020 IS/MND. Both new significant impacts and the substantially more severe significant impact can, however, be reduced to less than significant with the implementation of new mitigation measures included in this Supplemental Environmental Review.

Because of the involvement of new significant impacts and the substantial increase in the severity of previously identified significant impacts, the Project does not meet the criteria for an Addendum to the 2020 IS/MND contained in State CEQA Guidelines Section 15164. Because all impacts can be reduced to less than significant, however, a Subsequent Mitigated Negative Declaration may be prepared, per State CEQA Guidelines Section 15162 (b), and an Environmental Impact Report is not required.

Table 3-1
Conclusions Regarding New or Substantially More Severe Significant Impacts

Topical Issue	No New or Substantially More Severe Significant Impact	New or Substantially More Severe Significant Impact, Can Be Mitigated to Less than Significant	New or Substantially More Severe Significant Impact, Cannot Be Mitigated to Less than Significant
2.1 Aesthetics	X		
2.2 Agriculture and Forestry Resources	X		
2.3 Air Quality		X	
2.4 Biological Resources		X	
2.5 Cultural Resources	X		
2.6 Energy	X		

Topical Issue	No New or Substantially More Severe Significant Impact	New or Substantially More Severe Significant Impact, Can Be Mitigated to Less than Significant	New or Substantially More Severe Significant Impact, Cannot Be Mitigated to Less than Significant
2.7 Geology and Soils	X		
2.8 Greenhouse Gas Emissions	X		
2.9 Hazards and Hazardous Materials	X		
2.10 Hydrology and Water Quality	X		
2.11 Land Use and Planning	X		
2.12 Mineral Resources	X		
2.13 Noise		X	
2.14 Population and Housing	X		
2.15 Public Services	X		
2.16 Recreation	X		
2.17 Transportation and Traffic	X		
2.18 Tribal Cultural Resources	X		
2.19 Utilities and Service Systems	X		
2.20 Wildfire	X		
2.21 Mandatory Findings of Significance	X		

2. Mitigation Measures

This section compiles mitigation measures included in the 2020 IS/MND and those proposed in this Supplemental Environmental Review. Mitigation measures from the 2020 IS/MND were made a part of the septic system replacement project approved by the Stinson Beach County Water District in 2020, and so would be in effect if the Project is constructed. No changes to the mitigation measures from the 2020 IS/MND are proposed. All mitigation measures are compiled in Appendix A, Mitigation Monitoring and Reporting Program.

New Mitigation Measures Proposed in This Supplemental Environmental Review

Air Quality

New Mitigation Measure AIR-2: Diesel Exhaust Emissions Reduction. During Project construction, all off-road diesel-powered equipment with engines greater than 25 horsepower shall meet Tier 4 emissions standards.

Monitoring Measure AIR-2: The Marin County Community Development Agency shall verify that the provisions of the measure have been implemented.

Biological Resources

New Mitigation Measure BIO-2. Dune Restoration Plan. Consistent with Certified Implementation Program Section 22.64.050(A)(1)(d), Habitat Mitigation, the Applicant shall prepare a Dune Restoration Plan for County review and approval that provides for dune and related habitat enhancement for all vegetated coastal dune habitat located between the unvegetated sandy beach and non-dune iceplant mats located behind the dunes outside the approved building envelope. The Dune Restoration Plan shall be prepared by a qualified restoration biologist, shall meet all the requirements of Certified Implementation Program Section 22.64.050(A)(1)(d)(3), and at a minimum shall include the following elements:

a) Dune Inventory. Coastal dune habitat shall be inventoried on the Project site to depict dune impact and restoration areas. [1] The restoration area shall be enumerated and drawn onto a site plan similar to that presented in the 2020 IS/MND (see 2020 IS/MND Appendix A, Figure 5, Project Impacts to Biological Communities).

b) Dune Contours. Final contours of the site, after project grading, necessary to support dune restoration and development screening, shall be identified.

c) Iceplant Removal. To accommodate native plantings, non-native iceplant shall be removed from the site by means such as those described by the California Invasive Plant Council (CAL-IPC, 2022).

d) Native Dune Plants. All required plantings shall be native dune species from local stock appropriate to the Stinson Beach area and shall be maintained in good growing conditions during a 10-year review period and shall be replaced with new plant materials as necessary to ensure continued compliance with the restoration plan.

e) Initial Planting. Installation of all plants shall be completed prior to occupancy of the new home. Within 30 days of completion of initial native dune plant installation, the Applicant shall submit a letter to the County from the project biologist indicating that plant installation has taken place in accordance with the approved restoration plan, describing long-term maintenance requirements for the restoration, and identifying the five- and ten-year monitoring submittal deadlines (Measures g and i, below). At a minimum, long-term maintenance requirements shall include site inspections by a qualified biologist annually, or more frequently on the recommendation of the biologist, to identify and correct any restoration and maintenance issues.

[1] As identified in California Coastal Commission comments (CCC, 2021, pg. 2), dune habitat extends further inland than depicted in the 2019 IS/MND. Aerial imagery from 2019 shows that some coastal dune habitat was mapped as iceplant mats (e.g., see California Coastal Records Project imagery from 2019; https://www.californiacoastline.org/cgi-bin/image.cgi?image=201906174&mode=big&lastmode=sequential&flags=0&year=current). Hence, a revised baseline habitat assessment showing the extent of coastal dune habitat is warranted.

f) Site Protection. During the initial plant establishment period, ropes or low-profile fencing shall be minimally used to screen planted areas from recreational users and dogs.

g) Monitoring. At five and ten years from the date of initial planting under the Dune Restoration Plan, the Applicant or his successors in interest shall submit, for the review and approval of the County, a restoration monitoring report prepared by a qualified specialist that certifies that the on-site restoration is in conformance with the approved Dune Restoration Plan, along with photographic documentation of plant species and plant coverage.

h) Remediation. If the restoration monitoring report or expert's inspection report indicates the restoration is not in conformance with or has failed to meet the performance standards specified in the approved Dune Restoration Plan, the Applicant shall submit a revised or supplemental restoration plan for the review and approval by the County. The revised restoration plan shall be prepared by a qualified restoration biologist and shall specify measures to remediate those portions of the original plan that have failed as identified in the restoration monitoring report or inspection report. These measures, and any subsequent measures necessary to carry out the approved Dune Restoration Plan, shall be carried out in coordination with the County until dune restoration is established in accordance with the Dune Restoration Plan's specified performance standards.

i) The restored dune areas shall meet the following minimum performance standards:

    1. Density (perennial native species only): average 1 plant per 4 square feet.

    2. Percent total cover (perennial native species only): 1 year: 15%; 2 years: 25%; 3 to 5 years and beyond: 35%.

    3. Percent relative cover: all species are within normal range.

    4. Composition: at least five native, perennial species.

    5. Health and vigor: plants are in good health, exhibit normal flowering, and damage from people, deer, or pets is negligible.

    6. Exotic species: within the restoration areas (i.e., not within outdoor living areas) invasive, non-native plants are few in number and not evident.

    7. Provision for possible further action if monitoring indicates that initial restoration has failed.

Mitigation Monitoring Measure BIO-2. The Community Development Agency shall review the Dune Restoration Plan, implementation report, and monitoring reports for conformance with this mitigation measure.

Noise

New Mitigation Measure NOISE-2: Use vibration-reducing pile driving equipment, or select other method for ground improvement. During construction of the foundation for the proposed residence, the construction contractor shall use equipment and methods for ground improvement that will produce groundborne vibration with a maximum PPV of less than 0.30 inches/second at the property line if equipment is selected that generates continuous/frequent intermittent vibration, or less than 0.50 inches per second if equipment that generates transient vibration is selected. Vibratory equipment capable of achieving the 0.30 inches/second standard may include, for example, a resonance-free vibrator or variable eccentric moment vibrator (Caltrans, 2020, section 8.2), or drilled piers.

If a construction method capable of producing substantial groundborne vibration is selected, the construction contractor shall conduct vibration monitoring at the property line during construction, and shall conduct pre- and post-construction crack monitoring of all structures within 100 feet of the foundation footprint. Crack monitoring shall be accomplished by the use of photographs, video tape, or visual inventory. The purpose of the crack monitoring is to document pre-construction condition of nearby structures, so that any actual vibration damage from the construction operation may be accurately attributed. The construction contractor shall will be bonded to cover any liability from damage of nearby structures.

Mitigation Monitoring Measure NOISE-2: The Project sponsor shall provide construction specifications demonstrating that the equipment and methods used for ground improvement will achieve the applicable performance standard. The Community Development Agency, or a technical expert engaged by the Community Development Agency at the Applicant's expense, will verify the adequacy of the construction specifications, will determine whether vibration monitoring and a crack survey are required, and will verify that any required monitoring measures are implemented successfully.

Previously Adopted Mitigation Measures from the 2020 IS/MND

Air Quality

Previously adopted Mitigation Measure AIR-1 is duplicative of existing County Development Code requirements that are applied to all development projects, and therefore the mitigation measure is unnecessary.

Biological Resources

Previously Adopted Mitigation Measure BIO-1. The Project shall conduct initial ground disturbance and remove vegetation outside the nesting season (i.e., September 1 to January 31) to avoid any potential impacts to nesting birds.

Hydrology and Water Quality

Previously Adopted Mitigation Measure HYDRO-1. No construction shall be permitted under wet weather conditions. Construction should be scheduled to occur in the dry season, between May and October, if feasible. Should construction need to extend into the wet season, the Contractor shall implement best management to minimize the likelihood of spillage into surface or groundwater.

These include:

- Grading and excavation work shall occur during dry weather;
- All denuded areas shall be stabilized through installation of temporary erosion controls such as erosion control fabric or bonded fiber matrix. These controls shall be maintained until vegetation is established;
- Sediment shall be prevented from migrating off-site and storm drain inlets shall be protected by installing and maintaining appropriate measures such as fiber rolls, silt fences, sediment basins, gravel bags, berms, etc.; and
- Stockpiled landscaping materials shall be protected from wind and rain through storage under tarps.

Noise

Previously Adopted Mitigation Measure NOISE-1. The Contractor shall implement the following best management practices for noise reduction throughout project construction:

- Construction hours shall be clearly posted on a sign at the entrance to the project site at least 48 hours prior to the commencement of construction activities;
- The District or the Contractor shall be responsible for responding to any noise complaints. Contact information for representatives of both parties shall be posted on the construction site;
- All construction equipment used on-site shall be muffled and maintained in good working order. All internal combustion engine-driven equipment shall be fitted with mufflers in good condition; and
- Unnecessary idling of internal combustion engines shall be prohibited and all equipment shall be turned off when not in use.

Utilities and Service Systems

Previously Adopted Mitigation Measure UTILITIES-1. Prior to the start of ground disturbance, the Contractor shall determine the precise location of existing on-site utilities. If any water lines are located within ten feet of the proposed septic system, the Contract shall reroute the lines to a minimum distance of ten feet away. If a line may not be rerouted due to site constraints and water and sewer lines must cross, the Contractor shall install a PVC sleeve on both the water and the sewer line in question.

CHAPTER 4
Report Preparers

This report was prepared by Sicular Environmental Consulting and Natural Lands Management under contract to the Marin County Community Development Agency. Personnel preparing this report included the following:

1. Marin County Community Development Agency

Rachel Reid, Environmental Planning Manager

Tammy Taylor, Senior Planner

Sabrina Cardoza, Senior Planner

Robin Fies, Planner

Chelsea Hall, Environmental Planning & Housing Aide

2. Sicular Environmental Consulting and Natural Lands Management

Dan Sicular, Ph.D.

Subcontractors to Sicular Environmental Consulting

Sutro Science, LLC (Geology and Soils, Hydrology and Water Quality)

Peter Hudson, CEG

Justin Taplin, Hydrologist

Environmental Science Associates (Biological Resources)

Brian Pittman, CWB

Elijah Davidian, Senior Environmental Planner

Document Preparation

Graphics: Linda Uehara, September People, LLC

Word Processing: Brian Vahey, Eagle Eye Editing

This page intentionally left blank

CHAPTER 5
Signature Pages

PROJECT SPONSOR'S INCORPORATION OF MITIGATION MEASURES:

Acting on behalf of the project sponsor or the authorized agent of the project sponsor, I (undersigned) have reviewed the Supplemental Environmental Review for the Johnson Trust Coastal Permit (P3049) and have particularly reviewed the new mitigation measures and monitoring programs identified herein. I accept the findings of the Supplemental Environmental Review, including the recommended mitigation measures, and hereby agree to modify the proposed project applications now on file with Marin County to include and incorporate all mitigation measures and monitoring programs set out in this Supplemental Environmental Review.

1.2.23

Steve Kinsey, Civic Knit on behalf of the Project Sponsor

DETERMINATION: (Completed by Marin County Environmental Planning Manager). Pursuant to Sections 15081, 15070 and 15162 of the State Guidelines, the forgoing subsequent Supplemental Environmental Review evaluation, and the entire administrative record for the project:

[ ] I find that the proposed project WILL NOT have a new or substantially more severe significant effect on the environment, and an ADDENDUM to the previously adopted MITIGATED NEGATIVE DECLARATION will be prepared.

[X] I find that although the proposed project could have a new or substantially more severe significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described in the document and Mitigation Monitoring and Reporting Program have been added to the project. A SUBSEQUENT MITIGATED NEGATIVE DECLARATION will be prepared.

[ ] I find that the proposed project MAY have a new or substantially more severe significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

Rachel Reid, Environmental Planning Manager

1/4/2023
Date

APPENDIX A
Mitigation Monitoring and Reporting Program

The purpose of this Mitigation Monitoring and Reporting Program (MMRP) is to ensure that mitigation measures necessary to reduce the Project's significant impacts to less than significant are implemented in a timely and effective manner. The following MMRP table includes both those mitigation measures carried over from the 2020 Initial Study/Mitigated Negative Declaration and new mitigation measures identified in the Supplemental Environmental Review. In addition to the text of each mitigation measure, the MMRP table includes a brief description of the associated monitoring measure, when the measure will be implemented, and by whom it will be monitored.

JOHNSON TRUST COASTAL PERMIT
MITIGATION MONITORING AND REPORTING PROGRAM

January 2023

Environmental Impact	Mitigation Measures	Mitigation Monitoring and Reporting Measures	When Implemented	Verified by
Air Quality				
Substantially More Severe Impact AIR-1: The Project would expose sensitive receptors to substantial pollutant concentrations.	**Previously Adopted Mitigation Measure AIR-1:** Implement BAAQMD Best Management practices for reducing dust and other particulate emissions during project construction.	Previously adopted Mitigation Measure AIR-1 is duplicative of existing County Development Code requirements that are applied to all development projects, and therefore the mitigation measure is unnecessary.	n/a	n/a
	New Mitigation Measure AIR-2: Diesel Exhaust Emissions Reduction. During Project construction, all off-road diesel-powered equipment with engines greater than 25 horsepower shall meet Tier 4 emissions standards.	**Mitigation Monitoring Measure AIR-2:** The Marin County Community Development Agency will verify that the provisions of the measure have been implemented.	During Project construction.	Marin County Community Development Agency, prior to final building permit inspection.
Biological Resources				
Previously Identified Impact BIO-1: The Project could impact nesting birds.	**Previously Adopted Mitigation Measure BIO-1:** The Project shall conduct initial ground disturbance and remove vegetation outside the nesting season (i.e., September 1 to January 31) to avoid any potential impacts to nesting birds.	**Mitigation Monitoring Measure BIO-1**: Marin County Community Development Agency and Stinson Beach County Water Agency will condition permits to ensure that ground disturbance for septic system construction and for construction of the residence are limited to the stated seasonal work window, and will monitor compliance.	During construction.	Stinson Beach County Water Agency in coordination with Marin County Community Development Agency.
New Impact BIO-2: The Project would have a substantial adverse effect on a sensitive natural community. *and* The Project would conflict with local policies or ordinances protecting biological resources.	**New Mitigation Measure BIO-2: Dune Restoration Plan** Consistent with Certified Implementation Program Section 22.64.050(A)(1)(d), Habitat Mitigation, the Applicant shall prepare a Dune Restoration Plan for County review and approval that provides for dune and related habitat enhancement for all vegetated coastal dune habitat located between the unvegetated sandy beach and non-dune ice plant mats located behind the dunes outside the approved building envelope. The Dune Restoration Plan shall be prepared by a qualified restoration biologist, shall meet all the requirements of Certified Implementation Program Section 22.64.050(A)(1)(d)(3), and at a minimum shall include the following elements: a) Dune Inventory. Coastal dune habitat shall be inventoried on the Project site to depict dune impact and restoration areas. The restoration area shall be enumerated and drawn onto a site plan similar to that presented in the 2020 IS/MND (see 2020 IS/MND Appendix A, Figure 5, Project Impacts to	**Mitigation Monitoring Measure BIO-2:** The Marin County Community Development Agency will review and approve the Dune Restoration Plan, implementation report, and monitoring reports.	Dune Restoration Plan shall be finalized prior to beginning Project construction, and implemented according to the terms of the mitigation measure.	Marin County Community Development Agency, prior to Project construction and according to the monitoring schedule.

Environmental Impact	Mitigation Measures	Mitigation Monitoring and Reporting Measures	When Implemented	Verified by
	Biological Communities). b) Dune Contours. Final contours of the site, after project grading, necessary to support dune restoration and development screening, shall be identified. c) Ice plant Removal. To accommodate native plantings, non-native ice plant shall be removed from the site by means such as those described by the California Invasive Plant Council (CAL-IPC, 2022). d) Native Dune Plants. All required plantings shall be native dune species from local stock appropriate to the Stinson Beach area and shall be maintained in good growing conditions during a 10-year review period and shall be replaced with new plant materials as necessary to ensure continued compliance with the restoration plan. e) Initial Planting. Installation of all plants shall be completed prior to occupancy of the new home. Within 30 days of completion of initial native dune plant installation, the Applicant shall submit a letter to the County from the project biologist indicating that plant installation has taken place in accordance with the approved restoration plan, describing long-term maintenance requirements for the restoration, and identifying the five- and ten-year monitoring submittal deadlines (Measures g and i, below). At a minimum, long-term maintenance requirements shall include site inspections by a qualified biologist annually, or more frequently on the recommendation of the biologist, to identify and correct any restoration and maintenance issues. f) Site Protection. During the initial plant establishment period, ropes or low-profile fencing shall be minimally used to screen planted areas from recreational users and dogs. g) Monitoring. At five and ten years from the date of initial planting under the Dune Restoration Plan, the Applicant or his successors in interest shall submit, for the review and approval of the County, a restoration monitoring report prepared by a qualified specialist that certifies that the on-site restoration is in conformance with the approved Dune Restoration Plan, along with photographic documentation of plant species and plant coverage. h) Remediation. If the restoration monitoring report or expert's inspection report indicates the restoration is not in conformance with or has failed to meet the performance standards specified in the approved Dune Restoration Plan, the Applicant shall submit a revised or supplemental			

Environmental Impact	Mitigation Measures	Mitigation Monitoring and Reporting Measures	When Implemented	Verified by
	restoration plan for the review and approval by the County. The revised restoration plan shall be prepared by a qualified restoration biologist and shall specify measures to remediate those portions of the original plan that have failed as identified in the restoration monitoring report or inspection report. These measures, and any subsequent measures necessary to carry out the approved Dune Restoration Plan, shall be carried out in coordination with the County until dune restoration is established in accordance with the Dune Restoration Plan's specified performance standards. i) The restored dune areas shall meet the following minimum performance standards: 1. Density (perennial native species only): average 1 plant per 4 square feet. 2. Percent total cover (perennial native species only): 1 year: 15%; 2 years: 25%; 3 to 5 years and beyond: 35%. 3. Percent relative cover: all species are within normal range. 4. Composition: at least five native, perennial species. 5. Health and vigor: plants are in good health, exhibit normal flowering, and damage from people, deer, or pets is negligible. 6. Exotic species: within the restoration areas (i.e., not within outdoor living areas) invasive, non-native plants are few in number and not evident. 7. Provision for possible further action if monitoring indicates that initial restoration has failed.			
Hydrology and Water Quality				
Previously Identified Impact HYDRO-1: The Project could violate water quality standards or otherwise substantially degrade water quality.	Previously Adopted Mitigation Measure HYDRO-1: No construction shall be permitted under wet weather conditions. Construction should be scheduled to occur in the dry season, between May and October, if feasible. Should construction need to extend into the wet season, the Contractor shall implement best management to minimize the likelihood of spillage into surface or groundwater. These include: • Grading and excavation work shall occur during dry weather; • All denuded areas shall be stabilized through installation of temporary erosion controls such as erosion control fabric or bonded fiber matrix. These controls shall be maintained until vegetation is	**Mitigation Monitoring Measure HYDRO-1**: Marin County Community Development Agency and Stinson Beach County Water District will condition permits to ensure compliance with the seasonal limits and best management practices, and will monitor compliance.	During construction.	Stinson Beach County Water Agency in coordination with Marin County Community Development Agency.

Environmental Impact	Mitigation Measures	Mitigation Monitoring and Reporting Measures	When Implemented	Verified by
	established; • Sediment shall be prevented from migrating off-site and storm drain inlets shall be protected by installing and maintaining appropriate measures such as fiber rolls, silt fences, sediment basins, gravel bags, berms, etc.; and • Stockpiled landscaping materials shall be protected from wind and rain through storage under tarps. •			
Noise and Vibration				
Previously Identified Impact NOISE-1: The Project could result in generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance.	**Previously Adopted Mitigation Measure NOISE-1:** The Contractor shall implement the following best management practices for noise reduction throughout project construction: • Construction hours shall be clearly posted on a sign at the entrance to the project site at least 48 hours prior to the commencement of construction activities; • The District or the Contractor shall be responsible for responding to any noise complaints. Contact information for representatives of both parties shall be posted on the construction site; • All construction equipment used on-site shall be muffled and maintained in good working order. All internal combustion engine-driven equipment shall be fitted with mufflers in good condition; and • Unnecessary idling of internal combustion engines shall be prohibited and all equipment shall be turned off when not in use.	**Mitigation Monitoring Measure NOISE-1**: Marin County Community Development Agency and Stinson Beach County Water District will condition permits to ensure compliance with the terms of the mitigation measure, and will monitor compliance.	During construction.	Stinson Beach County Water Agency in coordination with Marin County Community Development Agency.
New Impact NOISE-2: The Project could result in generation of excessive groundborne vibration or groundborne noise levels.	**New Mitigation Measure NOISE-2: Use vibration-reducing pile driving equipment, or select other method for ground improvement.** During construction of the foundation for the proposed residence, the construction contractor shall use equipment and methods for ground improvement that will produce groundborne vibration with a maximum PPV of less than 0.30 inches/second at the property line if equipment is selected that generates continuous/frequent intermittent vibration, or less than 0.50 inches per second if equipment that generates transient vibration is selected. Vibratory equipment capable of achieving the 0.30 inches/second standard may include, for example, a resonance-free vibrator	**Mitigation Monitoring Measure NOISE-2:** The Project sponsor shall provide construction specifications demonstrating that the equipment and methods used for ground improvement will achieve the applicable performance standard. The Community Development Agency, or a technical expert engaged by the Community Development Agency at the Applicant's expense, will verify the adequacy of the construction specifications, will	Construction specifications to be submitted and verified prior to ground disturbance.	Marin County Community Development Agency.

Environmental Impact	Mitigation Measures	Mitigation Monitoring and Reporting Measures	When Implemented	Verified by
	or variable eccentric moment vibrator (Caltrans, 2020, section 8.2), or drilled piers. If a construction method capable of producing substantial groundborne vibration is selected, the construction contractor shall conduct vibration monitoring at the property line during construction, and shall conduct pre- and post-construction crack monitoring of all structures within 100 feet of the foundation footprint. Crack monitoring shall be accomplished by the use of photographs, video tape, or visual inventory. The purpose of the crack monitoring is to document pre-construction condition of nearby structures, so that any actual vibration damage from the construction operation may be accurately attributed. The construction contractor shall will be bonded to cover any liability from damage of nearby structures.	determine whether vibration monitoring and a crack survey are required, and will verify that any required monitoring measures are implemented successfully.		
Utilities and Service Systems				
Previously Identified Impact UTILITIES-1: The Project would require or result in the relocation or construction of new or expanded water, wastewater or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.	**Previously Adopted Mitigation Measure UTILITIES-1:.** Prior to the start of ground disturbance, the Contractor shall determine the precise location of existing on-site utilities. If any water lines are located within ten feet of the proposed septic system, the Contract shall reroute the lines to a minimum distance of ten feet away. If a line may not be rerouted due to site constraints and water and sewer lines must cross, the Contractor shall install a PVC sleeve on both the water and the sewer line in question.	**Mitigation Monitoring Measure UTILITIES-1:** Stinson Beach County Water Agency will monitor septic system installation, including location and possible realignment of existing utilities.	Prior to and during septic system construction.	Stinson Beach County Water Agency.