CALIFORNIA COASTAL COMMISSION

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Th15a

Application Filed: 11/22/2023
Action Deadline: 5/20/2024
Staff: Nolan Clark - SC
Staff Report: 4/19/2024
Hearing Date: 5/9/2024

STAFF REPORT CDP APPLICATION

Application Number: 3-22-1027

Applicant: Lawrence and Amy Hofmann

Project Location: On the beach and bluffs fronting 3034 Pleasure Point Drive,

just upcoast from Pleasure Point Park in the unincorporated

Live Oak area of Santa Cruz County

Project Description: Recognize (from past ECDP approvals), replace, and

augment existing shoreline armoring, and incorporate a new

coastal access pathway (at least 4 feet wide) with connections to the beach/surf, seaward of the subject

residence

Staff Recommendation: Approval with Conditions

SUMMARY OF STAFF RECOMMENDATION

Commission staff is recommending approval of a proposed project that would replace and augment existing armoring fronting a single-family residence, where such new armoring would incorporate an integral coastal access pathway (at least 4 feet wide) that connects to a public viewing area/platform seaward of the pathway, and stairways (to the beach/ocean) at either end of the pathway. Most of the proposed armoring and the project's public access elements are proposed to be located landward of a remnant retaining wall and shotcrete armoring elements at the site. Additionally, the proposed project includes the removal of concrete rubble and debris, including broken concrete chunks and exposed rebar, and a portion of the historic armoring that spans the project area. The public pathway and viewing platform areas would essentially enhance the existing rock shelf access area by providing an easily traversable pathway and two stairways, where that area currently is uneven and quite slippery. This armoring/public access project fronts the Applicants' home at Pleasure Point overlooking the world-

famous Pleasure Point surfing area. Unlike many projects considered by the Commission, the reality is that this stretch of coast includes very little sandy beach space, where the ocean essentially extends to the bluffs/armoring except at very low tides, such that direct sandy beach access is limited.

The site is currently fronted by a vertical concrete seawall (that appears to have been originally built in 1958 at the same time as the house itself, where it serves as an integral part of its foundation and overall structural support) on two sides, and a rock shelf with some remnant retaining wall-style and shotcrete armoring (that appears to likely pre-date the seawall) seaward of that. The rock shelf area has historically been used by beachgoers (at very low tides) and surfers for public access purposes. The house at the site pre-dates the implementation of the Coastal Act (January 1, 1977) and has not been redeveloped, and thus qualifies as an existing structure for purposes of Coastal Act Section 30235. Further, the Applicants' house is in danger from erosion as that term is understood in Section 30235 as well, and so armoring can be found Section 30235 consistent in this circumstance. And the project, as proposed and conditioned, is self-mitigating, because the public access improvement components will offset the public access impacts of the armoring.

To that point, it is clear to staff that the Commission may be faced with similar situations in the future along certain urbanized stretches of California's coast with similar geomorphologies where there are essentially no sandy beaches, but there is the potential for projects like this one to provide for a different type of public access experience along the ocean's edge. This project, like similar past projects approved by the Commission at Pleasure Point, speak to that unique circumstance, and it helps to move towards completing the vision of a through and formalized lateral access path along the ocean's edge, where currently only a select few of the more dexterous public can or are willing to traverse the current shoreline area in order to experience such access.

Thus, staff recommends approval of a CDP for the project with a series of implementing conditions, including a suite of conditions that speak to the dangers of pursuing coastal development in harm's way (e.g., assumption of risk, triggers for adaptation, real estate disclosure, etc.), ensuring that the project's public access features are maximized in their utility, and otherwise addressing coastal resource issues at the shoreline interface (e.g., with respect to public views, marine resources, natural landforms, etc.). The motions necessary to implement the staff recommendation can be found on page 4.

¹ Staff notes that Coastal Act violations exist at the site, including but not necessarily limited to, failure to apply for a CDP to recognize emergency armoring authorized via ECDP 3-98-043-G in 1998 and additional unpermitted armoring undertaken in 2021. The work performed under that ECDP is therefore also unpermitted development, which would be authorized after-the-fact by this CDP as part of this project. Approval of this application pursuant to the staff recommendation, issuance of the CDP, and the Applicants' performance of the authorized development in compliance with the CDP terms and conditions will resolve these violations going forward.

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Exhibit 2 – Project Site Photos

Exhibit 3 – Historic Aerial Photos

Exhibit 4 – Project Plans

Exhibit 5 – Project Visual Simulation

1. MOTION AND RESOLUTION

Staff recommends that the Commission, after public hearing, **approve** a coastal development permit for the proposed development. To implement this recommendation, staff recommends a **YES** vote on the following motion. Passage of this motion will result in approval of the CDP as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Motion: I move that the Commission **approve** Coastal Development Permit Number 3-22-1027 pursuant to the staff recommendation, and I recommend a **yes** vote.

Resolution to Approve CDP: The Commission hereby approves Coastal Development Permit Number 3-22-1027 and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

2. STANDARD CONDITIONS

This permit is granted subject to the following standard conditions:

- 1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the Permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
- 2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
- **3. Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
- **4. Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
- 5. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the Permittee to bind all future owners and possessors of the subject property to the terms and conditions.

3. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

- 1. Final Plans. PRIOR TO ISSUANCE OF THIS CDP, the Permittees shall submit two full size sets of Final Plans for the approved development to the Executive Director for review and written approval. The Final Plans shall: be prepared by a licensed professional or professionals (i.e., geotechnical engineer, surveyor, etc.); be based on current professionally surveyed and certified topographic elevations for the project area; and include a graphic scale. The Plans shall be substantially in conformance with the proposed plans (titled "Public Access Improvement and Coastal Protection Project" prepared by Haro, Kasunich & Associates, Inc., dated June 25, 2023 and dated received in the Central Coast District Office July 24, 2023 (see Exhibit 4)) except that they shall be modified to meet the following requirements:
 - a. Accessway. The lateral access path shall be curvilinear and at least 4 feet wide, and wider where topography allows, as measured from the seaward-most extent of the concrete surfacing of vertical seawall elements through to the landward most extent of the curb/railing (as applicable), and shall be as wide as possible while otherwise meeting the terms and conditions of these CDPs. Such access path shall incorporate drainage features to ensure that standing water from rain/surf does not pool on the accessway.
 - b. Railings. Railings shall only be allowed when they are required for public safety purposes and where other features and project design attributes (e.g., elevated and elongated curb features and similar such barriers) cannot provide adequate safety for path and stair users, where such design attributes (including to the extent they can serve as public seating areas if elevated) are strongly preferred. All required railings shall be sited and designed in such a way as to blend into the natural environment and to minimize public view impacts as much as possible.
 - c. Surfacing. The concrete surfaces of all publicly visible portions of the project shall be faced with a sculpted concrete surface that mimics the natural undulating bluff landform in the vicinity in terms of integral mottled color, texture, and undulation to the maximum extent feasible (other than stair tread areas, where only the coloring requirement applies). Any protruding elements (e.g., corners, edges, etc.) shall be contoured in a non-linear manner designed to evoke natural bluff undulations. All drainage and related elements within the sculpted concrete shall be camouflaged (e.g., randomly spaced, hidden with overhanging or otherwise protruding sculpted concrete, etc.) so as to be hidden or inconspicuous as seen from public viewing areas, including camouflage of any expected drainage staining over time. The color, texture, and undulation of all such surfaces shall be maintained throughout the life of the approved development. All such surface treatments shall make use of paints, stains, sealants, and any other such materials that are appropriate for and safe for use in the marine environment. Such contouring and/or colorizing/staining shall also be required of any portion of the approved development that becomes visible due to erosion and/or displacement/removal of debris/remnant armoring. At least 30 days prior

to commencement of finish concrete surfacing, the Permittees shall submit to the Executive Director for review and written approval the qualifications of the contractor who will perform the finish concrete work, including photos and identification of (a) similar completed projects, and (b) expected finish results. Finish concrete work shall not commence until the Executive Director has approved the expected finish results in writing.

- **d. Debris Removal.** All concrete and other debris, including concrete chunks, exposed rebar, and rubble from prior armoring efforts at this location, shall be removed to the maximum extent possible. The required As-Built Plans (see Special Condition 3) shall include photographic evidence and an accompanying narrative description that demonstrates compliance with this requirement.
- e. Private Connections. Private connections to the public lateral accessway and/or beach (e.g., gates, stairs, railings, etc.) shall be modified, updated, and camouflaged in such a manner as to not obviously appear to be private connections, but rather to appear as blufflike and inconspicuous in public views as possible, including making use of the upcoast area along the side of the residence as much as possible. Lighting of the private connection areas shall be prohibited.
- f. Top of Seawall/Landscaping. The top edge of the seawall shall extend above the home's lower floor elevation by at least 42 inches, where this raised area shall be curvilinear along its top, and can enclose planters for vegetation. Native landscaping capable of trailing vegetation shall be provided along the top edge of the seawall to provide some screening of at least the top 5 feet (and preferably more) of the seawall at maturity. Such landscaping shall be maintained, and shall be replaced as necessary, to maintain such screening for as long as the approved development is present.
- g. Lighting Prohibited. Lighting of any portion of the project area shall be prohibited, including as it relates to lighting atop the bluff directed seaward in any way.
- h. Accessway Stairs. The accessway stair treads shall be at least 3 feet wide (and shall be wider, up to 5 feet wide, if feasible) and at least 12 inches deep (and shall be wider, if feasible, with a roughly 6 inch rise), and any landings shall be at least as wide as stairway treads on all sides, all as measured between any required railings (or from the edge of the tread where no railing is required). The base of the stairway shall be embedded at least 3 feet into stable natural rock features.
- i. Public Recreational Access Areas and Amenities. All public recreational access areas associated with the approved development, including but not limited to all pathways and stairways, shall be clearly shown and depicted. Integral benches for public seating shall be provided where adequate space exists.

- j. Property Owner Consent. Written property owner consent shall be provided for any development associated with the project that may occur on properties not owned by the Permittees, including in terms of construction and staging, where such consent shall only be deemed to have been given if the consent allows for approved development consistent with the terms and conditions of this CDP, including as it affects such properties.
- k. Future Public Accessway Connections. Should upcoast and/or downcoast paths or other connections to the approved development be pursued, the Permittee shall coordinate with adjacent upcoast and/or downcoast property owners as applicable, and shall facilitate any necessary changes to the final approved development designed to seamlessly connect the approved development to upgraded/improved path/accessway features up and/or downcoast, as directed by the Executive Director.

All requirements above and all requirements of the Executive-Director-approved Final Plans shall be enforceable components of this CDP. The Permittees shall undertake development in conformance with this condition and the Executive-Director-approved Final Plans.

- 2. Construction Plan. PRIOR TO COMMENCEMENT OF CONSTRUCTION, the Permittees shall each submit two copies of a Construction Plan to the Executive Director for review and written approval. The Construction Plan shall, at a minimum, include the following:
 - a. Construction Areas. The Construction Plan shall identify the specific location of all construction areas, all staging areas, and all construction access corridors in site plan view. All such areas within which construction activities and/or staging are to take place shall minimize impacts on coastal resources, including public access/parking, including by maximizing use of the developed blufftop portions of the Permittees' property for construction staging and materials storage, and minimizing use of shoreline public use areas for construction-related purposes as much as possible. Construction, including but not limited to construction activities, materials, and equipment storage, is prohibited outside of the defined construction, staging, and storage areas.
 - b. Construction Methods. All construction methods to be used shall be clearly identified, and shall be required to protect coastal resources as much as possible, including identifying all methods to be used to keep construction areas separated from public use areas as much as possible (including through use of unobtrusive fencing and/or other similar measures to delineate construction areas), and including verification that equipment operation and equipment and material storage will not significantly degrade public access and views during construction.
 - **c.** Construction Timing. No work shall occur during weekends and/or during the summer peak months (i.e., from the Saturday of Memorial Day weekend through Labor Day, inclusive) unless, due to extenuating circumstances, the Executive Director authorizes such work, subject to applying all possible measures to

ensure maximum coastal resource protection. In addition, all work shall take place during daylight hours (i.e., from one-hour before sunrise to one-hour after sunset). Nighttime work and lighting of the work area is prohibited.

- d. Construction BMPs. All erosion control/water quality best management practices (BMPs) to be implemented during construction to protect coastal water quality and other coastal resources shall be clearly identified, including at a minimum all of the following:
 - 1. Runoff Protection. Silt fences, straw wattles, and equivalent apparatus shall be installed at the perimeter of the blufftop portion of the construction site to prevent construction-related runoff and/or sediment from discharging from the construction area, and/or entering into storm drains or otherwise offsite and/or towards the ocean. Similar apparatus shall be applied on the beach/shoreline recreational area for the same purpose when potential runoff is anticipated (and removed otherwise). Special attention shall be given to appropriate filtering and treating of all runoff, and all drainage points, including storm drains, shall be equipped with appropriate construction-related containment and treatment equipment.
 - 2. Equipment. Equipment washing, refueling, and/or servicing shall take place at appropriate off-site, level and inland locations (to help prevent leaks and spills of hazardous materials at the project area), and preferably on an existing hard surface area (e.g., Permittees' driveway, contractors' yard, etc.) or an area where collection of materials is similarly facilitated. All construction equipment shall also be inspected and maintained at a similarly sited inland location to prevent leaks and spills of hazardous materials at the project area.
 - 3. Good Housekeeping. The construction site shall maintain good construction housekeeping controls and procedures (e.g., clean up all leaks, drips, and other spills immediately; keep materials covered and out of the rain (including covering exposed piles of soil and wastes); dispose of all wastes properly, place trash receptacles on site for that purpose, and cover open trash receptacles during wet weather; remove all construction debris from the project site; etc.).
 - 4. Erosion and Sediment Controls. All erosion and sediment controls shall be in place prior to the commencement of construction as well as at the end of each workday.
 - **5. Intertidal Grading Prohibited.** Grading of intertidal areas is prohibited, except where expressly approved by this CDP or where approved development is sited in such areas, and except for removal of concrete, riprap, rubble, and debris, all only allowed when tidal waters are not present.
 - **6. Rubber-tired Construction Vehicles.** Only rubber-tired construction vehicles are allowed on the beach/shoreline recreational area, except track vehicles may be used if the Executive Director determines that they are required to safely carry out construction and all possible measures are applied to ensure

- maximum coastal resource protection. When transiting on the beach/shoreline recreational area, all construction vehicles shall remain as close to the bluff edge as possible and avoid contact with ocean waters.
- 7. Materials/Equipment Storage. All construction materials and/or equipment placed seaward of the bluff during daylight construction hours shall be stored beyond the reach of tidal waters. All construction materials and equipment shall be removed in their entirety from these areas by one hour after sunset each day that work occurs, except for necessary erosion and sediment controls and/or construction area boundary fencing where such controls and/or fencing are placed as close to the toe of the armoring/bluff as possible, and are minimized in their extent as much as possible.
- e. Property Owner/Easement Holder Consent. For any construction activities that may occur on properties (and/or on easements or similar legally defined areas) not owned by the Permittee, including but not limited to construction that requires equipment access on and/or across such other properties, evidence of review, approval and consent from such property owners allowing such activities shall be provided, where such consent shall only be deemed to have been given if the consent is for development consistent with the terms and conditions of this CDP, including as it affects such properties.
- f. Restoration. All beach/shoreline recreational area and other public recreational use areas and all beach/shoreline recreational area access points impacted by construction activities shall be restored to their pre-construction condition or better within three days of completion of construction. Any native materials impacted shall be filtered as necessary to remove all construction debris. All debris removal requirements associated with Special Condition 1 shall apply.
- g. Construction Site Documents. Copies of the signed CDP and the approved Construction Plan shall be maintained in a conspicuous location at the construction job site at all times where such copies are available for public review on request. All persons involved with the construction shall be briefed on the content and meaning of the CDP and the approved Construction Plan, and the public review requirements applicable to them, prior to commencement of construction.
- h. Construction Coordinator. A construction coordinator shall be designated to be contacted during construction should questions arise regarding the construction (in case of both regular inquiries and emergencies), and the coordinator's contact information (i.e., address, phone numbers, email address, etc.) including, at a minimum, a telephone number (with message capabilities) and an email that shall be made available 24 hours a day for the duration of construction, and that shall be conspicuously posted at the job site where such contact information is readily visible from public viewing areas while still protecting public views as much as possible, along with indication that the construction coordinator should be contacted in the case of questions regarding the construction (in case of both regular inquiries and emergencies). The construction coordinator shall record the

contact information (address, email, phone number, etc.) and nature of all complaints received regarding the construction, and shall investigate complaints and take remedial action, if necessary, within 24 hours of receipt of the complaint or inquiry. All complaints and all actions taken in response shall be summarized and provided to the Executive Director on at least a weekly basis.

- i. Construction Specifications. The construction specifications, materials, and contracts shall include appropriate penalty provisions that require remediation for any work done inconsistent with the terms and conditions of this CDP.
- j. Notification. The Permittee shall notify planning staff of the Coastal Commission's Central Coast District Office at least three working days in advance of commencement of construction, and immediately upon completion of construction.

All requirements above and all requirements of the Executive-Director-approved Construction Plan shall be enforceable components of this CDP. The Permittees shall undertake development in conformance with this condition and the Executive-Director-approved Construction Plan.

- 3. As-Built Plans. WITHIN THREE MONTHS OF COMPLETION OF CONSTRUCTION, the Permittees shall submit one electronic copy and two paper copies of complete As-Built Plans to the Executive Director for review and written approval showing all elements of the approved development as built, including in relation to all property lines and adjacent development. The As-Built Plans shall be substantially consistent with the Executive Director-approved Final Plans required by Special Condition 1, and any changes between the two shall be highlighted. The As-Built Plans shall include color photographs (in hard copy and jpg format) that clearly show the as-built project, and that are accompanied by a site plan that notes the location of each photographic viewpoint and the date and time of each photograph. At a minimum, the photographs shall be from upcoast, seaward, and downcoast viewpoints on the beach and/or bedrock platform, and from a sufficient number of viewpoints as to provide complete photographic coverage of the approved development. Such photographs shall be at a scale that allows comparisons to be made with the naked eye between photographs taken at different times and from the same vantage points; recordation of GPS coordinates would be desirable for this purpose. The As-Built Plans shall include vertical and horizontal reference data from inland surveyed benchmarks (which shall be clearly identified) for use in future monitoring efforts, and shall include the required debris removal verification specified in Special Condition 1. The As-Built Plans shall be submitted with certification by a licensed civil engineer with experience in coastal structures and processes, acceptable to the Executive Director, verifying that the development has been constructed in conformance with the Executive Director-approved Final Plans (see Special Condition 1).
- **4. Public Recreational Access Easement.** PRIOR TO COMMENCEMENT OF CONSTRUCTION, the Permittees shall execute and record a document, in a form and content acceptable to the Executive Director, irrevocably offering to dedicate to

a public agency or private entity, approved by the Executive Director, a public recreational access easement for public recreational access use in perpetuity, as described below.

- a. Easement Area. The easement area shall consist of all public recreational access areas on property owned by the Permittees that are identified for public recreational access on the approved Final Plans (see Special Condition 1) and all areas of the Permittees property located seaward/beachward of the vertical seawall edge.
- **b.** Allowed Uses and Development. No development, as defined in Coastal Act Section 30106, shall occur within the easement area except for the following: (1) construction of the approved development and removal of debris, all as identified in the approved Final Plans; (2) repair, maintenance, debris removal, and improvements associated with the approved development, consistent with the terms and conditions of this CDP; and (3) development only for the express purpose of further improving public recreational access, consistent with the intent and use of the easement, consistent with the terms and conditions of this CDP. The Permittees and their successors and assigns shall be responsible for the installation, repair, maintenance, and accessibility of the public recreational access areas associated with this CDP, and for improvements and amenities for public recreational uses and enjoyment consistent with the terms and conditions of this CDP. The document shall provide that the offer of dedication shall not be used or construed to allow anyone to interfere with any rights of public access acquired through use which may exist on the property, and shall also provide that public access consistent with the terms and conditions of these CDPs shall be uninterrupted at all times, including before and after the offer is recorded.
- c. Additional Parameters. The document shall also provide that all public recreational access areas, improvements, and amenities within the easement area shall be available to the general public 24 hours a day and shall be free of charge. The public recreational access easement shall be ambulatory, and the easement boundaries and amenities within shall move if relocation and/or reconstruction of public recreational access amenities outside of the easement area are necessary to retain their continuity and/or utility in response to erosion and related coastal hazards, and/or if connections to up and downcoast pathway segments require adjustments.
- d. Recordation. The document shall be recorded free of prior liens and any other encumbrances that the Executive Director determines may affect the interest being conveyed, and it shall include a metes and bounds legal description of the legal parcel subject to this CDP as well as a metes and bounds legal description and a corresponding graphic depiction, drawn to scale, of the perimeter of the easement area within the subject property, prepared by a licensed surveyor based on an on-site inspection of the easement area.
- **e. Duration.** The offer to dedicate shall run with the land in favor of the People of the State of California, binding all Permittee successors and assigns in

perpetuity; shall be irrevocable for a period of at least 21 years, such period running from the date of recording; and shall indicate that the restrictions on the use of the land shall be in effect upon recording and remain as covenants, conditions and restrictions running with the land in perpetuity, notwithstanding any revocation of the offer.

- 5. Monitoring and Reporting. The Permittee shall ensure that the location, condition, and performance of the approved development is regularly monitored and maintained. Such monitoring evaluation shall at a minimum address whether any significant weathering or damage has occurred that would adversely impact future performance, and identify any structural or other damage or wear and tear requiring repair to maintain the approved development in a structurally sound manner and in its approved and/or required state. Monitoring shall at a minimum include:
 - a. Evaluation. All project components, including all public access elements and areas, shall be regularly monitored by a licensed civil engineer with experience in coastal structures and processes to ensure structural and cosmetic integrity including, at a minimum, evaluation of concrete competence, spalling, cracks, movement, outflanking and undercutting; and evaluation of compliance with all required surface treatments of Special Condition 1. Such evaluation shall also assess any project related elements that have become visible or more visible due to erosion or any other coastal hazards, and shall identify steps necessary to contour and/or color/stain such exposed areas as required by this CDP.
 - b. Photo Documentation. All project elements shall be photographed annually from an adequate number of inland and seaward locations (and from the same locations as provided in the As-Bult Plans; see **Special Condition 3**) as to provide complete photographic coverage of the approved development, where all photo requirements associated with the Executive Director-approved As-Built Plans shall also apply here (see **Special Condition 3**).
 - c. Reporting. Monitoring reports covering the above-described evaluations shall be submitted to the Executive Director for review and written approval at five-year intervals by May 1st of each fifth year following completion of construction (with the first report due May 1, 2029, and subsequent reports due May 1, 2034, May 1, 2039, and so on) for as long as the approved development exists at this location. The reports shall identify the existing configuration and condition of the armoring and public access elements and areas, shall recommend actions necessary to maintain all project elements in their approved and/or required state consistent with the terms and conditions of this CDP, and shall include the above-described photographic documentation (in color hard copy and jpg format). Any proposed actions necessary to maintain the approved development in a structurally sound manner and its approved state shall be implemented within 30 days of Executive Director approval, unless a different time frame for implementation is identified by the Executive Director. In addition to the everyfive-year requirement, separate and additional monitoring reports subject to the same requirements shall be submitted within 30 days following either (1) an El Niño storm event comparable to a 20-year or larger storm, or (2) an earthquake

of magnitude 5.5 or greater with an epicenter in or offshore of Santa Cruz County.

- 6. Future Maintenance. This CDP authorizes future maintenance as described in this special condition. The Permittees acknowledge and agree on behalf of themselves and all successors and assigns that it is the Permittees' responsibility to: (a) maintain the approved development in a structurally sound manner, visually compatible with the shoreline surroundings, and in its approved and required state, including with respect to all camouflaging/surfacing; (b) retrieve any failing portions of the approved development or related improvements that might otherwise substantially impair the use, aesthetic qualities, or environmental integrity of the approved development's public recreational access areas and features, as well as the beach, shoreline, and/or ocean; and (c) regularly inspect all approved development components for signs of failure and/or structural issues. Any such maintenance-oriented development associated with the approved development shall be subject to the following:
 - **a. Maintenance.** "Maintenance," as it is understood in this condition, means development that would otherwise require a CDP whose purpose is to maintain the approved development in its approved and/or required state, including with respect to retrieval of any debris emanating from the approved development and/or the project area.
 - **b. Other Agency Approvals.** The Permittees acknowledge that these maintenance stipulations do not obviate the need to obtain permits and/or other authorizations from other agencies for any future maintenance episodes.
 - **c. Maintenance Notification.** Prior to commencing any maintenance event, the Permittees shall notify planning staff of the Coastal Commission's Central Coast District Office, in writing, regarding the proposed maintenance. Except for necessary emergency interventions (see below), such notice shall, at a minimum, be given by first-class mail at least 30 days in advance of commencement of work. The notification shall include a detailed description of the maintenance event proposed, and shall include any plans, construction BMPs, engineering and/or geology reports, proposed changes to the maintenance parameters, other agency authorizations, and other supporting documentation describing the maintenance event. The maintenance event shall not commence until the Permittee has been informed in writing by Central Coast District planning staff that the maintenance event complies with this CDP. If the Permittee has not received a response within 30 days of receipt of the notification by the Central Coast District Office, the maintenance event shall be authorized as if Commission planning staff affirmatively indicated that the event complies with this CDP. The notification shall clearly indicate that the maintenance event is proposed pursuant to this CDP, and that the lack of a response to the notification within 30 days of its receipt constitutes approval of it as specified in this CDP. If the notification does not explicitly identify that a lack of response within 30 days of its receipt constitutes approval, then the automatic authorization provision does not apply.

- d. Non-compliance Proviso. If the Permittees are not in compliance with any of the terms and conditions of the CDPs, or are in violation of the Coastal Act otherwise, at the time that a maintenance event is proposed, then the maintenance event that might otherwise be allowed by the terms of this future maintenance condition may not be allowed by this condition, subject to a determination by and at the discretion of the Executive Director.
- e. Emergency. Nothing in this condition shall serve to waive any Permittee rights that may exist in cases of emergency pursuant to Coastal Act Section 30611, Coastal Act Section 30624, and Subchapter 4 of Chapter 5 of Title 14, Division 5.5, of the California Code of Regulations (Permits for Approval of Emergency Work).
- f. Duration and Scope of Covered Maintenance. Future maintenance under the CDP may be allowed subject to the above terms throughout the duration of the authorization (see Special Condition 8) subject to Executive Director review and written approval every 5 years (with the first such approval due by May 9, 2029, and subsequent approvals by May 9, 2034, May 9, 2039, and so on) to verify that there are not changed circumstances, understandings, or other issues associated with such allowance for maintenance events that necessitate rereview. It is the Permittee's responsibility to request Executive Director approval prior to the end of each 5-year maintenance period, and maintenance can only be carried out beyond May 9, 2029 (and beyond subsequent five-year periods) pursuant to these maintenance provisions if (1) the Permittee requests an extension prior to the end of each 5-year maintenance period; and (2) the Executive Director extends the maintenance term in writing. The intent of this CDP is to allow for 5-year extensions of the maintenance term for as long as the approved development remains authorized unless there are changed circumstances, understandings, or other issues that may affect the consistency of this maintenance authorization with Coastal Act Chapter 3 and thus warrant a re-review of this maintenance condition. The Permittees shall maintain the approved development in its approved and required state consistent with the terms and conditions of these CDPs.
- **7. Coastal Hazards.** By acceptance of this CDP, the Permittees acknowledge and agree, on behalf of itself and all successors and assigns, that:
 - a. Coastal Hazards. The approved development is and may be subject to future coastal hazards including but not limited to episodic and long-term shoreline retreat and coastal erosion, high seas, ocean waves, storms, tsunami, tidal scour, coastal flooding, landslides, bluff and geologic instability, bluff retreat, liquefaction and the interaction of same, many of which are likely to worsen with future sea level rise.
 - **b. Assume Risks.** The Permittees: assumes the risks to the Permittees and the property that is the subject of this CDP of injury and damage from coastal hazards in connection with the approved development; unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and

employees for injury or damage from such hazards; indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the CDP against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards; and accept full responsibility for any adverse effects to people and/or property caused by the approved development.

- c. CDP Intent. The intent of this CDP is to allow for the approved development to be constructed and operated/used consistent with the terms and conditions of this CDP for only as long as such development remains safe for such operation/use without significant additional measures to protect such development from coastal hazards.
- 8. CDP Authorization Duration. This CDP shall authorize the approved development for as long as all approved and required public recreational access areas and features remain in good condition and available for public use, and for as long as the Permittees are in compliance with all terms and conditions of the CDP, whichever leads to a shorter time frame. At such time, the Permittees shall remove the approved development and appropriately restore the affected area to natural conditions subject to Executive Director approval of a plan to accomplish same with the least coastal resource impacts. Any project modifications associated with future coastal resource mitigation and/or adaptation pursuant to Special Condition 9 shall likewise be considered part of the approved development.
- 9. Future Coastal Resource Impact Mitigation and Adaptation. Impact assessment and mitigation under this CDP covers impacts to coastal resources through May 9, 2044. If the Permittees intend to keep the approved development in place after May 9, 2044, then the Permittees shall submit a complete CDP amendment application prior to that date that evaluates the coastal resource impacts associated with retention of the project past that date, and that provides commensurate coastal resource mitigation (as it relates to public views, public recreational access, shoreline processes, and all other affected coastal resources) for the proposed renewal/re-authorization period (e.g., the next 20 years). If, at any time, the Permittees intend to modify the approved development (including prior to May 9, 2044), or to perform repair or other work affecting 50 percent or more of the armoring, then the Permittees shall similarly submit a complete CDP amendment application that also includes the same evaluations and requirements. The same 20year mitigation requirement shall apply in the same way to subsequent 20-year periods, unless the Commission alters such requirement in its action on the CDP amendment application.

The application(s) shall also include an evaluation of potential project adaptations that could significantly reduce coastal resource impacts while still maintaining public recreational access areas and features (i.e., lateral, vertical, and overlook access) equal to or better than the intent and functionality of such features as originally approved (the "Adaption Objective"). Such adaptation evaluation shall include, but is not necessarily limited to, options to: 1) elevate the public accessway in response to

usability impacted by tidal inundation and sea level rise; 2) migrate the public access pathway and pathway connections (and any allowable armoring) inland and restore formerly armored areas to natural conditions; and 3) remove the approved development and restore the affected area to natural conditions. If it is determined that one of the above options is viable and would achieve the Adaption Objective, the chosen option shall be a proposed application component in addition to the necessary re-mitigation as described above. If the Commission denies the above CDP amendment application, the approved development authorized by this CDP shall no longer be authorized, and the Permittees shall remove the approved development and appropriately restore the affected area to natural conditions subject to Executive Director approval of a plan to accomplish same with the least coastal resource impacts.

- 10. Public Rights. By acceptance of this CDP, the Permittees acknowledge and agree, on behalf of themselves and all successors and assigns, that the Coastal Commission's approval of this CDP shall not constitute a waiver of any public rights that may exist on the affected property, and that the Permittees shall not use this CDP as evidence of a waiver of any public rights that may exist now or in the future.
- **11.Real Estate Disclosure.** Disclosure documents related to any future marketing and/or sale of the subject property (i.e., 3034 Pleasure Point Drive, APN 032-242-14), including but not limited to specific marketing materials, sales contracts and similar documents, shall clearly notify potential buyers of the terms and conditions of this CDP. Copies of the CDP shall be provided in all real estate disclosures.
- 12. Other Agency Approvals. PRIOR TO COMMENCEMENT OF CONSTRUCTION, the Permittees shall submit to the Executive Director written evidence that all necessary permits, permissions, approvals, or authorizations for the approved development have been granted by any other applicable agencies that may have such oversight over the approved development (including at least the U.S. Army Corps of Engineers, Monterey Bay National Marine Sanctuary, California State Lands Commission, Central Coast Regional Water Quality Control Board, Santa Cruz County Community Infrastructure and Development Department, and Santa Cruz County Parks Department) or written evidence that no permits, permissions, approvals or other authorizations from these agencies are required. The Permittees shall inform the Executive Director of any changes to the Commission-approved development required by other agencies. Such changes shall not be incorporated into the approved development until the Permittees obtain CDP amendments, unless the Executive Director determines that no amendments are legally required.
- 13. Future Permitting. None of the CDP exemptions that might be provided by Coastal Act Section 30610 (and/or related implementing regulations) shall apply to the approved development, and any and all future proposed development related to this project, this project area, and/or this CDP shall require a new CDP or CDP amendment that is processed through the Coastal Commission, unless the Executive Director determines that such CDP or CDP amendment are not legally required.

- 14. Liability for Costs and Attorneys' Fees. The Permittees shall reimburse the Coastal Commission in full for all Coastal Commission costs and attorneys' fees (including but not limited to such costs/fees that are: (1) charged by the Office of the Attorney General; and/or (2) required by a court) that the Coastal Commission incurs in connection with the defense of any action brought by a party other than the Permittees against the Coastal Commission, its officers, employees, agents, successors and/or assigns challenging the approval or issuance of this CDP, the interpretation and/or enforcement of CDP terms and conditions, or any other matter related to this CDP. The Permittees shall reimburse the Coastal Commission within 60 days of being informed by the Executive Director of the amount of such costs/fees. The Coastal Commission retains complete authority to conduct and direct the defense of any such action against the Coastal Commission, its officers, employees, agents, successors and/or assigns.
- 15. Deed Restriction. WITHIN ONE YEAR OF ISSUANCE OF THE CDP, the Permittees shall submit to the Executive Director for review and written approval documentation demonstrating that they have executed and recorded against the parcel governed by this CDP a deed restriction (Deed Restriction), in a form and content acceptable to the Executive Director: (1) indicating that, pursuant to CDP 3-22-1027, the California Coastal Commission has authorized development on the subject property subject to terms and conditions that restrict the use and enjoyment of that property; and (2) imposing the terms and conditions of CDP 3-22-1027 as covenants, conditions and restrictions on the use and enjoyment of the property. The Deed Restriction shall include a legal description of the entire parcel governed by CDP 3-22-1027, and shall also indicate that, in the event of an extinguishment or termination of the Deed Restriction for any reason, the terms and conditions of CDP 3-22-1027 shall continue to restrict the use and enjoyment of the subject property so long as any part of the approved development, including if modified, remains in existence on or with respect to the subject property.
- 16. Minor Changes. The Permittees shall undertake development in conformance with the terms and conditions of this CDP, including with respect to all Executive Director-approved plans and other materials, which shall also be enforceable components of this CDP. Any proposed project changes, including in terms of changes to identified requirements in each condition, shall either (a) require a CDP amendment, or (b) if the Executive Director determines that no amendment is legally required, then such changes may be allowed by the Executive Director if such changes: (1) are deemed reasonable and necessary; and (2) do not adversely impact coastal resources.

4. FINDINGS AND DECLARATIONS

A. Project Location and Background

The project site is located on the bluff, at the toe of the bluff, and on the beach seaward of 3034 Pleasure Point Drive in the Pleasure Point portion of the unincorporated Live Oak Beach Area of Santa Cruz County. Pleasure Point is the name of the predominantly residential area located roughly between upcoast Moran Lake and downcoast 41st Avenue. The project site spans the seaward side of the subject parcel

(APNs 032-242-14) and some State Lands areas located between Santa Cruz County's Sewer Peak coastal accessway/stairway (accessed from Pleasure Point Drive) and the County's Pleasure Point Park (at the corner of Pleasure Point Drive and East Cliff Drive), and is located on the downcoast portion of Soquel Point (also referred to as Pleasure Point), which is extensively armored, and has been for decades, where some the current armoring extends back nearly 100 years.² See **Exhibit 1** for location maps, and see **Exhibit 2** for site area photos.

The ocean area just seaward of the project site is part of the world-famous Pleasure Point surfing area, which is a very significant public recreational access area and a very popular and prime visitor destination. While surfing at Pleasure Point is popular yearround, the largest and most consistent waves occur during the fall and winter seasons.³ Equally important to the high-quality surfing conditions at Pleasure Point is the configuration of the shoreline and the underwater topography. A series of points, reefs, and sandbars serve to guide and shape the waves, and cause them to break at predictable peaks that accommodate a wide range of surfing levels. The largest and fastest breaking waves peak at the upcoast portion of the Point, over rocky reef ledges, and are preferred by advanced surfers. The larger waves of the outer break transition to smaller, rolling waves further downcoast, which break over a combination of rocky shelves and sand bars, and are more suitable for intermediate surfers and beginners. On good days, a surfer can link a single ride across these various peaks for a distance of up to 200 yards. The more protected nature of the surf break here also makes it one of the most popular and consistent surfing breaks in all of California,⁴ and it is well known throughout the surfing world. When conditions are ideal it is not uncommon to see upwards of 200 or more surfers in the water along Pleasure Point. Attesting to the significance of surfing at Pleasure Point is the large number of industries, shops, and visitor-serving establishments oriented to surfing located within a few miles. Multiple surfing competitions are held each year at Pleasure Point, and many Santa Cruz surfers, who got their first experiences at the Point, have gone on to become internationally recognized professional surfers. It is a destination for water sports

² A seawall/retaining wall fronting much of Pleasure Point Drive appears to have been constructed originally in the 1930s, and still largely exists today. In addition, riprap was also added to this area in the late 1960s, at least in part due to construction of the Santa Cruz Harbor about one and a half miles upcoast, which led to sand accretion upcoast of its jetties and sand deprivation downcoast, helping to prompt armoring throughout coastal Live Oak and into the City of Capitola.

³ During these times, winter storms emanating in the Aleutian Islands migrate across the Pacific Ocean into the Alaskan Gulf, creating gale force winds that generate very large ocean-going swells. As these swells travel down the west coast, the raw wave energy is groomed into sets of waves of equal height and traveling at similar speeds. In general, a distance of 1,000 nautical miles is required to groom raw storm energy into good quality surfing waves. The typical pattern of the fall and winter storms puts the Central Coast of California at an optimal distance to receive the energy of these storms in the form of well-organized surfing waves.

⁴ The southwest facing direction of Pleasure Point, and its location within the northeastern portion of Monterey Bay, also contributes to the high-quality surf by providing protection from predominant northwest winds and stormy ocean conditions. During the fall and winter surf season (roughly October through March), average wave heights at Pleasure Point tend to be around five to eight feet, with larger swells of eight to twelve feet in height common. By contrast, wave heights at the more exposed west facing beaches can be twice that of Pleasure Point, with much rougher conditions that attract only the most experienced surfers.

enthusiasts from around the world, as well as a gathering place where local and visiting surfers congregate to check the surf and share surf stories. Pleasure Point is at the hub of the Santa Cruz surfing community, and a unique and valuable recreational asset to the State of California.

The Applicants in this case own a blufftop home that was originally constructed in 1958 that has undergone only relatively minor repairs since,⁵ and the available data suggests that the home has not been redeveloped in the time since CDPs have been required,⁶ and thus constitutes an "existing" structure as that term is understood in relation to Coastal Act Section 30235.⁷ The site is currently fronted by a vertical concrete seawall (that appears to have been originally built at the same time as the house itself, where it serves as an integral part of its foundation and overall structural support) on two sides,⁸ and a rock shelf with some remnant retaining wall-style and shotcrete armoring (that appears to likely pre-date the seawall) seaward of that. The rock shelf area has historically been used by beachgoers (at very low tides) and surfers for public access purposes.

In terms of permit history, the Commission has approved two emergency CDPs (ECDPs) at this location in 1998, both for the patching and resurfacing the shotcrete-covered armoring area, although only one ECDP was actually implemented. The property owner at that time (not the current Applicants) failed to apply for a follow-up CDP to fully authorize those temporary emergency measures, and thus they are not recognized as legal, Constituting a violation of the Coastal Act. No action has been taken since then, and thus this CDP application is intended to cover the required follow-up regular CDP for the temporary development authorized by that 1998 ECDP, among other things (see below).

Finally, other Coastal Act violations exist on the subject property including, but not necessarily limited to, reinforcement and patching of the private beach access stairway

⁵ Based on available records, Santa Cruz County issued only a handful of building permits for non-structural elements, such as electrical work and the installation of new smoke detectors, over the years.

⁶ CDPs have been required at this location since February 1, 1973 (pursuant to 1972's Proposition 20, "The Coastal Initiative"), and subsequently since January 1, 1977 (pursuant to the 1976 Coastal Act).

⁷ Under the Coastal Act and its implementing regulations, if a home is replaced by 50% or more (measured cumulatively since January 1, 1977), then it must be evaluated as a replacement structure measured against the Coastal Act through a CDP application. Conversely, if it doesn't tip the 50% threshold, then it is considered an "existing structure" for purposes of Section 30235.

⁸ The house sits atop a portion of the bluff that is more a promontory on its upcoast side, where the orientation of the bluffs essentially 'dips' inland between this property and the upcoast property. As a result, the bluff is partially more perpendicular to the general shoreline orientation at the upcoast side of the property.

⁹ The Commission first issued ECDP 3-98-027-G, which was never acted upon, and subsequently issued 3-98-043-G, which was implemented.

¹⁰ The applicant at that time was required to either submit an application for a follow-up CDP to authorize this work within 60 days of receiving the ECDP, or, alternatively, to remove the work installed and restore the area within 150 days of receiving the ECDP. They failed to do either of these by the dates specified, resulting in the work becoming unpermitted development back in 1998.

that descends the seawall and the stairway landing on the bedrock shelf with concrete that occurred on or around March 3, 2021 without benefit of a CDP. The exact extent of this unpermitted work is unclear, but it is believed to only have been a few cubic yards of concrete in total or less. In response to this unpermitted development, Santa Cruz County issued a Stipulation and Order¹¹ on June 30, 2022, which included requiring the Applicants to submit this CDP application to resolve the violations. To date, the Applicants have complied with the County's Stipulation and Order, and this CDP application also addresses the unpermitted development undertaken in 2021.

B. Project Description

The proposed project would replace and augment the existing armoring at the site, where such new armoring would include an integral public access pathway (at least 4 feet wide) that connects to a public viewing area/platform seaward of the pathway, and stairways (to the beach/ocean) at either end of the pathway. Most of such proposed armoring and the project's public access elements are proposed to be located landward of the remnant retaining wall and shotcrete armoring elements at the site. Additionally, the Applicants propose to remove concrete rubble and debris, including broken concrete chunks and exposed rebar, and a portion of the historic armoring that spans the project area. The public pathway and viewing platform areas would essentially enhance the existing rock shelf access area by providing an easily traversable pathway and two stairways, where that area currently is uneven and quite slippery.

Specifically, starting at the upcoast end of the subject property, the proposed armoring would include a 32-foot-tall buried (to an elevation of -2 feet NAVD88)¹² seawall with tiebacks into the bluff underlying the house, extending about 30 linear feet roughly perpendicular to the general shoreline orientation. That portion of the seawall would then transition into the seawall along the shoreline orientation, extending about 75 feet to the downcoast property line at a height of roughly 20 feet (and also embedded to -2 feet NAVD88), fronting the current seaward perimeter of the existing seawall. At its downcoast end, the seawall would include a 7-foot-long wing wall along the downcoast property line. The seawall would include a 91-foot-long and minimum 4-foot-wide public access pathway on its seaward base (at elevation +7 feet NAVD88), with a sculpted faux rock curb on its seaward edge in place of a railing. The pathway would provide access to a coastal viewing area/platform on its seaward edge (via removal of a portion of a historic retaining wall and minor grading of the shotcreted area to establish a slightly sloped shelf). Finally, stairs to beach level would be constructed at either end of the public access pathway. In total, the overall project is expected to require about 500 cubic yards of concrete, 15,000 feet of rebar, and 1,300 feet of steel tiebacks, and all concrete surfaces would be colored and sculpted to visually simulate natural bluffs in the area as much as possible.

¹¹ Santa Cruz County Code Compliance Case No. 22-NV24594.

¹² NAVD88 stands for "North American Vertical Datum of 1988", and it is the official vertical datum of the United States. NAVD88 elevations are expressed in negative and positive values relative to zero NAVD88, where 0.0 feet NAVD88 is about 3 feet lower than mean sea level in Santa Cruz (i.e., mean sea level is at about +3 NAVD88). Put another way, the proposed armoring would extend to -2 NAVD88, or about 5 feet below mean sea level.

Due to the narrow shoreline area and spatial constraints, proposed construction access includes the installation of a temporary work platform, founded on and supported entirely by the existing armoring onsite. The temporary work platform would extend 16 feet seaward from the top of the existing seawall, supported by wide flange beams spaced 8 feet apart on center that are tied down on the landward side of the existing seawall. These wide flange beams will be supported mid-span with diagonal braces extending at a 45° angle landward and attached to the face of the existing seawall. Construction staging would be at the landward side of the subject residence, in the front yard and driveway. Initially, a hydraulic crane would be used to lift materials over the residence to the temporary work platform. Smaller cranes staged on the temporary work platform would be used to lower and raise mini excavators on and off the beach area as necessary. All construction equipment and access measures, including the cranes and temporary work platform and supporting elements, would be located on the Applicants' property, and construction duration is estimated to be 12-14 months.

See **Exhibit 4** for proposed project plans and **Exhibit 5** for visual simulations of the proposed project.

C. Standard of Review

The proposed development: is located within the Commission's retained CDP jurisdiction area at the lower beach/ocean elevations, and within the County's CDP jurisdiction inland of that; and is substantively associated with prior Coastal Commission CDP decisions and requirements, including the requisite follow-up regular CDP application for Commission-issued ECDP 3-98-043-G. The Applicants, the County, and the Executive Director have all agreed to consolidated CDP processing pursuant to Coastal Act Section 30601.3, and thus the standard of review for the proposed project is the Coastal Act, with the Santa Cruz County LCP providing non-binding guidance.

D. CDP Determination

1. Coastal Hazards

Applicable Coastal Act Provisions

The Coastal Act is, at its core, a law that requires coastal resource protection. In adopting the Act in 1976, the State Legislature included a series of goals and objectives. For example, Coastal Act Sections 30001 and 30001.5 state:

Section 30001. The Legislature hereby finds and declares: (a) That the California coastal zone is a distinct and valuable natural resource of vital and enduring interest to all the people and exists as a delicately balanced ecosystem. (b) That the permanent protection of the state's natural and scenic resources is a paramount concern to present and future residents of the state and nation. (c) That to promote the public safety, health, and welfare, and to protect public and private property, wildlife, marine fisheries, and other ocean resources, and the natural environment, it is necessary to protect the ecological balance of the coastal zone and prevent its deterioration and destruction. (d) That existing developed uses, and future developments that are carefully planned and developed consistent with the policies of this division, are essential to the

economic and social well-being of the people of this state and especially to working persons employed within the coastal zone.

Section 30001.5. The Legislature further finds and declares that the basic goals of the state for the coastal zone are to: (a) Protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources. (b) Assure orderly, balanced utilization and conservation of coastal zone resources taking into account the social and economic needs of the people of the state. (c) Maximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resources conservation principles and constitutionally protected rights of private property owners. (d) Assure priority for coastaldependent and coastal-related development over other development on the coast. (e) Encourage state and local initiatives and cooperation in preparing procedures to implement coordinated planning and development for mutually beneficial uses, including educational uses, in the coastal zone. (f) Anticipate, assess, plan for, and, to the extent feasible, avoid, minimize, and mitigate the adverse environmental and economic effects of sea level rise within the coastal zone.

In short, the law recognizes the coastal zone as a special place, where coastal resources are of "paramount concern", and requires that it both be protected against degradation, and enhanced where feasible. To implement these objectives, Chapter 3 of the Coastal Act includes a series of specific provisions that clearly and emphatically require the protection of coastal resources, from public recreational access to coastal habitats to public views and landforms. 13 And, perhaps just as clearly, and as explained in detail subsequently, armoring generally has significant adverse impacts on the coastal resources protected by Chapter 3 of the Coastal Act, leading to unavoidable impacts on natural landforms, public recreational access, natural processes (which also significantly impacts public recreational access) and public views. 14 These impacts are all inconsistent with the Coastal Act's resource protection requirements, and consequently, the Coastal Act generally directs that armoring be denied in order to meet these coastal resource protection requirements. In other words, the Coastal Act generally prohibits armoring except under very limited circumstances, and this general prohibition is echoed by Coastal Act Section 30253, which makes it clear that all development, including armoring, is not to be approved if it will cause erosion or

¹³ See, for example, more than 40 sections nested in Chapter 3, including sections related to public access, recreation, the marine environment, and land resources.

¹⁴ See, for example, Commission findings in LCP amendments LCP-3-SCO-20-0066-2 (Santa Cruz County Hazards Update) and LCP-3-MRB-21-0047-1 (Morro Bay Land Use Plan Update), and in CDPs A-3-SCO-07-095/3-07-019 (Pleasure Point Seawall), 3-09-025 (Pebble Beach Company Beach Club Seawall), 3-09-042 (O'Neill Seawall), 2-10-039 (Lands End Seawall), 3-14-0488 (Iceplant LLC Seawall), 3-16-0345 (Honjo Armoring), 3-16-0446 (Rockview Seawall), 2-17-0702 (Sharp Park Golf Course), 3-18-0720 (Candau Armoring), 3-20-0166 (Wavefarer Partners LLC Armoring), and 3-22-0440 (Casanova Armoring).

destruction of the site, or substantially alter natural landforms, 15 which past cases have shown is predominately the case with armoring. 16

In fact, as contrasted with the numerous Coastal Act resource protection provisions, both broad and specific, there is only <u>one</u> Coastal Act section that specifically allows armoring, Section 30235, and it includes important – and severely limiting – criteria. Section 30235 states, in applicable part:

Section 30235. Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply.

Section 30235 requires the Commission to approve armoring under very limited circumstances, namely when required to serve coastal-dependent uses or to protect public beaches or existing structures in danger from erosion, and only when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. In other words, when there are qualifying uses, beaches, or structures, ¹⁷ armoring must be allowed only if it is required to serve/protect them, meaning when there are no other less environmentally damaging feasible alternatives that can perform that same function. Put differently, given that armoring has significant adverse impacts on a variety of protected coastal resources and is only required to be approved in very limited circumstances, implementation of the Coastal Act's resource protection policies generally requires denial of proposals for armoring. When framed in this way, Section 30235's limited requirement to approve shoreline armoring is probably best understood as an exception with respect to the Coastal Act's coastal resource protection provisions, or put another

¹⁵ Section 30253 states, in applicable part, that "New development shall...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" (emphasis added).

¹⁶ See footnote 14.

¹⁷ Two of the three qualifying uses are based on protecting important State shoreline priorities (coastal-dependent uses and public beaches). Importantly, armoring rarely protects beaches; rather, armoring typically leads to the incremental loss of beaches. In fact, when public beaches are in danger of erosion, such danger is typically exacerbated by armoring as opposed to protected by it because armoring typically not only occupies beach and shoreline space that would otherwise be available to public recreational uses, but it also inhibits the transmittal of beach-generating materials from bluffs, and typically leads to loss of beaches over time as an eroding shoreline bumps up against such armoring (also referred to as the 'coastal squeeze' or passive erosion). Thus, bracketing groins in certain circumstances, armoring is typically not a viable/fruitful response to protect a public beach in danger from erosion. Finally, past these two important State shoreline priorities, the only other development allowed armoring by Section 30235 are existing structures, including private structures (e.g., residences) and in certain cases public coastal pathways.

¹⁸ In very rare circumstances, a project may include shoreline armoring and the overall project may still be consistent with Coastal Act, and the Commission may not need to invoke Section 30235.

way, an 'override' of the other Coastal Act sections found in Chapter 3 that would require the Commission to otherwise deny the project.

The purpose and structure of the Coastal Act support such an interpretation as well, as reflected in numerous policies of the Act. For example, not only does Section 30009 require a liberal interpretation to protect shoreline and beach resources, ¹⁹ but Section 30007.5 also directs the Commission to resolve conflicts in a manner that is "most protective of significant coastal resources." And Courts have relied on Section 30009 to find that exceptions to the Act's requirements must be read narrowly. Accordingly, the courts have upheld that the Coastal Act's requirements are to be implemented so as to be most protective of coastal resources, and this methodology applies to the limitations on allowable armoring including in light of the discernible adverse coastal resources impacts associated with such armoring. ²²

Consistency Analysis

As indicated above, Coastal Act Section 30235 is an override over other Coastal Act provisions that allows armoring if required to serve a coastal-dependent use or to protect an existing structure in danger from erosion (as applicable to this proposed project) subject to the requirement that adverse impacts to local shoreline sand supply are mitigated or eliminated. The Coastal Act provides for these limitations because shoreline armoring can have a variety of negative impacts on coastal resources, including adverse effects on sand supply, public access, coastal views, natural landforms, and overall shoreline beach dynamics on and off site, ultimately resulting in the loss of beaches.²³

Thus, the applicable questions here under Coastal Act Section 30235 are whether: (1) there is an existing structure and/or a coastal-dependent use; (2) that existing structure is in danger from erosion and/or that coastal-dependent use needs to be served; (3) shoreline-altering construction is required to protect that existing endangered structure and/or to serve that coastal-dependent use; and (4) the required protection is designed to eliminate or mitigate its adverse impacts on shoreline sand supply.²⁴ The first three criteria relate to whether the proposed armoring is necessary, while the fourth criterion

¹⁹ Section 30009 requires that: "This division [i.e., the Coastal Act] shall be liberally construed to accomplish its purposes and objectives."

²⁰ Section 30007.5 states, in applicable part: "The Legislature further finds and recognizes that conflicts may occur between one or more policies of the division. The Legislature therefore declares that in carrying out the provisions of this division such conflicts be resolved in a manner which on balance is the most protective of significant coastal resources."

²¹ See, for example, *Citizens for a Better Eureka v. California Coastal Com.* (2011) 196 Cal.App.4th 1577, 1586-87 ("[i]n light of the legislative directive to construe the Act liberally...it is appropriate to construe the exceptions narrowly", *quoting Capon v. Monopoly Game LLC* (2011) 193 Cal.App.4th 344, 355).

²² Ibid.

²³ Ibid.

²⁴ CDP approval also requires that projects be found consistent with other Coastal Act provisions that independently protect coastal resources in addition to these Section 30235 requirements. The discussion in this Coastal Hazards analysis speaks to consistency with Section 30235, but overlapping and distinct discussions regarding consistency with other Coastal Act provisions are covered separately below.

applies to mitigating some of the impacts from the proposed armoring if it is deemed necessary.

Existing Structure/Coastal-Dependent Use

The issue of what constitutes an "existing structure" for Section 30235 purposes has been debated for many years, where some, including some local governments in their LCP implementation, have argued at times that it means whether a structure is simply 'extant' at the time of armoring application. Another interpretation is that the Legislature intended the word to mean exactly what it meant at the time when the Legislature chose to use the word. In other words, in enacting the statute in 1976, the Legislature included the word "existing" in the natural sense, to mean existing at that time.

This controversy over these competing interpretations did not fully arise until roughly the early 2000s. This is likely due, in large part, to the fact that, prior to then, the only structures for which the distinction would be relevant (those built along the shoreline after 1976) were relatively new, and the parties who had secured permits to construct them had had to demonstrate that they would be safe without requiring armoring. Thus, even if that showing would eventually prove to have been mistaken, coastal erosion had not yet progressed far enough for that error to have become significantly evident and problematic. Since the early 2000s, as the issue has become increasingly contentious, and with few exceptions, the Commission has not found that a structure built after 1977 qualifies as an "existing structure" for purposes of Section 30235. Rather, it has been increasingly consistent in finding that "existing structures" as the phrase is used in Section 30235 refers to structures that were legally in existence as of January 1, 1977, the effective date of the Coastal Act.

The interpretation that 'existing' means 'extant' fails for other reasons as well. For example, Section 30253, the only other Coastal Act section that explicitly refers to armoring, prohibits new development that would "in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs." Thus, development approved since the Act's effective date is not allowed such armoring²⁵ that leads to substantial natural shoreline landform alteration (which, in the case of shoreline armoring, is essentially all armoring cases)²⁶ pursuant to Section

²⁵ It is noted that some have argued that the use of the term "require the construction of" in Section 30253 means that Sections 30253's provisions in that sense only apply <u>prospectively</u> to the future construction of armoring, and do not extend to armoring that may exist at the time that proposed development is being pursued, and thus that such proposed development can rely on such armoring notwithstanding it may lead to the types of prohibited impacts. However, such an interpretation completely ignores the qualifying language that proceeds such text, which states that the development cannot "in any way" require armoring construction. Proposed development attempting to rely on existing armoring is still dependent on that armoring having been constructed, which falls under the rubric of "in any way" requiring the construction of armoring to protect it. That such construction may have been constructed before the proposed development is being considered is immaterial to Section 30253's application for that reason (and such conclusion is bolstered by the Section 30009 requirement to liberally construe the Act to protect coastal resources). In addition, if new development relies on armoring that is already present, it will also have to rely on the continued upkeep, expansion, or eventual rebuilding of that armoring. If the armoring needs to be expanded or rebuilt, then the new development would be relying on the construction of new armoring, in violation of Section 30253.

²⁶ Ibid.

30253. If Section 30235's 'existing' meant 'extant' at the time of an application, then it would require approval of armoring that Section 30253 prohibits, and the two cannot readily be harmonized.

More appropriately, the application of Section 30253 since 1977 creates two types of development under the Coastal Act: pre-Coastal Act development that may not have been built to meet Section 30253 requirements to avoid armoring, and post-Coastal Act development that has (including because it is required by Section 30253). Put another way, the Section 30235 requirement to allow for armoring regardless of its coastal resource impacts or its inconsistencies with other Coastal Act resource protective provisions is intended to only apply to pre-Coastal Act development, and not anything else, essentially 'grandfathering' pre-Coastal Act structures and allowing them armoring as an exception to the otherwise applicable Coastal Act requirements.²⁷ In addition, such pre-Coastal Act structures lose their 'existing' status under Section 30235 if they are modified in such a way that they are no longer the same structure, but rather a replacement structure (often referred to by the Commission as a 'redeveloped' structure).²⁸

In short, the Coastal Act reflects a broad legislative intent to allow armoring under certain very limited circumstances generally only for structures that existed when the

²⁷ As described in the Commission's 2015 Sea Level Rise Policy Guidance, the Commission interprets the term "existing structures" in Section 30235 as meaning structures that were in existence on January 1, 1977, the effective date of the Coastal Act, and that have not been redeveloped since in a way that would require them to be reevaluated against the Coastal Act/LCPs as if new. In other words, Section 30235's directive to permit shoreline armoring for structures in certain circumstances applies to development that lawfully existed as of January 1, 1977, and that has not subsequently been redeveloped (i.e., where changes to it since 1977 have been extensive enough that it is considered a replacement structure required to conform to applicable Coastal Act and LCP provisions). This interpretation is the most reasonable way to construe and harmonize Sections 30235 and 30253, which together evince a broad legislative intent to allow armoring for development that existed when the Coastal Act was passed, when such development is in danger from erosion, but to avoid such armoring for development constructed consistent with the Act, which does not allow shoreline altering armoring development to support same. This interpretation, which narrowly allows protection for development that predates the Coastal Act, is also supported by the Commission's duty to protect public trust resources and interpret the Coastal Act in a liberal manner to accomplish its purposes.

²⁸ Coastal Act Section 30610(d) and Title 14 of California Code of Regulations (CCR) Section 13252(b) help define when structures meet or don't meet the redevelopment threshold. CCR Section 13252(b) specifically states that replacement of 50% or more of a structure, including single-family residences, is not repair and maintenance under Coastal Act Section 30610(d) but instead constitutes a replacement structure that must be evaluated for Coastal Act compliance purposes. In applying Section 13252(b)'s 50% criteria, the Commission has, in the past, found that a structure will be considered a replacement structure (also referred to as redevelopment) if at least one of the following takes place: 1) 50% or more of the major structural components (i.e., including exterior walls, floor, roof structure, or foundation, where alterations are not additive between individual structural components) are altered; 2) there is a 50% or more increase in gross floor area; 3) alteration of less than 50% of a major structural component results in cumulative alterations exceeding 50% or more of that major structural component (taking into account previous replacement work undertaken since January 1, 1977); and 4) a less than a 50% increase in floor area where the alteration would result in a cumulative addition of 50% or more of the floor area, taking into account previous additions to the structure since January 1, 1977 (see, for example, LCP amendments LCP-2-MAR-13-0224-1 Part A and LCP-3-MRB-21-0047-1, and CDP 3-16-0345 (Honjo armoring)).

Coastal Act was adopted and when such structures are in danger from erosion (Section 30235), but to prohibit armoring for new development constructed after adoption of the Act (Section 30253). This interpretation to allow protection only for certain structures that predate the Coastal Act is also supported by the Commission's duty to protect public trust resources, and the Coastal Act requirement that the Act "shall be liberally construed to accomplish its purposes and objectives" (Section 30009, previously described), where, as described, the Act on this point protects these natural shoreline and beach resources and only allows for armoring as an exception – or, put another way, as an override – under extremely narrow circumstances and criteria.

Furthermore, Section 30270 requires the Commission to "take into account the effects of sea level rise in coastal resources planning and management policies and activities in order to identify, assess, and, to the extent feasible, avoid and mitigate the adverse effects of sea level rise;" and recognizing the inevitability of ever increasing impacts from armoring in an era of sea level rise underlines the importance of limiting the circumstances under which armoring can be approved. Thus, the only types of structures that qualify as 'existing structures" allowed armoring under Section 30235 are those that existed before January 1, 1977 and have not been redeveloped since.

In this case, as detailed earlier, available evidence shows that the home at the subject site pre-dates CDP requirements and has not been redeveloped since 1977, and thus qualifies as an existing structure as applicable to Section 30235. Specifically, the residential structure onsite was built in 1958, and since 1977 the County has only issued minor building permits for non-structural elements, such as electrical work and the installation of new smoke detectors. Additionally, California Coastal Records Project (CCRP) imagery confirms that the subject residence has remained in the same configuration without discernable change since as early as 1972.²⁹ Thus, the proposed project meets the first test of Section 30235, as the subject residence onsite is an existing structure in Section 30235 terms.

<u>Danger from Erosion/Serving Coastal-Dependent Uses</u>

The second Section 30235 test is whether the existing structure is in danger from erosion, or whether the coastal-dependent use would be served by the proposed project. In this case, there is no coastal-dependent use to be protected by the proposed armoring, and thus instead the degree to which the subject residence is in danger must be considered. As to the degree of danger at the site, the Coastal Act does not define the term "in danger." There is risk involved in maintaining development along a California coastline that is actively eroding and can be directly subject to violent storms, large waves, flooding, earthquakes, and other coastal hazards. Sea level rise and localized geography that can focus storm energy at particular stretches of coastline can exacerbate these risks. Put another way, all development along the immediate California coastline is in a certain amount of "danger." It is a matter of the degree of threat that distinguishes between danger that represents an ordinary and acceptable risk, and danger that requires shoreline armoring per Section 30235. Lacking a Coastal Act definition, the Commission has in the past evaluated the immediacy of any threat in order to make a determination as to whether an existing structure is "in danger" for the

²⁹ CCRP Images Nos. 7220086, 6659, 20057113, and 201908551.

purposes of Section 30235 considerations. While each case is evaluated based upon its own particular set of facts, the Commission has in the past interpreted "in danger" to mean that an existing structure would be unsafe to use/occupy within the next two or three storm season cycles (generally, the next few years) if nothing were to be done (i.e., in the no project alternative). ³⁰

The existing vertical armoring onsite that appears to have been installed during the construction of the subject residence in the late 1950s does not appear to have been updated since that time, and the Commission has no records of CDPs associated with such vertical armoring. As described earlier, the remnant retaining wall and shotcrete armoring of the rock shelf seaward of the vertical armoring was resurfaced and patched via ECDP in 1998, but it appears that most of that ECDP work has been worn away since, and the area where the vertical armoring meets the underlying Purisima bedrock is largely exposed. Additionally, according to the Applicants' geotechnical report, the vertical seawall shows signs of lateral cracking across the entire structure, posing a serious risk of failure, which could damage the subject residence in the event of failure due to lateral movement from an earthquake or additional degradation caused by wave attack. Put another way, the vertical seawall has been degraded over time by coastal hazards, and could fail in the shorter term. The Applicant's geotechnical report concludes that:

Undercutting of this supporting wall and the degraded and cracked condition of the concrete is now threatening the home itself.

Further, the Applicant's geotechnical report found that:

The terrace deposits within the bluff have the potential to become unstable and fail...if no coastal protection structures or blufftop retaining walls are present. Additionally, bedrock failures can occur with little or no warning. The combination of these two failure events would retreat the top edge of the bluff well beyond the existing residence foundations. In absence of the existing coastal protection the lower deck foundations which support the residence would immediately be undermined...The lower-level residence foundations would likely be undermined with the next winter storm cycle.

The Commission's Coastal Engineer, Jeremy Smith, and Geologist, Dr. Joseph Street, evaluated the Applicant's geotechnical and geologic report and related project materials and agree with the conclusion that the residence is in danger from erosion. Thus, the proposed project meets the second test of Section 30235, because the existing

³⁰ See, for example, CDPs A-3-SCO-07-095/3-07-019 3-07-019 (Pleasure Point seawall), 3-09-025 (Pebble Beach Company Beach Club seawall), 3-09-042 (O'Neill seawall), 2-10-039 (Lands End seawall), 3-14-0488 (Iceplant LLC seawall), 2-17-0702 (Sharp Park Golf Course revetment), 3-18-0720 (Candau Armoring), 3-20-0166 (Wavefarer Partners LLC Armoring), and 3-22-0440 (Casanova Armoring).

³¹ See "Geologic and Coastal Hazard Evaluation, 3034 Pleasure Point Drive" prepared by Gary Griggs, Consulting Coastal Geologist (September 2022).

³² See "Geotechnical and Coastal Engineering Investigation: Public Access and Coastal Protection Improvements, 3034 Pleasure Point Drive" prepared by Haro, Kasunich and Associates, Inc. (September 2022).

armoring onsite has the potential to fail, and the subject residence is in danger from erosion.

Alternatives to Shoreline Armoring

The third Section 30235 test that the project must meet is that the proposed armoring must be "required" to protect the existing endangered structures or to serve the coastal-dependent use. In other words, Section 30235 is structured that the third test is met if shoreline armoring is the only feasible 3 alternative capable of protecting the existing endangered structures or serving the coastal-dependent uses. When read in tandem with other applicable Coastal Act provisions cited in these findings, the Commission has in the past conceptualized this Coastal Act Section 30235 evaluation as a search for the least environmentally damaging feasible alternative that can serve to protect existing endangered structures or to serve the coastal-dependent uses. Other alternatives typically considered include: the "no project" alternative; relocation of endangered structures; drainage and vegetation measures on the blufftop; sand replenishment programs; and combinations of each. The Applicants have submitted an alternatives analysis, 34 and several potential alternatives are discussed briefly below.

No Project Alternative

The "no project" alternative in this case would result in the continued degradation and undermining of the existing armoring onsite, which serves as an integral part of the structural support for the residence. As the Applicants' alternatives analysis suggests, erosion onsite would continue landward and downward, only further undermining the existing vertical concrete seawall with resultant failure of the seawall in an unpredictable, episodic manner, in turn leading to the loss of the residence. Moreover, not completing the proposed project would likely lead instead to emergency as-needed fixes to respond to erosion events. Such an approach could result in a patchwork nature of armoring at this location, resulting in a continually deteriorating visual environment as well as the continued presence of errant concrete debris on the beach. The "no project" alternative is infeasible for those reasons.

Relocation of Threatened Structure

There is limited space on the Applicants' property to relocate the threatened residential structure. The subject parcel is approximately 7,400 square feet in size, and the existing residence covers most of that area with only approximately 20 feet of space between Pleasure Point Drive and the landward side of the house. There is insufficient space within which to relocate the residence, including in light of required setbacks and coastal hazards concerns. Even if the residence were demolished and reduced in size, there would not be adequate development area on the site to accommodate a residence set back far enough to avoid the need for shoreline armoring. In addition, the degree of potential bluff loss if armoring is not replaced as proposed would further narrow

³³ Coastal Act Section 30108 defines feasibility as follows: "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.

³⁴ Titled "Alternatives Analysis: Hofmann Living Trust, Proposed Public Access Improvement and Coastal Protection Project, 3034 Pleasure Point Drive" prepared by Haro, Kasunich and Associates, Inc. (September 2022).

available space. For these reasons, this alternative is infeasible.

Enhanced Erosion Control/Landscaping/Drainage

Sometimes erosion can be abated via better erosion control, increased landscaping, and improved drainage. However, such measures on their own are typically more considered 'best practices' for blufftop development, and they can help extend the useful life of setbacks from blufftop edges, but on their own are typically incapable of protecting against the type of major bluff failure to be expected at this site. Specifically, the mode of bluff failure of most concern here is not so much driven by terrestrial processes (i.e., unfavorable drainage, soil saturation, etc.) as it is driven by marine forces that are actively leading to seawall degradation. This alternative is infeasible as well.

Beach Nourishment

While beach nourishment can raise beach surface elevations, widen beaches, and cause waves to break further from the coastal bluff, successful beach nourishment efforts of the type that would offer necessary protection need to be applied over a fairly large area, and coordinated in such a way as to maximize their utility. Conversely, beach nourishment at individual sites like this is extremely unlikely to be able to effect significant changes of the type that would be necessary for protection here. Such a conclusion is only further bolstered by the fact that the area offshore has very strong littoral currents that displace large volumes of sand, which would likely cause any deposited sand to be quickly transported downcoast. In addition, there is limited beach to nourish at this site, and the shoreline area includes what appears to be a substantial amount of diverse biological marine growth, which would be at least temporarily buried via any beach nourishment effort. And even if nourishment could serve as viable protection for the structure, it would be extremely expensive at the volumes that would be required, including in terms of the continual need to add such volumes of sand over time, and it would not abate the instability of the bluffs. This alternative is also infeasible.

Temporary Erosion Control

Temporary erosion controls, such as a thin temporary coating of shotcrete on the existing concrete seawall, would be a potentially effective short-term measure, but is not designed to resist seismic forces or active earth pressures from potential landsliding or other types of bluff failure, and erodes relatively quickly. Thus, this would be unsuitable as a retaining structure, which the existing seawall effectively acts as for the residential foundation, or as long-term protection. Additionally, temporary rip rap along the base of the existing seawall could be used to reduce the wave runup and attack that is currently causing undermining, but not only would such measures lead to their own new coastal resource impacts, but such measures can slide or collapse and move seaward, only further restricting access on/across the beach in an already spatially confined shoreline area. In both scenarios, the likely result is the introduction of even more rock and concrete debris to the public beach area, leading to additional coastal resource impacts in that scenario as well. For these reasons, this alternative is infeasible.

Armoring

Ultimately, non-armoring solutions are incapable of protecting the existing endangered structure in this case. And while it is true that a variety of armoring types and designs

could be used, and many were evaluated by the Applicants (such as temporary shotcrete or rip rap, as described above), the proposed project limits its footprint (including being placed landward of the existing deteriorating armoring in places), removes existing unnatural structures and materials (e.g., broken concrete chunks and a portion of the pre-Coastal retaining wall), camouflages all concrete surfaces by mimicking bluff landforms, and ultimately creates significant public benefit through project design (i.e., the proposed public access path, stairways, and viewing area/platform). It also further realizes the vision of a continuous lateral accessway on the seaward side of the homes along Pleasure Point, including providing a connection for current and future potential segments.³⁵ As such, the Commission concurs with the Applicants that the proposed project represents the least environmentally damaging feasible alternative, including when coastal resource impacts and mitigations are factored in (see below sand supply discussion, and see subsequent findings related to public recreational access, public views, and marine resources, all incorporated here by reference).

Thus, the proposed project meets the third test of Section 30235 in that the proposed project, as conditioned, is the least environmentally damaging feasible alternative to protect an existing structure in danger.

Sand Supply Impacts

The fourth test of Section 30235 that the project must meet is that the armoring must be designed to eliminate or mitigate adverse impacts to local shoreline sand supply.

Shoreline Processes

Some of the effects of engineered armoring structures on the beach and shoreline (such as scour, end effects and modification to the beach profile) are temporary or are difficult to distinguish from all the other actions that modify the beach/shoreline. Others are more qualitative (e.g., impacts to the character of the beach/shoreline and visual quality). Some of the effects that a shoreline armoring structure may have on natural shoreline processes can be quantified, however, including: (1) the loss of the beach and shoreline recreational area on which the structure is located; (2) the long-term loss of beach and shoreline recreational area that will result when the back-beach location is fixed on an eroding shoreline; and (3) the amount of material that would have been supplied to the beach and shoreline recreational area if the back-beach or bluff were to erode naturally. The first two calculations relate to directly affected underlying and adjacent beach and shoreline use areas, and the third calculation is related to sand supply impacts that can affect that area but also larger sand supply systems, but all three calculations relate to public recreational access to the beach, shoreline, and offshore recreational areas.

³⁵ This includes the portions of the lateral accessway previously approved by the Commission in connection with CDPs 3-14-0488 (Iceplant LLC Seawall), 3-18-0720 (Candau Armoring), 3-20-0166 (Wavefarer Partners LLC Armoring), and 3-22-0440 (Casanova Armoring). The addition of the lateral accessway fronting the subject site would leave only two 'gaps' to a continuous lower-level public access loop pathway between the Sewer Peak stairs and the Pleasure Point Park stairs, one on each side of the proposed project site.

Encroachment on the Beach/Shoreline Recreational Area

With respect to loss of beach and other shoreline recreational area, shoreline protective devices, such as the armoring proposed in this case, are physical structures that occupy space. Typically, when a shoreline protective device is placed on a beach or other recreational area, the underlying area cannot be used for beach and other recreation. This generally results in a loss of public access as well as a loss of sand and/or areas from which sand-generating materials can be derived. The area where the structure is placed will be altered from the time the protective device is constructed, and the extent or area occupied by the device will remain the same over time, until the structure is removed or moved from its initial location, or in the case of a revetment, as it spreads seaward over time. The beach/recreational area located beneath a shoreline protective device, referred to as the encroachment area, is the area of the structure's footprint.

In this case, the footprint of the proposed armoring would occupy an area that is already armored, both by elements of pre-Coastal Act armoring as well as the aforementioned ECDP-authorized and unpermitted armoring that did not receive requisite regular CDP approval. As described previously, in 1998 the Commission issued ECDP 3-98-043-G for the patching and resurfacing of the bedrock shelf seaward of the Applicants' residence with additional shotcrete. The work that was completed in 1998 covered much of the armoring on the site, and appears to have exceeded what would otherwise constitute repair and maintenance and instead constituted a new armoring structure at that time, which has gone unmitigated since. For the purpose of these impact calculations, impact assessment needs to account for what was completed in 1998 as well as what is proposed now. Thus, accounting for the footprint impacts of all armoring that has not yet been permitted (the unpermitted and proposed armoring in total), the footprint is 2,150 square feet.

Fixing the Shoreline Position (the "Coastal Squeeze")

On an eroding shoreline, beach and shoreline recreational areas will exist between the shoreline/waterline and the bluff as long as sand and space are available to form a beach/shoreline recreational area. As bluff erosion proceeds in a natural setting, the profile of the beach/shoreline recreational area also retreats, and the beach area migrates inland along with the bluff. This process essentially stops, however, when the backshore is fronted by a hard protective structure, such as a revetment or a seawall. Experts generally agree that where the shoreline is eroding and armoring is installed, the armoring will eventually define the boundary between the sea and the upland. While the shoreline on either side of the armoring continues to retreat, shoreline in front of the armoring eventually stops at the armoring. This effect is also known as passive erosion or "coastal squeeze". The beach/recreational area will narrow, being squeezed between the retreating shoreline and the fixed backshore, and this represents the loss of a beach and recreational shoreline as a direct result of the armoring. The coastal squeeze phenomenon caused by armoring will only be exacerbated by climate change

³⁶ See, for example: Kraus, Nicholas (1988) "Effects of Seawalls on the Beach: An Extended Literature Review," Journal of Coastal Research, Special Issue No. 4: 1 – 28; Kraus, Nicholas (1996) "Effects of Seawalls on the Beach: Part I An Updated Literature Review," Journal of Coastal Research, Vol.12: 691 – 701., pg. 1 – 28; and Tait and Griggs (1990) "Beach Response to the Presence of a Seawall," Shore and Beach, 58, 11-28.

and sea level rise. As climate change causes the seas to rise ever faster and increases the intensity and frequency of storms, beach and recreational shoreline areas will retreat inland at an increasingly rapid pace.^{37,38} If the inland area cannot also retreat, eventually, there will be no available dry beach/shoreline area and the shoreline will be fixed at the base of the armoring structure. In the case of an eroding shoreline, this represents the loss of a beach and shoreline recreational area as a direct result of the armoring.

Such passive erosion impacts can be calculated over the time the proposed armoring is expected to be in place. Consistent with the Commission's experience that shoreline armoring often needs to be reinforced, augmented, replaced, or substantially changed within twenty years of its original installation (as reflected in portions of the underlying existing armoring at this location), and to provide for re-review on a regular basis to allow for consideration of possible changes in policy, law, and physical conditions associated with armoring, the Commission evaluates this impact for an initial twenty-year period from the date of approval. After the initial 20-year initial mitigation period ends in 2044, additional impact analysis will be needed (see **Special Condition 9**) to assess appropriate additional mitigation necessary at that time, if any.

The Commission has in the past used a methodology for calculating the passive erosion impacts of a seawall, or the long-term loss of beach/shoreline area due to fixing the back beach. Specifically, the lost area is equivalent to the footprint of the beach/shoreline area that would have been created by natural erosion processes

³⁷ Sea level rise (SLR) will have dramatic impacts on California's coast in the coming decades and is already impacting the coast today. In the past century, the average global temperature has increased by about 0.8°C (1.4°F), and global sea levels have increased by 7 to 8 inches (17 to 21 cm). In addition, SLR has been accelerating in recent decades, with the global rate of SLR tripling since 1971 (IPCC, 2021). There is strong scientific consensus that SLR will continue over the coming years regardless of future human actions, but the exact rate and amount will depend on the amount of future greenhouse gas emissions as well as the exact contribution from sources such as the Antarctic and Greenland ice sheets, which are areas of continuing research. Currently, the best available science on SLR projections in California is provided in the State of California Sea-Level Rise Guidance (OPC 2018) and is reflected in the Coastal Commission Sea Level Rise Policy Guidance last updated in 2018 (CCC 2018). These documents also describe how, with SLR, shoreline development will experience increasingly hazardous conditions, including worsening storm flooding, inundation, rising groundwater, and shoreline and bluff erosion. On a relatively flat shoreline, even small amounts of SLR can cause large losses of beach width if the beach is squeezed between the landward migrating ocean and a fixed backshore. For example, for a shoreline with a slope of 40:1, a simple geometric model indicates that every foot of SLR will result in a 40-foot landward movement of the ocean/beach interface, resulting in significant loss of beach and recreational space. This change could also expose previously protected backshore development to increased tidal/wave action and flooding, and those areas that are already exposed to such conditions will be exposed more frequently and with greater severity. In addition, recent research has suggested that winter wave heights and winter storm intensity in the North Pacific have, on average, increased over the last 50 years in parallel with climate change, sending larger and more powerful waves to the California shoreline. Some studies suggest that wave heights could continue to increase in the future, generally extending the reach of wave run up and further exacerbating the erosion that is already expected to increase due to rising sea levels, though this is an area of developing research.

³⁸ See, for example: Sea Level Rise, Adopted Policy Guidance, https://www.coastal.ca.gov/climate/slrguidance.html. The most current data provided by the Ocean Protection Council, https://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_Exhibit-A_OPC_SLR_Guidance-rd3.pdf, estimates between 3.3 and 10.1 feet of sea level rise by 2100.

absent the armoring and is equal to the long-term average annual erosion rate multiplied by the width of property that has been fixed by a shoreline protective device. In this case, the proposed armoring spans approximately 74 feet,³⁹ and the average long-term annualized erosion rate unarmored bluffs (here, the same for both the bedrock platform and the terrace deposits) is estimated to be approximately 0.83 feet per year (as determined by the Applicants' geotechnical consultants, and as concurred on by the Commission's Coastal Engineer, Jeremy Smith). Therefore, the impacts due to the proposed project from fixing the back beach would be the loss of approximately 1,230 square feet of beach/shoreline loss through 2044 (i.e., beach/shoreline area that would have been created naturally if the back beach had not been fixed by the replacement and augmented armoring through that time period).

In addition to the impacts of the proposed armoring moving forward, the Commission must also account for the past impacts over time from existing unpermitted and ECDP-authorized (but no longer authorized) armoring. ⁴⁰ That shotcrete was applied along the same 74 linear feet of the bluff for 26 years with no follow-up CDP authorization. Thus, applying 0.83 feet per year of erosion over 26 years equates to an impact of 1,597 square feet. As to the unpermitted armoring installed circa 2021, the exact extent of the work is unclear, but it appears that only a relatively small area at the base of the private stairway that descends the existing concrete seawall to the shoreline was patched and reinforced with concrete. Still, this stretch of the wall constitutes approximately 10 linear feet. Applying 0.83 feet per year of erosion over the 3-year period that the unpermitted work has existed results in an impact of 25 square feet. Consequently, the impacts associated with fixing the back beach due to the past armoring totals approximately 1,622 square feet, and the total coastal squeeze impact through the first 20 years of mitigation is 2,855 square feet (i.e., 1,230 + 1,622 = 2,852).

Thus, the proposed project will result in a loss of approximately 5,002 square feet of beach/shoreline recreational area (2,150 square feet from the armoring footprint and 2,852 square feet associated with coastal squeeze impacts) through 2044, including accounting for the yet unmitigated and unpermitted work. Such impacts undoubtedly impact public recreational access, including the loss of the socio-economic value of beach/shoreline recreational access area, for which the Coastal Act requires mitigation. The most obvious in-kind mitigation for these impacts would be to create a new 5,002 square-foot area of beach/shoreline recreational area to replace that which will be lost with an identical area of beach/shoreline recreational area near the eliminated beach/shoreline recreational area. While in concept this would be the most direct mitigation approach, finding an area where natural processes can be allowed to occur and create a satisfactory beach, and ensuring it does so appropriately over time, is very difficult in actual practice. At the same time, the calculations of the affected area do provide an appropriate relative scale for evaluating alternative mitigations. For example,

³⁹ The 74-foot length used here is the width of the subject parcel. It is assumed that if the subject site were not armored, it would move inland at the annualized erosion rate of 0.83 feet per year across that 74-foot length, irrespective of the actual sinuosity of the bluff here. Thus, for purposes of calculating the coastal squeeze, this 74-foot length is used.

⁴⁰ All of the unpermitted and ECDP-authorized armoring will either be removed or replaced through implementation of the proposed project, and thus its impacts need only be accounted for retrospectively.

in the past, the Commission has looked at several ways to value such beach and shoreline areas to determine appropriate in-lieu mitigation fees, including evaluating the recreational value of the beach/shoreline recreational area in terms of the larger economy, as well as the real estate value of property acquisition necessary to accommodate an area that could be so created through natural erosion.

In terms of the recreational beach/shoreline value, the Commission has recognized that in addition to the more qualitative social benefits of beaches and shoreline areas (recreational, aesthetic, habitat values, etc.), beaches and shoreline recreational areas provide significant direct and indirect revenues to local economies, the state, and the nation. Most people recognize that the ocean and the coastline of California contribute greatly to the California economy through activities such as tourism, fishing, recreation, and other commercial activities. There is also value in just spending a day at the beach and having wildlife and clean water at that beach and being able to walk along a stretch of beach and shoreline. There are also societal benefits of beaches and shoreline areas, including the ways in which they contribute to local community, state social fabric, and cultural identity. However, it can be difficult to put a price tag on these types of benefits, including 'existence' values, where people are asked how much it is worth to them for a beach to exist, even if they do not visit the beach or seldom visit the beach. Depending on the person, even one beach can be priceless.

Thus, these recreational impacts are often difficult to quantify, including in this case. In other cases, including where detailed visitation data is lacking, as it is here, the Commission has found that using a real estate valuation method as a basis for identifying mitigation values allows for objective quantification of the value of the lost beach and shoreline area, and that this valuation is appropriate both in terms of the scope of impacts and the rational basis for applying such methodology. This method requires an evaluation of the cost of property that could be purchased and allowed to erode and turn into equivalent beach/shoreline area naturally to offset the area that would be lost due to the construction and continued placement of the armoring over time.

Toward this end, the Commission evaluated market values of representative blufftop properties in the Pleasure Point area and nearby to identify what it might cost to purchase such property and allow it to erode to create beach/shoreline recreational space. Specifically, this review was conducted by looking at the sales of blufftop and ocean fronting property in close proximity to the project site (specifically blufftop ocean fronting properties in coastal Live Oak) between the years 2019 and 2022. This value is then divided by the property square footage to derive a price per square foot for each

⁴¹ See, for example, the Commission's 2015 Sea Level Rise Adopted Policy Guidance (https://www.coastal.ca.gov/climate/slrguidance.html) where it states that "Just over 21 million people lived in California's coastal counties as of July 2014 (CDF 2014), and the state supports a \$40 billion coastal and ocean economy (NOEP 2010)."

⁴² See, for example, CDPs 2-10-039 (Land's End Seawall), 2-11-009 (City of Pacifica Shoreline Protection), A-3-PSB-12-042 (Capistrano Seawall), A-3-PSB-12-043 (Vista del Mar Seawall), 3-16-0345 (Honjo Seawall), 3-18-0720 (Candau Armoring), 3-19-0446 (Rockview Seawall and Accessway), 3-19-1287 (Fanshell Beach 17-Mile Drive Armoring), 3-20-0166 (Wavefarer Partners LLC Armoring), and 3-22-0440 (Casanova Armoring).

sale. The square-foot calculated value provides an estimated per square-foot value of what it would cost to purchase/acquire an equivalent blufftop property area that could be allowed to naturally erode and provide a beach area roughly equivalent to what will be lost due to the proposed project through 2044.

Fifteen blufftop ocean fronting properties sold in the vicinity between 2019 and 2022, where sales data shows a range of values from \$189 per square-foot at the low end, up to \$1,372 per square-foot at the high end, with an average of \$577 per square-foot. ⁴³ This value represents a reasonable estimate of the average market value per square-foot of blufftop properties in close proximity to the project site based on actual sales data in recent years, and is a valid estimate of the cost of purchasing such property. Applying this land acquisition value to the 5,002 square-foot impact through 2044 would result in a mitigation fee of approximately \$2.89 million for this impact through the end of the initial 20-year mitigation period (i.e., 5,002 square feet x \$577 per square foot = \$2,886,154). The Commission finds that this mitigation fee amount is most closely tied to specific land values in the vicinity of the project, and is thus both reasonably related and roughly proportional to the anticipated loss of beach and shoreline recreational use areas due to the project through 2044.

Retention of Potential Beach Material

The final Section 30235 impact calculation pertains to the loss of sand and sandgenerating materials due to the project, and the way that affects the larger sand supply system. Beach sand material comes to the shoreline from inland areas, carried by rivers and streams; from offshore deposits, carried by waves and tidal currents; and from coastal dunes and bluffs feeding sandy beaches and shoreline recreational areas. Bluff retreat is one of several ways that sand and sand generating materials are added to the shoreline. Bluff retreat and erosion are natural processes resulting from many different factors such as erosion by wave action causing cave formation, enlargement and eventual collapse; saturation of the bluff soil from groundwater causing the bluff to slough off; and natural bluff deterioration. For coastal dunes, the contribution to the system is typically more direct, with sand becoming part of the shoreline system during and as a result of climatic events, including wind, rain, and storms. When the bluff/shoreline area is armored with a shoreline protective device, the natural exchange of material from the armored area to the beach/shoreline area and offshore sand supply system will be interrupted and, if the armored bluff/shoreline area would have otherwise eroded, there will be a measurable loss of material to the beach/shoreline/offshore sand supply system area as a result.

In this case, sand and sand generating materials would be added to the beach/shoreline

⁴³ At the low end, the blufftop property at 4190 Opal Cliff Drive sold for \$2.135 million in 2019 and included 11,282 square feet of property or \$189 per square-foot. The next lowest property sold for \$3.85 million and included 17,598 square feet of property or \$219 per square foot. On the high end, the property at 102 24th Avenue sold for \$4.9 million in 2021 and included 3,572 square feet of property, or \$1,372 per square-foot. The next highest property, the property at 4610 Opal Cliff Drive sold for \$12 million in 2019, or \$803 per square-foot. The only property along Pleasure Point Drive to sell recently is 3034 Pleasure Point Drive (the subject residence), which sold for \$4.9 million in 2021, or \$666 per square-foot. The average of these fifteen properties per square-foot value is \$576.5 per square-foot and the median is \$540 per square foot.

at these locations, as well as to the larger littoral cell sand supply system fronting the bluff/shoreline, if natural erosion were allowed to continue (i.e., if the armoring was not there). The volume of total material that would have gone into the sand supply system over the initial mitigation period through 2044 would be the volume of material between (a) the likely future bluff/shoreline configuration with armoring; and (b) the likely future bluff/shoreline configuration without the armoring. A necessary component of the Commission's established methodology for calculating this amount is the percentage of sand in the bluff materials at the site. Mr. Smith estimates (and the Applicants' geotechnical consultants estimate similar amounts) that the amount of beach-quality sand retained by the proposed armoring would be approximately 233 cubic yards through to 2044. In addition to the new armoring, impacts over time from existing unpermitted armoring must be accounted for. The 1998 ECDP-authorized armoring and 2021 unpermitted armoring have retained approximately 303 cubic yards of sand. Thus, all told, retention impacts are roughly 536 cubic yards due to the up to 26 years of unmitigated impacts and the initial 20-year mitigation period.

To mitigate for this loss of sand, the Commission has in the past required payment of an in-lieu fee to contribute to ongoing sand replenishment or other appropriate mitigation programs, where such fee is based on the cost of buying and delivering an equivalent volume of beach quality sand to the affected area. For purposes of this analysis, the cost of purchasing and delivering 536 cubic yards of beach quality sand is assumed to be roughly \$61 per cubic yard. Thus, an in-lieu fee to address this sand retention impact would be approximately \$32,449 (i.e., \$60.54 per cubic yard x 536 cubic yards = \$32,449) through 2044.

Approvable Mitigation

Accordingly, the value associated with the proposed project's sand supply and related beach/shoreline loss impacts through 2044 is approximately \$2.92 million (i.e., \$2,886,154 + \$32,449 = \$2,918,603), which could be accommodated by collecting a mitigation fee in that amount. While requiring such a mitigation fee could commensurately mitigate for these impacts, the Commission has also instead required the provision of in-lieu public recreational access improvements to offset such impacts, particularly when a public agency is an applicant for a shoreline armoring project. Such mitigation strategies can allow for bona fide improvements to public recreational access infrastructure and utility so that mitigation benefits can be realized in the near term, and in the area of the impacts.

Here, the Applicants have proposed in-lieu mitigation via formalizing and enhancing lateral (pathway), vertical (beach/surf stairway), and overlook access almost entirely on

⁴⁴ In recent years, the Commission has applied a replacement sand cost of \$50 per cubic yard (see CDPs 3-16-0446 (Rockview Seawall and Accessway), 3-16-0345 (Honjo Armoring), A-3-PSB-12-042 (Capistrano Seawall) and A-3-PSB-12-043 (Vista del Mar Seawall)). Here, the Commission applies \$60.54 per cubic yard, which represents that \$50 per cubic yard as adjusted for inflation to 2024 since those original calculations, consistent with recent cases evaluated by the Commission (see, for example, CDPs 3-18-0720 (Candau), 3-20-0166 (Wavefarer Partners LLC), 3-22-0440 (Casanova), and 3-23-0014 (Grossman)).

their property. 45 In other words, the project by design builds in mitigating components, including importantly completing additional segments of the envisioned public pathway seaward of homes from downcoast Pleasure Point Park (which connects to the extremely popular Pleasure Point blufftop recreational trail) all the way to Rockview Drive, and ultimately all the way around the point and back to Moran Lake County Park further upcoast; where otherwise absent such a connection, the public is forced to inland streets (much of which lack even sidewalks), where ocean views are blocked by residences, for coastal access along this stretch. Such enhancements together represent significant public access improvements in this area, including a formalized and much more accessible segment of the California Coastal Trail, 46 helping to transform this area from a fairly difficult-to-traverse and hazardous beach/bedrock shelf area to a much more accessible coastal lateral accessway that is readily connectable to the upcoast and downcoast neighboring properties, in the event that those property owners pursue and/or are conditioned as part of a broader armoring permitting action to include similar such public access amenities.⁴⁷ In addition, there is significant added value in the fact that these public access improvements will be constructed in the near term (including as the residence is in danger, and so there is a heightened sense of urgency to construct the armoring and integral public access features). In contrast, if a mitigation fee were to be employed here, the public would not benefit from immediate on-the-ground improvements, and would instead bear the public costs of the armoring up until such mitigation funds were put to use (which, in the Commission's experience, can sometimes be decades after the impact needing mitigation is incurred).

Accordingly, in this case, the Commission finds that the best way to mitigate for the above-identified armoring impacts, as well as to enhance and maximize public access and recreational opportunities at this location and in the greater project area, is via the proposed in-lieu mitigation package, subject to minor refinements. In other words, the proposed and refined mitigation package constitutes appropriate and adequate compensatory mitigation to offset the impacts identified above, including for the Commission to be able to find the project consistent with Coastal Act Section 30235 (see **Special Condition 1** where such mitigation is codified).

Thus, the proposed project meets the fourth and final test of Section 30235, because the proposed project, as would be conditioned, appropriately avoids, where feasible, and mitigates where unavoidable, its sand supply and related impacts. As a result, the proposed project, as conditioned, can be found consistent with Section 30235 in this

⁴⁵ The base and footing of the downcoast vertical stairway that connects to the public accessway would be sited below the mean high tide line, and thus in Public Trust lands. All other project elements would entail public access improvements located on the Applicants' private property.

⁴⁶ A continuous braided California Coastal Trail (or CCT) along California's shoreline has long been a collective objective for California's coastal zone, including as articulated in 1972's Proposition 20 ("The Coastal Initiative") and 1976's Coastal Act. Further details on CCT alignment principles, including continuity and proximity to the sea, may be found in the document "Completing the California Coastal Trail" prepared by the State Coastal Conservancy in 2001 and on the Commission's Coastal Access Program webpage at https://www.coastal.ca.gov/access/ca-coastal-trail/coastal-trail.pdf.

⁴⁷ In the short run, it is acknowledged that the pathway would not actually connect to pathways on up and downcoast sites, but it would still function for public access as an overlook at lower tides when beachgoers can reach the site, and as a respite for surfers at other times when the tide is higher.

regard.

Duration of Authorization

The Commission typically imposes conditions that restrict the use of armoring to the time frame when the existing structure being protected has not been redeveloped (and requiring armoring removal upon redevelopment), and could impose such a requirement here too in relation to the subject residence. However, this project is somewhat unique as it also includes integral public access features seaward of the residence, and tying the authorization to residential redevelopment does not adequately account for the independent utility of the armoring for such features. Provided the coastal accessway continues to exist and is maintained in its approved state, the CDP is otherwise in good standing, and no other violations on the site exist, the subject CDP need not be conditioned to require armoring removal upon redevelopment. Instead, the subject CDP is conditioned to require armoring removal if the access features are no longer useable and/or the CDP is out of compliance (e.g., the Applicants do not properly apply for and implement additional mitigation for the time period past 2044, and the Commission allows such armoring to remain after 2044, etc.). Accordingly, see **Special Condition 8**, which ties the duration of armoring approval to the coastal accessway's useability and CDP/Coastal Act compliance, and Special Condition 9, which requires the Applicants to reevaluate the impacts associated with the retention of armoring beyond the initial mitigation period through 2044, and to provide additional mitigation if approved by the Commission and deemed necessary to mitigate for additional impacts to coastal resources past the initial authorization period in the event that said impacts are not mitigated sufficiently under this approval.

Long-Term Stability, Maintenance, and Risk

Coastal Act Section 30253 requires the project to assure long-term stability and structural integrity, minimize future risk, and avoid additional, more substantial protective measures in the future. This is particularly critical given the dynamic shoreline environment in this area. Also critical to the task of ensuring long-term stability, as required by Section 30253, is a formal long-term monitoring and maintenance program. If the completed project were damaged in the future (e.g., as a result of wave action, storms, an earthquake, etc.), it could lead to a degraded public access condition as well as loss of the integral public access improvements. In addition, such damages could adversely affect nearby beaches and recreational use areas by resulting in debris on the beaches and/or creating a hazard to the public using the beaches and offshore areas. Therefore, in order to find the proposed project consistent with Coastal Act Section 30253, the project must be maintained in its approved and required state. Further, in order to ensure that the Applicants and the Commission know when repairs or maintenance are required, the Applicants must regularly monitor the condition of the completed project, particularly after major storm events. Such monitoring will ensure that the Applicants and the Commission are aware of any damage to or weathering of the completed project, and can determine whether repairs or other actions are necessary to maintain the completed project in their approved state. To assist in such an effort, monitoring plans should provide vertical and horizontal reference distances from the completed project to surveyed benchmarks for use in future monitoring efforts.

Thus, to ensure that the project is properly maintained to ensure its long-term structural

stability, **Special Condition 5** requires regular submission of monitoring and maintenance reports. Such reports are required to provide for evaluation of the condition and performance of the completed project and its overall stability, and to provide for necessary maintenance, repair, changes, or modifications to the completed project. In addition, **Special Condition 6** authorizes the Applicants to maintain project components in their approved state through this CDP, subject to the terms and conditions identified by the special conditions. Such future monitoring and maintenance activities must be understood in relation to clear as-built plans that are required to be submitted by the Applicants (**Special Condition 3**).

In terms of recognizing and assuming the hazard risks for shoreline development, the Commission's experience in evaluating proposed development in areas subject to hazards has been that development has continued to occur despite periodic episodes of heavy storm damage and other such occurrences, as well as more steady erosion and other coastal hazards, all as may be exacerbated by sea level rise. Separate from its impact on coastal resources directly, development in such dynamic environments is also susceptible to damage due to such long-term and episodic processes. Past occurrences statewide have resulted in public costs (through low interest loans, grants, subsidies, direct assistance, etc.) in the many, many millions of dollars. As a means of allowing continued development in areas subject to these hazards while avoiding placing the economic burden for damages onto the people of the State of California, the Commission has in the past required applicants to acknowledge site hazards and agree to waive any claims of liability on the part of the Commission for allowing the development to proceed. Accordingly, this approval is conditioned for the Applicants to assume all risks for developing at this location (see **Special Condition 7**), and also to require notice in any real estate transactions involving the site of the coastal hazard dangers, and the terms and conditions of this CDP (see Special Condition 11).

Finally, the Commission has long analyzed consistency with Section 30253 in terms of analyzing a project's risks and structural integrity over time, taking sea level rise into account. However, Section 30270 now explicitly requires the Commission to consider sea level rise when analyzing risks under Section 30253 and also requires the Commission to assess and, to the extent feasible, avoid and mitigate the adverse effects of sea level rise. The findings above identify and assess the project's hazardsrelated impacts in a manner that accounts for sea level rise. As described above, the Commission has also imposed conditions to avoid, where feasible, and mitigate the adverse, hazard-related impacts of sea level rise, as they relate to these projects. For example, Special Condition 5 requires submission of monitoring and maintenance reports to ensure that the project remains stable over time, and Special Condition 6 authorizes maintenance of the project to ensure it does not erode or cause destruction of the site or surrounding area over time as sea levels rise and potentially cause the project to deteriorate. The above findings also describe how it is not feasible to completely avoid all project-related impacts because there is no less damaging alternative to the armoring in this instance. With these findings and conditions, the project can be found consistent with Section 30270.

Coastal Hazards Conclusion

The proposed project, as conditioned, meets requisite Section 30235, 30253, and

30270 tests, as detailed above, and can be found consistent with those sections.

2. Public Recreational Access

Applicable Coastal Act Provisions

Protecting and providing for maximum public recreational access is one of the main cornerstones of the Coastal Act, where the most explicit such provisions are found in Sections 30210 through 30224, with other sections also speaking to similar goals and requirements (such as Section 30240 protecting parks and recreational areas). The Coastal Act states:

Section 30210. In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30211. Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Section 30212(a). Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby, or, (3) agriculture would be adversely affected. ...

Section 30213. Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. ...

Section 30220. Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Section 30221. Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

Section 30222. The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.

Section 30223. Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

Section 30240(b). Development in areas adjacent to ... parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those ... areas.

These overlapping Coastal Act provisions protect public recreational access to and along the beach/shoreline and to offshore waters, particularly free and low-cost access. Specifically, Section 30210 requires the Commission to provide the general public maximum access and recreational opportunities, while respecting the rights of private property owners. Section 30211 prohibits development from interfering with the public's right of access to the sea, including as it relates to the use of dry sand and rocky coastal areas. In approving new development, Section 30212(a) requires new development to provide access from the nearest public roadway to the shoreline and along the coast, save certain limited exceptions, such as existing adequate nearby access. Section 30213 protects lower cost forms of access, such as the free access available at the shoreline at the project site. Section 30220 protects coastal areas suited for oceanoriented activities, such as offshore surfing areas here, for such purposes. Sections 30221 and 30223 protect oceanfront and upland areas for public recreational uses, and Section 30222 prioritizes visitor-serving amenities providing for public recreational use. Section 30240(b) protects parks and recreation areas, like the shoreline at the site, from degradation, and requires any allowed development to be compatible with the continuation of those areas.

Finally, Coastal Act Section 30210's direction to maximize public access and recreation opportunities represents a different threshold than to simply provide or protect such access, and is fundamentally different from other similar provisions in this respect. In other words, it is not enough to simply provide public recreational access to and along the coast, and not enough to simply protect such access, but rather that such access must also be maximized. This terminology distinguishes the Coastal Act in certain respects, and provides fundamental direction to maximize public recreational access opportunities with respect to projects along the California coast that raise such issues, like this one. In addition, with sea levels rising and coastal erosion, the mean high tide line will generally move landward over time depending on the beach/shoreline profile, seasonal tidal activity, and continued sea level rise. Given that that line often defines the demarcation point between public and private property (with the public's property lying on the seaward side, and generally held in public trust by the California State Lands Commission),⁴⁸ it is also important to consider the effect of shoreline projects like this one on what is best understood as an ambulatory public trust area, including where structures can halt the inland migration of the mean high tide line, and thus potentially

⁴⁸ The State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable waterways upon its admission to the United States in 1850. The State holds and manages these lands for the benefit of all people of the State for statewide purposes consistent with the common law Public Trust Doctrine ("public trust"). In coastal areas, the landward location and extent of the State's sovereign fee ownership of these public trust lands are generally defined by reference to the ordinary high-water mark (Civil Code Section 670), as measured by the mean high tide line (*Borax Consol. v. City of Los Angeles* (1935) 296 U.S. 10), and these boundaries generally remain ambulatory as natural processes dictate.

halt the inland migration of public trust areas, at least physically.⁴⁹ Thus, it is also important that the Commission assess the effect of the proposed project on public trust resources.

Consistency Analysis

As identified earlier, shoreline armoring can have significant adverse impacts to public access and recreation. 50 Here, the bluffs in the greater Pleasure Point project area are essentially all armored in one form or another, some near the project area for nearly a century, and sandy beach areas are few and far between. That is not to say that the beach/shoreline resource here is less valuable in some way, rather it is to say that it is simply more limited than some other armoring cases that the Commission considers (e.g., where proposed armoring might front a wide sandy beach). The predominant form of immediate shoreline access, as befits the world class surf break offshore, is surfing access, as detailed earlier. Specific to this location, direct access to the water is accomplished primarily from Pleasure Point Park, just downcoast of the project site. There is also an informal, for the most part, trail that exists atop and across this site as well as nearby armoring structures, between Pleasure Point Park and Rockview Drive, which is guite popular. 51 That said, other than the pathway integrated into armoring nearest Pleasure Point Park, it is currently suited for the most nimble afoot, and vertical access to it is limited. Finally, the beach and bedrock shelf area immediately seaward of the subject residence is typically constrained by the tides, and scrambling across this bedrock/armoring area can be guite slippery and dangerous, where such difficulties are only compounded by the relative state of disrepair of the existing onsite armoring, characterized by cracked, spalling concrete with sharp edges and unpredictable potholes in many places. It is in this context that the proposed project needs to be understood.

As detailed at some length in the Coastal Hazards discussion above, the proposed project would have both public recreational access impacts and benefits, where impacts are focused on beach/shoreline loss, especially over time, and the benefits are the proposed formalized public access trail and viewing area/platform (all above Coastal Hazards findings are incorporated herein by reference) that are envisioned to connect seamlessly to whatever public access improvements may come from future armoring efforts at the upcoast and downcoast neighboring properties. Other public recreational access impacts to consider are related to the effect of the project on surfing access, and on the public trust.

Surfing

As described in some detail earlier, Pleasure Point is an internationally known and loved, world-class surfing area. "The Point" includes at least a half-dozen distinct surf breaks, each with its own unique characteristics, that provide a variety of opportunities

⁴⁹ The artificial fixing of a shoreline does not permanently fix the legal property boundary (see *United States v. Milner*, 583 F.3d 1174 (9th Cir. 2009)).

⁵⁰ See Footnote 14.

⁵¹ And as already noted, this accessway between 2970 and 3000 Pleasure Point Drive is slated to be improved upon as a result of the Commission's actions on CDPs 3-18-0720 (Candau Armoring), 3-20-0166 (Wavefarer Partners LLC Armoring), and 3-22-0440 (Casanova Armoring).

for both novice and advanced surfers.⁵² The high quality of surfing waves, and the consistently favorable surfing conditions found at Pleasure Point, make it a unique and particularly valuable recreational resource that is clearly protected by the Coastal Act sections cited above.⁵³ It is a water-oriented recreational resource of the highest magnitude that cannot be provided at inland areas, let alone duplicated along the shoreline, of which there are a finite number in California.

More technically, several relationships have been developed to establish wave characteristics. One relationship relates wave characteristics to beach slope and wave steepness.⁵⁴ A second relationship compares the wave vortex geometry to the orthogonal seabed gradient.⁵⁵ Both these relationships correlate the shape and energy of the waves to the sea bottom, reflecting the importance of sea bottom bathymetry on wave conditions. A steep seabed gradient will produce a steep-faced wave. The alignment of the wave relative to the seabed will determine the peel angle. Face steepness and peel angle are key components to the quality of surfing waves.

Potential impacts from the proposed project on Pleasure Point surfing conditions are essentially three-fold: one, the degree to which the armoring itself affects the surf break (e.g., 'muddling' the break via increased wave reflection); two, the degree to which it starves the break of sandy materials that can help create sandbars and other wave tripping features; and three, the degree to which the armoring in tandem with sea level rise leads to the break being 'flooded out' because it cannot migrate inland (i.e., it cannot establish new more inland wave tripping features as sea levels rise and as natural erosion is halted).

In terms of loss of sand, as indicated earlier, the project has and would lead to a loss of about 536 cubic yards of materials through 2044 that would no longer make its way into the offshore sand system. However, the manner in which such sand may contribute to offshore sandbars to the benefit of surfing is unclear. Sandbar formation is dependent on a number of dynamic variables, and it is difficult to near impossible to pinpoint the degree to which such loss of sand from this discrete location may affect the surf break, if at all.

However, changes in water depth across the surfing area as sea levels rise is a little clearer of a phenomenon, as a rise in water levels means that the same exact swell will 'trip' on different underwater features, thus changing the location, and possibly the

⁵² For example, Sewer Peak, First Peak, Second Peak, 38th, etc.

⁵³ The Commission has, in the past, similarly considered the potential impacts that shoreline armoring may have on surfing. See, for example, CDPs A-3-SCO-07-015/3-07-019 (Pleasure Point Seawall), 3-18-0720 (Candau Armoring), 3-20-0166 (Wavefarer Partners LLC Armoring), and 3-22-0440 (Casanova Armoring).

⁵⁴ Called the "Irribarren number," the "surf scaling parameter," or "surf similarity parameter" by different researchers.

 $^{^{55}}$ The full relationship developed by Mead and Black ("Predicting the Breaking Intensity of Surfing Waves") is: Y = 0.065X + 0.821, where Y is the wave vortex ratio and X is the orthogonal seabed gradient. This quasi-empirical relationship was developed through the study of 48 images from 23 different world-class surfing breaks. There were not any Santa Cruz area surf breaks included in this analysis.

orientation, of the surf break. As previously described, the underwater reef/rocky ledge at Pleasure Point is one of the most important physical features that result in high quality surfing waves. Sand deposition is also a factor. In general, the reef breaks at Pleasure Point are 400 to 600 feet offshore. Conditions vary somewhat, but since the reef is the primary physical feature controlling the location of the break, the break does not move much beyond the zone of influence of the reef feature, except when sand bars form. ⁵⁶

The effect of sea floor bathymetry on the shape of breaking waves at Pleasure Point can currently be observed at different tides. At higher tides, waves break closer to the bluff, with less steep faces. During tides greater than 6 feet, a decrease in the quality and frequency of surfing waves can be noticed at various locations within the Pleasure Point surfing area, particularly when swell size is under 6 feet.

Over the long term, the proposed project will be expected to influence the bathymetry at Pleasure Point by "fixing" the back beach. That is, the project will prevent the natural process of erosion from occurring, and thereby establish a permanent location to the coastal bluff. Under natural conditions, the bluff would be eroded by waves and would move landward over time. Using the estimated long-term erosion rate of 0.83 feet per year, an unarmored bluff at this location would be expected to retreat landward approximately 40 feet over the next 50 years at this location. This would move landward the point where the ocean interacts with the bluff. Thus, under natural shoreline retreat conditions, the position of ocean/bluff interaction would move inland over time.

When combined with an armored shoreline, this increase in water depth can have an adverse long-term impact on surfing conditions. With or without armoring, water over the reef will be deeper more of the time. However, with an unarmored bluff, other wave-tripping features inland of the current break, such as rocky ledges of higher elevation or sandbars, will continue to result in breaking waves over the shallow waters that form as the bluff naturally erodes. In comparison, the installation of a seawall will prevent the surf break from adapting to increased sea levels, because in the absence of the landward migration of the bluff, areas of shallow water will continuously decrease. Under this situation, breaking waves would occur closer and closer to shore, and eventually, over the very long-term, become unsurfable.

It is difficult, however, to predict the time frame over which such impacts may occur. In past cases nearby, USGS studies showed that the wave break at Pleasure Point is not expected to move landward much at all, perhaps a few meters, in the next 100 years, with or without the seawalls.⁵⁷ And the project site is not an unarmored bluff that would actually erode naturally in the absence of the proposed project, rather it is already armored, with some of these impacts already present, to whatever degree they are

⁵⁶ The influence of sand bars on the waves at Pleasure Point is most notable at the downcoast peaks, such as in the surfing area between 36th and 38th Avenues.

⁵⁷ Storlazzi, Curt D., Barnard, Patrick L., Collins, Brian D., Finlayson, David P., Golden, Nadine E., Hatcher, Gerry A., Kayen, Robert E., and Ruggiero, Peter, 2007, High-resolution topographic, bathymetric, and oceanographic data for the Pleasure Point area, Santa Cruz County, California; 2005-2007: U.S. Geological Survey Open-File Report 2007-1270, 23 p. [http://pubs.usgs.gov/of/2007/1270/].

occurring, without this project. Thus, it appears unlikely that the project would lead to these sorts of deleterious effects on the surf break, particularly within the time frame where impact mitigation is required (i.e., over the next 20 years until 2044).

As to the potential for the proposed project to muddle the waves by increasing the reflection from waves bouncing off the bluffs at this location, ⁵⁸ for similar reasons, this also appears unlikely, especially over the next 20 years, including because whatever muddling may be occurring now that could be attributed to this armored site is unlikely to change much in that time frame. Additionally, the shoreline at this site is at an angle oblique to the primary direction of wave attack here. Waves along this stretch of coast are refracted around Soquel Point. Due to the subject property's location just downcoast of the Point, waves 'bend' around the Point and arrive at this particular location at an angle, and do not reflect directly back into surfable waves. In other words, any potential muddling caused by waves reflecting off of the armoring here is likely minimal due to the subject site's particular location and orientation.

Going forward, an opportunity to better understand the various impacts that shoreline armoring along the Pleasure Point shoreline has on surfing includes an upcoming planning effort by Santa Cruz County, in the form of a sea level rise vulnerability assessment funded by a Commission LCP Planning Grant.⁵⁹ Such assessment seeks to analyze potential sub-regional approaches/adaptation pathways including the impacts from armoring along discrete sections of the coast. This effort may very well include a surfing-specific analysis of impacts, if the community and shareholders so choose.

Public Trust

In addition to the Coastal Act provisions that support public access and equal opportunities for recreation, the Commission has the responsibility to protect public trust resources and public trust uses. Coastal Act regulations define public trust lands as "all lands subject to the Common Law Public Trust for commerce, navigation, fisheries, recreation, and other public purposes," where such lands include "tidelands, submerged lands, the beds of navigable lakes and rivers, and historic tidelands and submerged lands that are presently filled or reclaimed, and which were subject to the Public Trust at any time." In the common law, the doctrine traditionally protects in-water uses such as fishing and navigation, but has been extended to protect the environment and associated resources that affect trust lands, such as non-navigable tributaries supplying

⁵⁸ Reflection of wave energy can change the offshore wave patterns and diminish the quality of surfing waves. Often referred to as "backwash," reflected wave energy causes waves to break in unpredictable ways, and disrupts the clean line and peel of waves that make Pleasure Point a particularly high quality surf break.

⁵⁹ The Commission awarded Santa Cruz County \$780,000 to complete a series of technical studies on sea level rise hazards, economic impacts, and adaptation pathways that will culminate in an LCP amendment on sea level rise.

⁶⁰ CCR Section 13577(f).

water to a lake, and groundwater resources that impact navigable waters.⁶¹ California recognizes public recreational access as a component of public trust resources.

As noted earlier, the Coastal Commission is guided by the principle articulated in the *Milner* case that an upland owner cannot unilaterally and permanently fix the tidelands boundary with shoreline armoring, such as the armoring part of this proposal. Even so, as discussed above, the public's ability to recreate on the shoreline area will inherently be impacted as a direct result of the project, especially over time, which will interfere with public trust uses. These impacts on public trust uses are an additional impact basis for requiring mitigation.

Public Recreational Access Conclusion

As described earlier, the proposed project will have identifiable impacts on public recreational access (and inherently public trust resources), including loss of beach/shoreline recreational use area, incremental loss of such area due to the "coastal squeeze," and a loss of sand in the sandy supply system (again, see discussion above in the "Coastal Hazards" section, incorporated here by reference). The project will also have temporal public recreational access impacts during construction. 62 But the project will also provide significant public recreational access benefit, including: 1) formalizing a minimum 4-foot-wide, and wider where topography allows, public pathway across the property (see Special Condition 1); 2) removing existing historic armoring at the site and establishing an improved public viewing area/platform; 3) establishing stairway access at either end of the pathway segment on this site, and 4) offering a public access easement over the formalized pathway, viewing area/platform, and stairs (see **Special Condition 4**). In other words, the present-day conditions of a hazardous. difficult-to-traverse bedrock shelf and beach area currently occupied with concrete debris and historic armoring would be significantly improved for the general public. Further, the public access path here is positioned well to connect to future public access improvements at either end on neighboring properties, moving closer to realizing the vision of a continuous California Coastal Trail around Pleasure Point.

As such, the Commission finds that the project mitigation package appropriately mitigates for the public recreational access impacts associated with the proposed

⁶¹ See Marks v. Whitney, 6 Cal.3d 251, 259-260 (1971), Nat'l Audubon Soc. v. Super. Ct., 33 Cal. 419, 436-437 (1983), and Envtl. Law Found. v. State Water Res. Control Bd., 237 Cal. Rptr. 3d 393 (2018), respectively.

⁶² The project would involve the use of large equipment and significant construction that would generally intrude and negatively impact the aesthetics, ambiance, serenity (and use at all, as it relates to the pathway/overlook fronting the project) of the public recreational experience during the expected year or so of construction. Any future maintenance episodes would lead to similar construction impacts, but to less expected degrees. Although these construction impacts can be minimized by appropriate construction controls, including as proposed by the Applicants and as modified to include typical construction parameters applied by the Commission (see Special Condition 2), they cannot be eliminated. In fact, while the Applicants can be made to restore all disturbed recreational areas following construction, cleaning up one's construction mess does not compensate for the negative public recreational access impacts over the duration of construction. In some cases, the Commission has required compensatory mitigation for this type of temporal impact (see, for example, CDP 3-02-107 (Podesto) where a seawall project was required to fund \$20,000 worth of public access repairs to offset three months of similar such construction impacts).

project, and the proposed package entails upgrades to public access for this area, both rejuvenating the area, and enhancing access for the general public. Therefore, as conditioned, the proposed projects can be found consistent with the Coastal Act's access and recreation provisions cited above.

3. Public Views

Applicable Coastal Act Provisions

Coastal Act Section 30251 states:

Section 30251. The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural landforms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

Consistency Analysis

Much of the urbanized Live Oak coastline (between the Harbor and through to the City of Capitola) is armored, including via vertical concrete seawalls, riprap revetments, retaining walls, and sometimes a combination of two or more armoring types/features with combination armoring features/structures especially present along Pleasure Point Drive. The majority of the armoring fronting the Live Oak coastal areas was installed prior to the Coastal Act and/or in response to the 1982-1983 El Niño, and thus it is quite dated both visually and structurally. Recently authorized seawalls, however, including the Pleasure Point seawall (which spans approximately 1,100 linear feet), and the Iceplant LLC seawall (which spans approximately 140 linear feet), have been camouflaged (via sculpted and colored shotcrete facing) in an effort to replicate the look of a natural bluff face.

In terms of the proposed project, the existing public viewshed and landform is currently degraded, including as it has been artificially manipulated for many years (see site area photos in **Exhibit 2**, and time series air photos in **Exhibit 3**). Some of the existing concrete and gunite armoring is cracked and falling apart, and there are exposed voids and chunks of dislodged components from previously authorized and/or pre-Coastal armoring scattered along the shoreline. As proposed and conditioned, errant armoring and debris would be removed, which would enhance the existing visually degraded state, as well as making it safer for public access. Specifically, the proposed project would include removal of a significant portion of the existing deteriorated armoring (including notably the portions of the eroded shotcrete surfacing of the bedrock shelf and most of the 1930s era seawall/retaining wall) (codified and further refined in **Special Condition 1**).

In addition, the Applicants would sculpt, color, and texture the concrete surfaces of the project to approximate natural bluffs (see photo simulations in **Exhibit 5).** If done

correctly, such measures can help to camouflage large slabs of concrete (although, even then, there can be changes to natural aesthetics more broadly). However, when done poorly, it reinforces the unnatural element present in the back beach area. This approval is conditioned to ensure that camouflaging elements are of the highest caliber and maintained over time, and requires screening vegetation that would cascade down the upper portion of the seawall to further camouflage the connection between the armoring structure and the Applicants' lower patio area (see **Special Conditions 1 and 6**). Finally, the private accessway to the pathway area would be modified to better camouflage such features and to better blend with overall 'bluff-like' nature of the project to the greatest extent possible (**see Special Condition 1**).

In short, the proposed project would enhance the currently degraded public view at this location via removal of detritus/remnant armoring and replacement armoring that is uniform in design to create an integrated and seamless experience, one that is required to visually mimic the natural bluff landform to the greatest extent feasible. Therefore, as conditioned, the proposed project can be found consistent with Coastal Act Section 30251.

4. Marine Resources

Applicable Coastal Act Provisions

The Coastal Act protects the marine resources and habitat at this location and offshore. Coastal Act Sections 30230 and 30231 provide:

Section 30230. Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231. The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

In addition, Section 30233 only allows for fill of coastal waters in certain limited circumstances, and only when such projects are the least environmentally damaging feasible projects, and where all unavoidable impacts are mitigated. Section 30233 states in applicable part:

Section 30233. (a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other

applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following: (1) New or expanded port, energy, and coastaldependent industrial facilities, including commercial fishing facilities, (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps. (3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities. (4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines. (5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas. (6) Restoration purposes. (7) Nature study, aquaculture, or similar resource dependent activities. ...

Section 30230 and 30231 require that marine resources "be maintained, enhanced, and where feasible, restored." Further, uses of the marine environment must be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes. And Section 30233 limits the situations when coastal waters can be filled.

Consistency Analysis

The proposed project would take place at the shoreline interface, including in the intertidal area and areas of submerged land. Coastal armoring has, at times, been shown to have significant impact on the habitat, biodiversity and functioning of beach and shoreline ecosystems, as well as their long term health and resilience, even if these effects are oftentimes difficult to quantify, including because beaches and shorelines are quite dynamic. Sandy beach ecosystems support unique and often under-appreciated biodiversity and provide a suite of ecosystem services and functions. These functions include rich invertebrate communities and food webs that are prey for birds and fish, buffering of wave energy by stored sand, filtration of large volumes of seawater, detrital and wrack processing and nutrient recycling, and the provision of critical habitat and resources for declining and endangered wildlife, such as shorebirds and pinnipeds.

⁶³ See, for example, Defeo, O., McLachlan, A., Schoeman, D.S., Schlacher, T.A., Dugan, J., Jones, A., Lastra, M. and Scapini, F., 2009. Threats to sandy beach ecosystems: a review. Estuarine, coastal and shelf science, 81(1), pp.1-12; and Dugan, J.E., Hubbard, D.M., Rodil, I., Revell, D.L., Schroeter, S., 2008. Ecological effects of coastal armoring on sandy beaches. Marine Ecology 29, 160–170.

⁶⁴ See, for example, Nel, R., Campbell, E.E., Harris, L., Hauser, L., Schoeman, D.S., McLachlan, A., du Preez, D.R., Bezuidenhout, K. and Schlacher, T.A., 2014. The status of sandy beach science: Past trends, progress, and possible futures. Estuarine, Coastal and Shelf Science, 150, pp.1-10.

⁶⁵ See, for example, McLachlan A, Brown AC (2006) The ecology of sandy shores. 2nd edn, Academic Press, Amsterdam, 392 pp.; and Hubbard D.M., J.E. Dugan (2003) Shorebird use of an exposed sandy beach in southern California. Estuarine, Coastal and Shelf Science 58S:169–182.

In terms of the requirements of Sections 30230 and 30231, the proposed project is expected to result in both temporary and longer-term impacts to these surrounding coastal water and beach/shoreline habitat areas, both from construction activities and the completed project. In terms of construction, the beach/intertidal area at the base of the bluffs will be occupied by construction equipment and activities throughout the duration of construction (estimated at approximately 12-14 months). During such construction time, the resource values of the affected area may be reduced. Construction noise, vibration, and overall activities and human presence are expected to adversely affect marine species and their habitat inside and adjacent to the established construction zone. Furthermore, although the direct construction impacts are expected to end when the construction activities conclude, the effect of such construction in and adjacent to coastal waters on the short-term productivity of the affected areas could extend beyond the construction timeline. In other words, the biological productivity during the construction period may not correct itself instantaneously when construction concludes, rather its effects may linger for some time thereafter, affecting coastal waters/intertidal values until previous productivity levels have been reestablished. In addition, the amount of time necessary for the reestablishment of coastal waters/intertidal value also represents lost productivity (because this time period when the areas might otherwise be thriving would not be available as a foundation for encouraging such values). Thus, it's possible that there may be indirect and direct construction impacts, and also a "hangover" period of reduced habitat productivity as the habitat recovers over time. These impacts can be minimized by appropriate construction methods and BMPs during construction (see **Special Condition 2**), but they likely cannot be eliminated entirely.

Longer term, two impacts on marine resources can be expected. First, the armoring is likely to degrade (as has the existing armoring at the project site), both on a slower and more consistent basis over time as well as episodically in larger chunks. Although concrete is more inert than a number of other materials, it could still result in changes to the surrounding waters' water quality and habitat values, perhaps most obviously if larger chunks are dispersed into the ocean. Secondly, and as described earlier, armoring creates a barrier to natural shoreline migration, which leads to the types of sand and shoreline impacts previously described, including a narrowing and disappearing beach/shoreline area overall. That same narrowing and disappearing beach/shoreline also changes shoreline habitat conditions, including as it relates to accumulating sand and supporting intertidal and near tidal biodiversity and wildlife. 66 Moreover, as climate change causes the seas to rise ever faster, such areas and their habitat values will be lost and 'drown out' at an increasingly faster pace when the shoreline is armored, as here in this case. Section 30270 of the Coastal Act, read together with Sections 30230 and 30231, requires the Commission to assess and, to the extent feasible, avoid and mitigate these types of impacts, including as it relates to sea level rise.

In terms of Section 30233, as described above, portions of the project appear to be

⁶⁶ See, for example, Dugan, J.E., Emery, K.A., Alber, M., Alexander, C.R., Byers, J.E., Gehman, A.M., McLenaghan, N. and Sojka, S.E., (2017). Generalizing ecological effects of shoreline armoring across soft sediment environments. Estuaries and Coasts, 1-17.

located partially within coastal waters, and the project does not provide for one of the seven enumerated and allowed types of uses/development in coastal waters. However, Section 30235 provides more specific Coastal Act direction when armoring is allowed, and that more specific manifestation takes precedence over the allowed types of fills under Section 30233. In other words, if armoring meets 30235 tests for approval, as it does here, then that can serve as an override to the types uses/development that can fill coastal waters, and that override applies to this case. This override does not, however, negate meeting other Section 30233 requirements as much as possible, including that the project be the least environmentally damaging feasible alternative, and that the project include feasible mitigation measures to minimize adverse environmental effects.⁶⁷

In short, the project would occur in and adjacent to important marine resources, and is expected to result in some unavoidable marine resource impacts. These impacts are allowable both because the Coastal Act includes an armoring override, and because the project incorporates appropriate mitigation measures (as described in previous findings). Therefore, as conditioned, the proposed project can be found consistent with the above referenced Coastal Act requirements.

5. Violation

As described earlier, violations of the Coastal Act exist on the subject property including, but not necessarily limited to, failure to apply for a follow-up CDP to either authorize or remove the temporary development that was installed under ECDP 3-98-043-G in a timely manner. The then permittees (not the current Applicants) were required to either submit an application for a follow-up CDP to authorize such temporary development within 60 days of receiving the ECDP, or, alternatively, to remove the temporary development installed and restore the area within 150 days of receiving the ECDP. They failed to do either of these by the dates specified, resulting in the work becoming unpermitted development back in 1998.

Additionally, other Coastal Act violations exist on the subject property including, but not necessarily limited to, reinforcement and patching of the private beach access stairway that descends the seawall and the stairway landing on the bedrock shelf with concrete that occurred on or around March 3, 2021 without benefit of a CDP. As previously noted, in response to this unpermitted reinforcement and patching of the stairway, Santa Cruz County issued a Stipulation and Order⁶⁸ on June 30, 2022 that included requiring the Applicants to submit this CDP application to resolve the violations. To date, the Applicants have complied with this Stipulation and Order, including by

⁶⁷ Note that other non-marine resource/habitat resource issues associated with such fill are addressed in previous findings. Note too that the requirements of Section 30233(a) regarding mitigating impacts and identifying the least environmentally damaging feasible alternative would still apply. The intent of this finding is to explain the distinction between Sections 30233(a) and 30235 as it relates to armoring occupying coastal waters. Giving precedence to the more particular provisions of Section 30235 over the more general provisions of Sections 30233(a) is in accordance with generally applicable principles of California law (see, for example, Civil Code Section 3534 ("Particular expressions qualify those which are general")).

⁶⁸ Santa Cruz County Code Compliance Case No. 22-NV24594.

submitting a CDP application to the Commission in December 2022, and have been working with Commission staff in the time since to bring forth the current proposal which both recognizes and authorizes, after-the-fact, prior ECDP development from 1998 and seeks to resolve the unpermitted development undertaken in 2021. As described above, the conditions of approval of this application require the Applicants to construct significant public access improvements in connection with the development authorized by this project. In particular, **Special Condition 1(a)** requires construction of a minimum 4-foot-wide public pathway (that may eventually connect to adjacent pathways), an overlook, and two beach/surf stairways. Additionally, the Applicants have agreed to remove concrete debris from the beach area that has accumulated seaward of the Applicants' property due to the deterioration of the older armoring structures in the area (see **Special Condition 1(d)**). Issuance of the CDP and the subsequent performance of the development authorized by the permit in compliance with all of the terms and conditions of the permit will result in resolution of the violations described above, going forward.

Commission review and action on this CDP does not constitute a waiver of any legal action with regard to these violations (or any other violations), nor does it constitute an implied statement of the Commission's position regarding the legality of the development undertaken on the subject site without a CDP, or of any other development, other than the development approved herein. In fact, approval of this CDP is possible only because of the terms and conditions of the CDP, and the Applicants' presumed subsequent compliance with said terms and conditions, and failure to comply with these terms and conditions in conjunction with the exercise of the CDP would also constitute a violation of the CDP and of the Coastal Act. Accordingly, the Applicants remain subject to enforcement action just as they were prior to this CDP approval for the violations described herein and for any violations of this CDP, unless and until the terms and conditions of this CDP are satisfied.

6. Other

Public Rights

The area associated with this CDP application has been used by the public for access for many years, and may include land to which the public has an access right and/or outright owns. The Commission here does not intend its action waive any public rights that may exist on the affected property, and thus, the CDP is so conditioned to require the Applicants to agree and acknowledge same, including that the Applicants shall not use the CDP as evidence of a waiver of any public rights that may exist on the property now or in the future (see **Special Condition 10**).

Disclosure

The CDP includes important required terms and conditions, including as it relates to mitigation, as well as ensuring the completed project is monitored and maintained, both to satisfy those mitigations that are integral the project's authorization, and to ensure that the public benefits of the project are provided. The project is also located in a hazardous location, and the property owner must assume all risks for development here. To ensure that the terms and conditions of approval are clear to the Applicants as well as any future owners, this approval requires that the CDP terms and conditions be

recorded as covenants, conditions, and restrictions against use and enjoyment of the property, and that all real estate disclosures include clear explanations of the CDP and its terms and conditions (see **Special Conditions 11 and 15**).

Indemnification

Coastal Act Section 30620(c)(1) authorizes the Commission to require applicants to reimburse the Commission for expenses incurred in processing CDP applications. Thus, the Commission is authorized to require reimbursement for expenses incurred in defending its actions on the pending CDP application in the event that the Commission's action is challenged by a party other than the Applicants. Therefore, consistent with Section 30620(c), the Commission imposes **Special Condition 14** requiring reimbursement for any costs and attorney fees that the Commission incurs in connection with the defense of any action brought by a party other than the Applicants challenging the approval or issuance of this CDP, or challenging any other aspect of its implementation, including with respect to condition compliance efforts.

Other Agency Approvals

The California State Lands Commission is responsible for determining the landward location and extent of the State's sovereign fee ownership of public trust lands and has jurisdiction and management authority over public trust lands, including all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The State Lands Commission also has review authority over public trust lands legislatively granted in trust to local governments. A portion of the proposed project is located below the mean high tide line and appears to be on public trust lands, necessitating State Lands review. In addition, the project may require authorization from several other entities, including the U.S. Army Corps of Engineers, Monterey Bay National Marine Sanctuary, Central Coast Regional Water Quality Control Board, and Santa Cruz County Community Infrastructure and Development Department.

To ensure that the Applicants are able to carry out the proposed project consistent with the terms and conditions of this CDP, and to ensure that the proposed project is authorized by all applicable agencies, **Special Condition 12** requires the Applicants to submit written evidence of these other agencies authorizations of the project (as conditioned and approved by this CDP) or evidence that such authorizations are not required.

Minor Changes

Although a great deal of thought and planning has gone into the proposed project, including as it is affected by CDP terms and conditions, oftentimes minor unforeseen issues present themselves in complicated projects of this nature, particularly as construction gets underway, and it is important that the CDP is nimble enough to account for potential minor changes. Thus, minor adjustments to special condition requirements that do not require a CDP amendment or a new CDP (as determined by the Executive Director) may be allowed by the Executive Director if such adjustments: (1) are deemed reasonable and necessary; and (2) do not adversely impact coastal resources (**Special Condition 16**).

Future Development

The project site presents complicated coastal resource issues, and is the site of past Commission approvals as well as this CDP, and the Commission finds that it is critical that any future development associated with the approved development be considered in that context. Thus, **Special Condition 13** specifies that none of the CDP exemptions that might be provided by Coastal Act Section 30610 (and/or related implementing regulations) will apply to the approved development, and any and all future proposed development related to this project, this project area, and/or this CDP will require new CDPs or CDP amendments that are processed through the Coastal Commission, unless the Executive Director determines that such CDPs or CDP amendments are not legally required.

E. California Environmental Quality Act (CEQA)

Section 13096 of Title 14 of the California Code of Regulations requires that a specific finding be made in conjunction with CDP applications showing the application to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment. Santa Cruz County, acting as the lead agency under CEQA, categorically exempted the proposed project from the provisions of CEQA (pursuant to Section 15301 of the CEQA regulations applicable to existing facilities).

The Coastal Commission's review and analysis of land use proposals has been certified by the Secretary of the Natural Resources Agency as being the functional equivalent of environmental review under CEQA (pursuant to Section 15251(c) of the CEQA regulations). The Commission has reviewed the relevant coastal resource issues with the proposed project, including relating to comments received to date, and has identified appropriate and necessary modifications to address potential adverse impacts to such coastal resources. All above findings are incorporated herein in their entirety by reference.

The Commission finds that only as modified and conditioned by this CDP will the proposed project avoid significant adverse effects on the environment within the meaning of CEQA. As such, there are no additional feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse environmental effects that approval of the proposed project, as modified, would have on the environment within the meaning of CEQA. If so modified, the proposed project will not result in any significant environmental effects for which feasible mitigation measures have not been employed consistent with CEQA Section 21080.5(d)(2)(A).

5. APPENDICES

A. Appendix A – Substantive File Documents⁶⁹

ECDP File 3-98-043-G

⁶⁹ These documents are available for review in the Commission's Central Coast District office.

B. Appendix B – Staff Contact with Agencies and Groups

- Santa Cruz County Community Development and Infrastructure Department
- Surfrider Foundation
- Save The Waves Coalition