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STAFF REPORT: CDP HEARING

Application Number: 3-16-0345

Applicants: Shigefumi and Amy Honjo

Project Location: On the beach and bluff seaward of 1307 West Cliff Drive (APN 003-284-05).

Project Description: Reconfiguration and approval of existing (and partially unpermitted) shoreline armoring (consisting of riprap and gabion baskets) within a reduced footprint on the beach and bluff.

Staff Recommendation: Approval with Conditions.

SUMMARY OF STAFF RECOMMENDATION

The project site is located seaward of on an oceanfront, blufftop parcel occupied by the only residence (and a separate but associated cottage unit) on the seaward side of approximately 2.5 miles of West Cliff Drive in the City of Santa Cruz. In addition to serving as a vehicular roadway, West Cliff Drive is also heavily used as a bike and pedestrian segment of the California Coastal Trail (CCT), with otherwise unobstructed views of the ocean across the Monterey Bay National Marine Sanctuary. The existing residence and cottage sit on a bluff that is reinforced by partially unpermitted riprap placed at its toe in the early 1980s and other riprap permitted in the early 1990s. The parcel is currently zoned in the LCP as Ocean Front Recreational, a designation that does not allow for single-family dwellings (though at the time these structures were built the parcel was zoned for single-family dwellings, prior to the Coastal Act and prior to LCP certification), and therefore the existing house and cottage are legal nonconforming structures and uses. The parcel also is also currently zoned under the LCP with Shoreline Protection and

West Cliff Drive overlays, the LCP objectives of which are to ensure the protection of coastal resources and views, and to enhance public access.

In the wake of severe El Niño storms in the early 1980s, the prior property owner installed fairly substantial shoreline armoring on the beach and bluffs seaward of the residential development atop the bluff at the subject location, including rock-filled gabion baskets and approximately 850 tons of riprap, in order to protect the residence and cottage. Although that prior owner initiated an after-the-fact CDP application at that time, that process was never completed. Subsequently, in 1992, the prior owner received a different CDP to place some 300 cubic yards (cy) of riprap at the site (CDP 3-92-078). At that time, the record indicates that the Commission was unaware that the early 1980s unpermitted work had not been permitted, and thus the Commission's CDP did not evaluate or approve that prior work at that time. Thus, 300 cy of riprap has been legally permitted at the site, but the remainder of the armoring remains unpermitted, and is currently considered a violation of the Coastal Act that is subject to a Commission enforcement case (V-3-15-0124). The current owners and Applicants acquired the property in July of 2014, and thus inherited the violation. This CDP application is intended to resolve that violation.

Specifically, the Applicants propose to modify the existing (and mostly unpermitted) armoring by: 1) removing approximately 500 cy of riprap; 2) retaining approximately 700 cy of riprap in a reduced footprint; 3) removing approximately 36 linear feet of gabion baskets (with a volume of approximately 32 cy); and 4) retaining approximately 39 linear feet of gabion baskets (with an approximate volume of 78 cy). The retained riprap and gabion baskets are necessary in order to protect the existing cottage on the site, which is in danger from erosion, but are not necessary to protect the redeveloped main house. Both the cottage and the main house are also proposed for improvements under a separate CDP application also being heard at the July Commission meeting (CDP Application A-3-STC-16-0016), wherein the cottage would be remodeled (but not to a level considered to be redevelopment requiring that it meet all required setbacks; by not rising to the level of redevelopment the cottage remains an 'existing structure' pre-dating the Coastal Act for which shoreline protection can be considered under Section 30235) and the house redeveloped (thus requiring that it meet all required setbacks and not being entitled to shoreline protection pursuant to Section 30235). In other words, the cottage would retain its status as an existing structure pre-dating the permitting requirements of the Coastal Act, but the house would not, and only the cottage would be afforded armoring under Coastal Act Section 30235.

Staff, including the Commission's Senior Coastal Engineer, Dr. Lesley Ewing, has reviewed the reduced-scale armoring proposal and concurs that it is the preferable alternative in this case to minimize significant adverse impacts to coastal resources while protecting the existing endangered cottage. It will reduce armoring coverage to about half of that that exists now (albeit what exists now is partially unpermitted), and free up approximately 2,000 square feet of beach area. In addition, staff and the property owners have worked closely and are in agreement on an appropriate mitigation package to offset coastal resource impacts from both the armoring that has been in place since the early 1980s and the reduced scale armoring that would be retained moving forward. These measures include the Applicants providing for two public stairway improvement projects, a public pathway repair, and public park improvements along West Cliff Drive, as well a public access easement over the unburdened beach and rock shelf areas on the site, 2,000 square feet of which will be free of armoring for the first time in nearly four decades.

Therefore, staff recommends that the Commission approve a CDP for the proposed project, including with conditions designed to: 1) ensure that the project is the minimum necessary to protect the existing cottage; 2) provide enhanced public recreational access amenities at nearby locations along West Cliff Drive; 3) include other agency approvals; 4) require assumption of risk, waiver of liability and indemnity agreements for coastal hazards; 5) require monitoring and maintenance of the as-built project; 6) provide for appropriate coastal bluff landscaping, including only low-growing native blufftop plants as well as ‘creeping’ plants able to help provide visual screening of the armoring; 7) include appropriate best management practices to protect water quality and public access during construction, and; 8) record a deed restriction against the property governed by this permit. As conditioned, the project can be found consistent with the Coastal Act.

Therefore, as conditioned, the project is consistent with the Coastal Act, and staff recommends **approval** of the CDP. The motion is found on page 5 below.

Staff Note: Unpermitted Development

A Coastal Act enforcement case (V-3-15-0124) was opened in 2015 for the unpermitted installation of shoreline armoring in 1983 by the prior owner. That prior owner subsequently pursued an ATF CDP application (CDP application number 3-83-152), but never completed the application process, and thus the armoring installed by the prior owner is not considered permitted. The Applicants seek to resolve these violations through this application, and the CDP is conditioned to eliminate all unnecessary armoring, and authorize the minimum necessary armoring to protect the existing cottage, while mitigating for all project impacts to coastal resources, including those that accrue due to the presence of the unpermitted armoring since the early 1980s. Approval of this application pursuant to the staff recommendation, issuance of the CDP, and the Applicant’s subsequent compliance with all terms and conditions of the permit will result in resolution of the above described violations.

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EXHIBITS

Exhibit 1 – Project Vicinity Map

Exhibit 2 – Project Site Photos

Exhibit 3 – Applicants’ Alternatives Analysis

Exhibit 4 – Applicants’ Proposed Project Plans

Exhibit 5 – Mitigation Package Public Access Improvement Projects

Exhibit 6 – Public Access Easement Location

I. MOTIONS AND RESOLUTIONS

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 3-16-0345 pursuant to the staff recommendation, and I recommend a **yes** vote.*

***Resolution to Approve CDP:** The Commission hereby approves Coastal Development Permit Number 3-16-0345 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.*

II. 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 of 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.

III. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

1. **Revised Final Armoring Plans.** PRIOR TO ISSUANCE OF THE CDP, the Permittees shall submit two full-size sets of Revised Final Armoring Plans to the Executive Director for review and written approval. The Plans shall be prepared by a licensed professional or professionals (i.e., geotechnical engineer, surveyor, etc.), shall be based on current professionally surveyed and certified topographic elevations for the entire site, and shall include a graphic scale. The Revised Final Armoring Plans shall be in substantial conformance with the proposed plans (titled “Reduced Coastal Protection Alternative to Only Protect the Cottage” as set forth in the Geotechnical Information and Coastal Protection Alternatives Analysis dated January 16, 2018, and dated received in the Coastal Commission’s Central Coast District Office on January 24, 2018; see **Exhibit 4**), except that they shall be modified as required below:
 - (a) **Riprap and Gabion Removal and Restoration.** All riprap, gabion baskets, and related armoring debris that are not part of the approved reconfigured revetment and gabion basket array shall be removed and disposed of at an appropriate inland location and the affected areas restored to natural conditions.
 - (b) **Riprap Restacking.** The riprap approved to remain shall be restacked at a 1:1 slope and shall be sited and designed to use the minimum amount of riprap necessary to protect the cottage.
 - (c) **Landscape Screening.** Native bluff species capable of trailing vegetation (e.g., Carmel creeper, *Ceanothus griseus* var. *horizontalis*) shall be planted along the three-foot-wide blufftop area adjacent to the portion of the bluff edge that is located above the retained gabion baskets and riprap. These bluff edge plants shall be chosen and planted in such a way as to cover and trail over the armoring as much as possible at maturity in order to help provide visual softening of the armoring features. All invasive and non-native species in this three-foot-wide blufftop area, including iceplant, shall be removed. The plans shall include certification from a licensed landscape professional experienced with native species indicating that all plant species to be used are native and non-invasive. All plants shall be replaced as necessary to maintain the approved vegetation and its screening capacity over the life of the project. No plant species listed as problematic and/or invasive by the California Native Plant Society, the California Invasive Plant Council, or as may be so identified from time to time by the State of California, and no plant species listed as a “noxious weed” by the State of California or the U.S. Federal Government, shall be planted or allowed to naturalize or persist in this area of the site.

All requirements above and all requirements of the approved Revised Final Armoring Plans shall be enforceable components of this CDP. The Permittees shall undertake development in conformance with this condition and the approved Revised Final Armoring Plans unless the Commission amends this CDP or the Executive Director provides a written determination that no amendment is legally required for any proposed minor deviations.

2. **Public Access and Recreation Projects.** PRIOR TO ISSUANCE OF THE CDP, the Permittees shall submit evidence to the Executive Director demonstrating that funding for the following City of Santa Cruz public access and recreation projects along West Cliff Drive has been provided to the City:
 - (a) **Stairway Repair.** Two stairway repair projects, one near the intersection of Sunset Avenue and West Cliff Drive, and one at Its Beach;
 - (b) **Pathway Widening.** West Cliff Drive pathway widening between Almar Avenue and Swanton Boulevard; and
 - (c) **Park Improvements.** Pathway improvements in Bethany Curve Park from West Cliff to Oxford Way.

The sole purpose of the funds shall be for the public access and recreational projects identified above (or equivalent projects; i.e. project that provide an equivalent level of access to and along the shoreline, such as other stairway repairs to ensure vertical access, or other path widening, or park improvement projects) as identified by the Executive Director should development of these projects become not possible). All funds and any accrued interest shall be used for the above-stated purposes, in consultation with the Executive Director, within three years of the date of this approval (i.e., by July 12, 2021.) PRIOR TO THE EXPENDITURE OF ANY FUNDS, the Executive Director shall review and approve the proposed use of the funds as being consistent with the intent and purpose of this condition.

3. **Construction Plan.** PRIOR TO ISSUANCE OF THE CDP, the Permittees shall 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 public access, including public parking, and other coastal resources, including by maximizing use of the developed blufftop portions of the Permittees' property for construction staging and materials storage, and minimizing use of public properties and public use areas for construction-related purposes as much as possible. Special attention shall be given to siting and designing construction areas in order to minimize impacts on the ambiance and aesthetic values of the West Cliff Drive recreational trail, including but not limited to public views across the site.
 - (b) **Construction Methods.** The Construction Plan shall specify the construction methods to be used, including all methods to be used to keep construction areas separated from public properties and public use areas as much as feasible (including through use of unobtrusive fencing and/or other similar measures to delineate construction areas), including verification that equipment operation and equipment and material storage will not significantly degrade public views during construction. The Plan shall limit construction activities to avoid coastal resource impacts as much as possible.

- (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. 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 are prohibited.
- (d) **Construction BMPs.** The Construction Plan shall identify the type and location of erosion control/water quality best management practices that will be implemented during construction to protect coastal water quality and related coastal resources, 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. Similar apparatus shall be applied on the beach 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 equipment.
 - (2) **Equipment BMPs.** Equipment washing, refueling, and/or servicing shall take place at an appropriate off-site location to prevent leaks and spills of hazardous materials at the project site.
 - (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 work day.
 - (5) **No Intertidal Grading.** Grading of intertidal areas is prohibited, except removal of existing concrete, riprap, and rubble is allowed in these areas.
 - (6) **Rubber-tired Construction Vehicles.** Only rubber-tired construction vehicles are allowed on the beach, except track vehicles may be used if the Executive Director determines that they are required to safely carry out construction. When transiting on the beach, all such vehicles shall remain as close to the bluff edge as possible and avoid contact with ocean waters.
 - (7) **Construction Material Storage.** All construction materials and equipment placed seaward of the bluffs 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 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 coastal protection/bluff as possible, and are minimized in their extent.
- (e) **Restoration.** All sandy beach and other public recreational use areas and all beach 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.
 - (f) **Construction Site Documents.** The Construction Plan shall provide that copies of the signed CDP and the approved Construction Plan be maintained in a conspicuous location at the construction job site at all times, and that 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.
 - (g) **Construction Coordinator.** The Construction Plan shall provide that a construction coordinator be designated to be contacted during construction should questions arise regarding the construction (in case of both regular inquiries and emergencies), and that his/her contact information (i.e., address, phone numbers, email address, etc.) including, at a minimum, a telephone number (with message capabilities) and an email that will be made available 24 hours a day for the duration of construction, is 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.
 - (h) **Construction Specifications.** The construction specifications and materials shall include appropriate penalty provisions that require remediation for any work done inconsistent with the terms and conditions of the CDP.
 - (i) **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.

Minor adjustments to the above Construction Plan requirements may be allowed by the Executive Director if such adjustments: (1) are deemed reasonable and necessary; and (2) do not adversely impact coastal resources. All requirements above and all requirements of the approved Construction Plan shall be enforceable components of this CDP. The Permittees shall undertake development in conformance with this condition and the approved Construction Plan, unless the Commission amends this CDP or the Executive Director

provides a written determination that no amendment is legally required for any proposed minor deviations.

4. As-Built Plans. WITHIN THREE MONTHS OF COMPLETION OF CONSTRUCTION, the Permittees shall submit two copies of As-Built Plans to the Executive Director for review and written approval showing all development authorized by this CDP; all property lines; and all shoreline armoring elements. The As-Built Plans shall be substantially consistent with the approved Revised Final Armoring Plans identified in Special Condition 1. 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 permitted shoreline armoring and landscaping. Such photographs shall be at a scale that allows comparisons to be made with the naked eye between photographs taken in different years 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 markers from inland surveyed benchmarks for use in future monitoring efforts. 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 armoring has been constructed in conformance with the approved Revised Final Armoring Plans.

5. Authorization Duration and Other Provisions.

(a) Duration of Authorization. This CDP authorizes the armoring (consisting of the approved riprap and gabion baskets) only for the cottage, but not the main house, until the time when the cottage (as approved to be remodeled per CDP A-3-STC-16-0016) is either: (1) redeveloped; (2) no longer present; or (3) no longer requires armoring, whichever occurs first. If any of those occur, then the Permittees shall submit a complete CDP amendment application to the Coastal Commission to remove the armoring. As used in this condition, “redevelopment” is defined to include: (1) additions to the existing cottage, (2) exterior and/or interior renovations, and/or (3) demolition of the existing cottage, or portions thereof, which result in:

1. Alteration of any component of the foundation beyond the work approved per CDP A-3-STC-16-0016; or
2. Alteration of 12% or more of the exterior walls beyond the work approved per CDP A-3-STC-16-0016; or
3. Alteration of 50% or more of non-foundation or non-exterior-wall major structural components including floor and roof structures, or a 50% or more increase in floor area. Alterations are not additive between individual major structural components; however, changes to individual major structural components are cumulative over time from the date of approval of CDP A-3-STC-16-0016, including the major structural components authorized under this permit; or

4. Demolition, renovation or replacement of less than 50% of non-foundation or non-exterior-wall major structural components where the proposed alteration would result in cumulative alterations exceeding 50% or more of the major structural components, taking into consideration alterations approved pursuant to CDP A-3-STC-16-0016 and any amendments to that CDP; or an alteration that constitutes less than 50% increase in floor area where the proposed alteration would result in a cumulative addition of greater than 50% of the floor area, taking into consideration previous additions approved pursuant to CDP A-3-STC-16-0016 and any amendments to that CDP or any other subsequent approvals.
- (b) **Armoring Modifications.** If the Permittees apply for a separate CDP or an amendment to this CDP to enlarge the armoring to further protect the cottage (as approved to be remodeled per CDP A-3-STC-16-0016), or to perform repair work affecting 50 percent or more of the armoring, the Permittees shall be required to provide additional commensurate mitigation for the impacts of the enlarged or reconstructed armoring on public views, public recreational access, shoreline processes, and all other affected coastal resources that have not already been mitigated through this CDP.
- (c) **Amendment Required for Retention of Armoring Beyond 20 Years.** If the Permittees intend to keep the armoring (consisting of the approved riprap and gabion baskets) in place after July 12, 2038, the Permittees must submit a complete CDP amendment application prior to July 12, 2038 that evaluates the coastal resource impacts associated with retention of the armoring beyond 20 years (including in relation to any potential modifications to the armoring approved by this CDP that may be part of such CDP amendment application or any prior CDP amendment) that have not already been mitigated for through this CDP, if any, and that includes commensurate mitigation for those additional coastal resource impacts.
- (d) **No Future Seaward Encroachment.** By acceptance of this CDP, the Permittees acknowledge and agree, on behalf of themselves and all successors and assigns, that no future enhancement, reinforcement, or any other activity affecting the shoreline armoring approved pursuant to this CDP, as described and depicted on the approved As-Built Plans (see **Special Condition 4**), shall result in any encroachment seaward of the authorized footprint of the shoreline armoring. By acceptance of this CDP, the Permittees waive, on behalf of themselves and all successors and assigns, any rights to such activity that may exist under Coastal Act Section 30235, the City of Santa Cruz Local Coastal Program, or other applicable laws.
6. **Monitoring and Reporting.** The Permittees shall ensure that the condition and performance of the approved as-built project are 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 of the armoring, and identify any structural or other damage or wear and tear requiring repair and/or maintenance (subject to **Special Condition 7** below) to maintain the armoring in a structurally sound manner and in its approved state. The monitoring evaluation shall also address landscape screening and any required remedial measures to ensure that the gabions and the upper portion of the riprap are screened from view, and shall identify any changes relative to the surveyed vertical and

horizontal reference markers. The riprap and gabions shall be monitored by a licensed civil engineer with experience in coastal structures and processes to ensure structural and cosmetic integrity, including evaluation of movement and sloughing. Monitoring reports covering the above-described evaluations, shall be submitted to the Executive Director for review and approval at five year intervals by May 1st of each fifth year measured from the year of approval of this CDP (with the first report due May 1, 2023, and subsequent reports due May 1, 2028, May 1, 2033, and so on) for as long as the approved as-built project exists at this location. The reports shall identify the existing configuration and condition of the armoring and screening landscaping, shall recommend actions necessary to maintain these project elements in their approved and/or required state, and shall include photographs with the date and time of the photographs and the location of each photographic viewpoint noted on a site plan. Subject to **Special Condition 7** below, actions necessary to maintain the approved as-built project in a structurally sound manner and in 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.

7. Future Repair and Maintenance Authorized. This CDP authorizes future repair and maintenance subject to the following:

- (a) **Maintenance.** “Repair” and/or “maintenance,” as it is understood in this special condition, means development that would otherwise require a CDP whose purpose is to maintain the armoring and landscape screening in its approved state. Repair and/or maintenance authorized under this CDP does not include physical enlargement and/or seaward encroachment of the approved armoring.
- (b) **Other Agency Approvals.** The Permittees acknowledge that these maintenance stipulations do not obviate the need to obtain permits from other agencies for any future maintenance and/or repair episodes.
- (c) **Maintenance Notification.** At least 30 days prior to commencing any maintenance event, the Permittees shall notify, in writing, planning staff of the Coastal Commission’s Central Coast District Office. The notification shall include: (1) a detailed description of the maintenance event proposed; (2) any plans, engineering and/or geology reports describing the event; (3) a construction plan that complies with all aspects of the approved construction plan (see Special Condition 3); (4) other agency authorizations; and (5) any other supporting documentation describing the maintenance event. The maintenance event shall not commence until the Permittees have been informed by planning staff of the Coastal Commission’s Central Coast District Office that the maintenance event complies with this CDP. If the Permittee has not been given a verbal response or sent a written response within 30 days of the notification being received in the Central Coast District Office, the maintenance shall be authorized as if planning staff affirmatively indicated that the maintenance complies with this CDP. The notification shall clearly indicate that maintenance is proposed pursuant to this CDP, and that the lack of a response to the notification within 30 days constitutes approval of it as specified in the CDP. In the event of an emergency requiring immediate maintenance, the notification of such emergency shall be made as soon as possible, and shall (in addition to the foregoing information) clearly describe the nature of the emergency.

- (d) **Maintenance Coordination.** Maintenance events shall, to the degree feasible, be coordinated with other maintenance events proposed in the immediate vicinity with the goal being to limit coastal resource impacts, including the length of time that construction occurs in and around the beach and bluff area, beach access points, and the West Cliff Drive recreational trail and corridor. As such, the Permittees shall make reasonable efforts to coordinate the Permittees' maintenance events with other adjacent events, including adjusting maintenance event scheduling as directed by planning staff of the Coastal Commission's Central Coast District Office.
- (e) **Restoration.** The Permittees shall restore all areas (including blufftop, bluff, and beach areas and all access points) impacted by construction activities to their pre-construction condition or better within three days of completion of construction. Any beach sand impacted shall be filtered as necessary to remove all construction debris from the beach. The Permittees shall notify planning staff of the Coastal Commission's Central Coast District Office upon completion of restoration activities to allow for a site visit to verify that all beach-area restoration activities are complete. If planning staff should identify additional reasonable measures necessary to restore blufftop, bluff, beach areas, or access points to their pre-construction state, such measures shall be implemented as quickly and reasonably as possible.
- (f) **Noncompliance Provision.** If the Permittees are not in compliance with the terms and conditions of any Coastal Commission CDPs (including this CDP) or other coastal authorizations that apply to the subject property, or are otherwise in violation of the Coastal Act, 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 shall not be allowed by this condition until the Permittees are in full compliance with all terms and conditions of said CDPs or other coastal authorizations and the Coastal Act.
- (g) **Emergency.** In addition to the emergency provisions set forth in subsection (c) above, nothing in this condition shall affect the emergency authority provided by 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).
- (h) **Duration of Covered Maintenance.** Future maintenance under this CDP is allowed subject to the above terms until July 12, 2028. Maintenance may be carried out beyond July 12, 2028 under the same existing terms if the Permittees request an extension of the maintenance provision of this CDP (i.e., **Special Condition 7**) prior to July 12, 2028, and if the Executive Director extends the maintenance term in writing. The intent of this provision is to allow for future repair and maintenance to occur without obtaining an otherwise necessary CDP throughout the term of this development authorization (see **Special Condition 5(a)**) unless there are changed circumstances that may affect the consistency of this maintenance authorization with the policies of Chapter 3 of the Coastal Act which may warrant obtaining a CDP for future repair and maintenance events associated with the approved armoring and landscaping.

8. Public Access Easement. PRIOR TO ISSUANCE OF THE CDP, the Permittees shall execute and record a document, in a form and content acceptable to the Executive Director, that provides for either of the following: (1) irrevocably offering to dedicate to a public agency or private association approved by the Executive Director an easement for public access and passive recreational use along the shoreline seaward of the blufftop at the project site; or (2) granting an easement to the City of Santa Cruz for public access and passive recreational use along the shoreline seaward of the blufftop at the project site. In either case, the Permittees shall submit evidence to the Executive Director that the document has been recorded, and such easement shall be located along the entire length of the property from the ambulatory mean high tide line landward to the base of the terrace portion of the bluff as generally depicted in **Exhibit 6**. It is recognized that both the mean high tide line and the bluff are ambulatory in nature and that, therefore, the area of beach and shoreline subject to this offer to dedicate a public access easement is also ambulatory in nature and will move inland/grow as the bluff erodes and the mean high tide moves inland.

If an offer to dedicate is recorded, the following shall apply: the document shall provide that the offer of dedication shall not be used or construed to allow anyone, prior to acceptance of the offer, to interfere with any rights of public access acquired through use which may exist on the property. The offer of dedication shall be irrevocable for a period of 21 years, such period running from the date of the recording.

The irrevocable offer to dedicate an easement to a public agency or private association approved by the Executive Director or grant of easement to the City of Santa Cruz shall be of a form and content approved by the Executive Director, free of prior liens that the Executive Director determines may affect the interest being conveyed, and free of any other encumbrances that may affect said interest. The offer to dedicate an easement shall run with the land in favor of the People of the State of California binding all successors and assignees. The recording document shall include legal descriptions and a map of both the Permittees' entire parcel and the easement area. This offer to dedicate or grant of easement to the City of Santa Cruz shall not be removed or changed without a Coastal Commission approved amendment to this CDP unless the Executive Director determines that no amendment is required.

9. Public Rights. The Coastal Commission's approval of this CDP shall not constitute a waiver of any public rights that may exist on the property. The Permittees shall not use this CDP as evidence of a waiver of any public rights that may exist on the property now or in the future.

10. Other Agency Approvals. PRIOR TO COMMENCEMENT OF CONSTRUCTION, the Permittees shall provide to the Executive Director copies of all permits, permissions, or other required authorizations from the U.S. Army Corps of Engineers, Central Coast Regional Water Quality Control Board, Monterey Bay National Marine Sanctuary, and the California State Lands Commission, or evidence that no permits, permissions, or other authorizations from these agencies are required. The Permittees shall inform the Executive Director of any changes to the Commission-approved project required by such agencies. Such changes shall not be incorporated into the project until the Permittees obtain a Commission amendment to this CDP, unless the Executive Director issues a written determination that no amendment is legally required.

- 11. Coastal Hazards Risk.** By acceptance of this CDP, the Permittees acknowledge and agree, on behalf of themselves and all successors and assigns, to all of the following:
- (a) **Coastal Hazards.** That the site is subject to coastal hazards including but not limited to episodic and long-term shoreline retreat and coastal erosion, high seas, ocean waves, tsunami, tidal scour, coastal flooding, landslides, bluff and geologic instability, bluff retreat, liquefaction and the interaction of same, many of which will worsen with future sea level rise.
 - (b) **Assume Risks.** To assume the risks to the Permittees and the property that is the subject of this CDP of injury and damage from such coastal hazards in connection with this permitted development.
 - (c) **Waive Liability.** To unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such coastal hazards.
 - (d) **Indemnification.** To indemnify and hold harmless the Coastal Commission, its officers, agents, and employees with respect to the Commission's approval of the development 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 coastal hazards.
 - (e) **Property Owners Responsible.** That any adverse effects to property caused by the permitted development shall be fully the responsibility of the property owners.
- 12. Real Estate Disclosure.** Disclosure documents related to any future marketing and sale of the subject property, including but not limited to specific marketing materials, sales contracts and similar documents, shall notify potential buyers of the terms and conditions of this CDP including, but not limited to, explicitly identifying all requirements associated with **Special Conditions 5, 6, 7, 8, 9 and 11**. A copy of this CDP shall be provided in all real estate disclosures.
- 13. Deed Restriction.** PRIOR TO ISSUANCE OF THE CDP, the Permittees shall submit to the Executive Director for review and approval documentation demonstrating that the Permittees have executed and recorded against the property governed by this permit a deed restriction, in a form and content acceptable to the Executive Director: (1) indicating that, pursuant to this CDP, 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 special conditions of this CDP as covenants, conditions and restrictions on the use and enjoyment of the property. The deed restriction shall include a legal description and site plan of the entire parcel or parcels governed by this CDP. The deed restriction shall also indicate that, in the event of an extinguishment or termination of the deed restriction for any reason, the terms and conditions of this CDP shall continue to restrict the use and enjoyment of the subject property so long as either this CDP or the development it authorizes, or any part, modification, or amendment thereof, remains in existence on or with respect to the subject property.

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 and/or its officers, employees, agents, successors and assigns challenging the approval or issuance of this CDP, the interpretation and/or enforcement of the CDP 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 and/or its officers, employees, agents, successors and assigns.

IV. FINDINGS AND DECLARATIONS

A. PROJECT DESCRIPTION

Project Location

The proposed project is located seaward and on the bluff face of an oceanfront blufftop parcel at 1307 West Cliff Drive. The blufftop area of the project site contains the only residential structures located seaward of West Cliff Drive in the City of Santa Cruz. The existing main house and guest cottage sit on a bluff that is partially reinforced by riprap at its toe and by gabion baskets on the bluff face (which form a gabion retaining wall). This riprap (most of which is unpermitted) and the gabion baskets (all of which are unpermitted) were placed in the early 1980's.

The parcel is zoned in the LCP as Ocean Front Recreational (OF-R), which does not allow for single-family dwellings (though at the time the main house and guest cottage were built the parcel was zoned for single-family dwellings, prior to the Coastal Act and prior to LCP certification), and therefore the existing main house and cottage are legal nonconforming structures and uses. The parcel is also zoned in the LCP with Shoreline Protection (SPO) and West Cliff Drive (WCDO) overlays, of which the LCP objectives are to ensure the protection of coastal resources and views, and to enhance public access along this stretch of coast. See **Exhibit 1** for location maps and **Exhibit 2** for photos of the site.

Project Background and History

The existing single-family dwelling and a guest cottage were both originally built around the 1940's. In 1982, in the wake of severe El Niño storms, the prior property owner (Dr. Larimore Cummins) installed substantial shoreline armoring on the beach and bluff face at the subject location, including gabion baskets and approximately 900 cubic yards (cy)¹ of riprap, in order to

¹ A subsequent application to retain the armoring after-the-fact, CDP Application No. 3-83-152, identified the amount as 850 tons of rip rap; however current estimates indicate the amount is closer to 900 cy (see **Exhibit 3**).

protect the main house and guest cottage.² Although that prior property owner initiated an after-the-fact CDP application at that time (CDP Application No. 3-83-152), that process was never completed and thus no CDP was ever issued to authorize the placement of the gabion baskets and 900 cy of riprap on the beach and bluff fronting the residence.³ Thus, the gabion baskets and 900 cy of riprap have been retained without benefit of a CDP for over three decades, and are currently considered a violation of the Coastal Act (see also Violation finding).

In 1992, Mr. Cummins applied for a different CDP to place some 300 cy of riprap at the site (CDP Application No. 3-92-078). That CDP was ultimately approved, and 300 cy of riprap was placed per the permit. At that time, the record indicates that the Commission was unaware that the early 1980s unpermitted armoring work had not been permitted, and thus the Commission's CDP did not evaluate or approve that prior work at that time. Thus, 300 cy of riprap has been legally permitted at the site, but the remainder of the armoring (i.e., about 900 cy of riprap and the gabion baskets) remains unpermitted, and is currently considered a violation of the Coastal Act that is subject to a Commission enforcement case (V-3-15-0124).⁴

The current owners and Applicants acquired the property in July of 2014, and thus inherited the violation. This CDP application is meant to resolve that violation.

Project Description

The Applicants propose to modify the existing (and mostly unpermitted) shoreline armoring by removing approximately 500 cy of riprap and retaining approximately 700 cy of riprap in a reduced footprint; and by removing approximately 36 linear feet of gabion wall (with a volume of approximately 32 cy) and retaining approximately 39 linear feet of gabion wall (with an approximate volume of 78 cy). The retained riprap and gabion baskets would be intended to protect the existing guest cottage only, and not the main house (see "Coastal Hazards" section below for further discussion). See **Exhibit 6** for the proposed project plans.

B. STANDARD OF REVIEW

The proposed armoring is located in the Commission retained CDP jurisdiction area, and is the subject of prior Coastal Commission permit applications and decisions, and thus the standard of review for this proposed armoring project is the Coastal Act.

² The current owners/Applicants assert that the shoreline protection work was done under a verbal emergency authorization from Coastal Commission staff, though no independent or subsequent written documentation has been identified to substantiate this claim, and Commission staff have not been able to corroborate that staff was involved at all in the prior owner's decision to install the shoreline protective work. Because of this, Commission staff do not consider there to have been any emergency authorization.

³ Thus, even assuming that Dr. Cummins did obtain some type of verbal emergency permit authorization from Coastal Commission staff to place the shoreline protection work on a temporary basis (and there is no evidence to suggest same), the armoring never received an actual Emergency CDP nor a regular CDP as required by law, and is unpermitted at this point either way.

⁴ The 1983 application (which was never completed and never acted upon) to recognize the unpermitted armoring stated that 850 *tons* of riprap was placed at the site in 1982. The current Applicants' geotechnical consultant estimates that there is a total of about 1,200 cy of riprap present at the site. Given that CDP 3-92-078 authorized the placement of 300 cy of riprap, the 1982 riprap is estimated to equal about 900 cy.

C. COASTAL HAZARDS

Coastal Act Section 30235 addresses the use of shoreline protective devices:

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. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.

Coastal Act Section 30253 addresses the need to ensure long-term structural integrity, minimize future risk, and to avoid landform altering protective measures for new development. Section 30253 provides, in part:

Section 30253. New development shall do all of the following:

- (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
- (2) 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.*

Consistency Analysis

Coastal Act Section 30235 acknowledges that seawalls, revetments, cliff retaining walls, groins and other such structural or “hard” methods designed to forestall coastal erosion also alter natural landforms and natural shoreline processes. Accordingly, with the exception of coastal-dependent uses, Section 30235 limits the construction of shoreline protective works via Section 30235 to those required to protect existing structures or public beaches in danger from erosion. The Coastal Act provides these limitations because shoreline structures 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.

Under Coastal Act Section 30235, a shoreline structure may be required if: (1) there is an existing structure; (2) the existing structure is in danger from erosion; (3) shoreline-altering construction is required to protect the existing endangered structure; and (4) the required protection is designed to eliminate or mitigate its adverse impacts on shoreline sand supply. The first three questions relate to whether the proposed armoring is necessary, while the fourth question applies to mitigating some of the sand-related impacts from it.

Existing Structure to be Protected

For the purposes of shoreline protective structures, the Coastal Act distinguishes between development for which shoreline armoring is required as a matter of law and development where it is not. Under Section 30253, new development is to be designed, sited, and built without creating a need for a shoreline protective device that would substantially alter natural landforms along bluffs and cliffs. Coastal development permittees for new shorefront development are thus

making a commitment to the public by virtue of compliance with 30253 (through the approved action of the Commission, and its local government counterparts) that, in return for building their project, the public will not lose public beach access, offshore recreational access, sand supply, or visual resources, as a result of substantial alteration of natural landforms along bluffs and cliffs, and that the public will not be held responsible for any future stability problems.

In addition, the Commission has in the past interpreted Section 30235 to apply only to existing principal structures. The Commission must always consider the specifics of each individual project, but has in the past found that accessory structures (such as patios, decks, gazebos, stairways, etc.) are not required to be protected under Section 30235 and can be protected from erosion by relocation or other less impactful means that do not involve shoreline armoring.

Originally, the Applicants proposed to redevelop both the main house and the cottage, including constructing completely new foundations for both, such that they would both be considered “new” development under the Coastal Act, and thus not entitled to shoreline armoring under Section 30235, as more specifically described in the related staff report A-3-STC-16-0016. However, because the cottage cannot be sited to meet the LCP’s required geologic setback, the Applicants are now proposing to limit the scope of work on the guest cottage to a level that would not be considered “redevelopment” (including limiting structural foundation work as discussed in more detail in the related staff report) which would thus allow *the cottage only* to be considered an “existing” structure for the purposes of 30235, and therefore entitled to protection under Section 30235 of the Coastal Act.⁵

Danger from Erosion

Section 30235 identifies ‘existing structures in danger from erosion’ for purposes of armoring evaluations under that Section, but it does not define the term “in danger.” There is a certain amount of 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. These risks can be exacerbated by such factors as sea level rise and localized geography that can focus storm energy at particular stretches of coastline. As a result, it is plausible to take the position that 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 justifies shoreline armoring per 30235. Lacking Coastal Act definition, the Commission has in the past evaluated the immediacy of the relevant threat in order to make a determination as to whether an existing structure is “in danger.” 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).

⁵ As discussed further in the staff report for A-3-STC-16-0016, the location of the main house (which will be redeveloped within that same existing footprint) meets the City of Santa Cruz LCP’s 50-year bluff development setback requirement. Furthermore, the house, once redeveloped, will no longer be an existing structure for the purposes of Coastal Act Section 30235, so the redeveloped house will not be entitled to shoreline protection. The guest cottage, however, does not meet the LCP’s 50-year bluff development setback requirement. If the cottage were redeveloped, it would no longer be an existing structure and would need to conform to the LCP’s bluff setback requirement. Thus, the cottage will be remodeled only (to an extent that does not constitute redevelopment) and will thus continue to be an existing structure entitled to shoreline protection under Section 30235.

The existing cottage sits atop a relatively uplifted marine terrace that is comprised of a blanket of soil that overlies a bedrock shelf. Both types of earth materials are exposed in patches in the bluff face that nearly encircles the peninsula of land upon which the cottage sits (see **Exhibit 2**). In the vicinity of the guest cottage, the bedrock in the bluff face has been undercut in the past by wave action, based upon field observations of the Applicants' geologist (see Zinn, revised August 25, 2016 letter regarding armoring) and an aerial oblique photograph shot in 1972, as well as in plans prepared in 1983 (by Ifland Engineering). The upper portion of the bluff on the property is also partially armored by an existing (unpermitted) gabion wall, also in the vicinity of the cottage. The lower bedrock exposure of the bluff is armored in the vicinity of the undercut ledge by an older (partially unpermitted) riprap revetment. The guest cottage is some 15 feet from the edge of the coastal bluff.

Based on the September 8, 2017 Wave Run up/Erosion and Bluff Instability report prepared by Haro Kasunich and Associates, absent any armoring, the guest cottage would be considered "in danger" for the purposes of 30235 based on a standard of safety to occupy/use in the next two to three storm cycles. Specifically, that report found:

Removing the riprap rock would expose the wave cut notch and jeopardize the foundation support of the gabion basket retaining wall. Wave run up would also impact the base of the gabion walls footing area. More disconcerting is the instability associated with an exposed wave cut notch and the loss of bedrock support. Within one or two winter coastal storm seasons the bedrock will collapse, the gabion basket retaining structure will lose its support and collapse, exposing near vertical terrace deposit scarp.... The top of the coastal bluff will recede under the guest cottage's shallow foundation.

In our opinion, removal of the riprap coastal protection at the base of the bluff will result in significant bluff instability resulting in loss of the gabion retaining wall and erosion and recession of the terrace deposit under the corner of the guest cottage. This could occur within 1 or 2 coastal storm winter seasons. The guest cottage stability will be jeopardized at that time.

The Commission's Senior Coastal Engineer, Dr. Lesley Ewing, has reviewed materials associated with this project, has visited the site, and concurs with this assessment. Therefore, the Commission concludes that the guest cottage is an existing structure in danger from erosion for purposes of Section 30235.

Feasible Protection Alternatives to a Shoreline Structure

The third Section 30235 test that must be met is that the proposed armoring must be "required" to protect the existing threatened structure. In other words, shoreline armoring can be permitted if it is the only feasible alternative capable of protecting the structure.⁶ When read in tandem with other applicable Coastal Act policies 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. Other alternatives typically considered include: the "no project" alternative;

⁶ 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.

abandonment of threatened structures; relocation of threatened structures; sand replenishment programs; drainage and vegetation measures on the blufftop; and combinations of each.

The Applicants prepared an alternatives analysis for the proposed project (*Geotechnical Information and Coastal Protection Alternatives Analysis*, HKA, September 9, 2017, which is attached hereto as **Exhibit 5**), but none of the non-armoring alternatives were either feasible, or capable of protecting the endangered existing structure. Alternative 3 of that analysis evaluated a reduced coastal protection structure described as follows:

... the coastal bluff at the property is armored with riprap along the lower bluff, and a gabion retaining wall along the upper bluff. Only a portion of the riprap and a portion of the gabion wall are necessary to protect the existing guest cottage from erosion during the next 50 years. A geologic study by Zinn and Associates has indicated that if all of the riprap and gabion walls are removed, the guest cottage will be in imminent danger from erosion in a very short period of time. The Zinn study also indicates that the main home on the property is unlikely to be impacted by coastal erosion during the next 50 years; even if all of the riprap and gabion walls is removed. We have evaluated the minimum amount of riprap and gabion wall that appears to be necessary to protect the guest cottage from erosion. That is depicted on Sheets 1 through 4 dated 9-5-2017 in Appendix A. Using a 50 year evaluation period, only the central segment of the gabion wall and riprap is necessary to protect the guest cottage, with a total riprap structure that is 68 feet long and a gabion structure above it that is 48[sic⁷] feet long.

While this alternative was originally rejected by the Applicants' experts, subsequent discussions between the Applicants and staff, including Dr. Ewing, have identified this alternative as preferable, and the minimum amount of armoring necessary to protect the cottage. Thus, the project meets the third test of Section 30235 of the Coastal Act.

Sand Supply/Beach/Shoreline Area Impact Assessment and Mitigation

The fourth test of Section 30235 that must be met in order to compel Commission approval is that shoreline structures 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 (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 shoreline. Others are more qualitative (e.g., impacts to the character of the shoreline and visual quality). Some of the effects that a shoreline structure may have on natural shoreline processes can be quantified, however, including: (1) the loss of the occupied 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

⁷ According to HKA, the "48 feet" referenced in the report regarding the length of gabion wall to be retained is a typographical error and should be 39 feet.

shoreline recreational area if the back-beach or bluff were to erode naturally.⁸ The first two calculations affect beach and shoreline use areas, and the third is related more explicitly to shoreline sand supply impacts, but all three impact public recreational access to the beach and shoreline recreational area.

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 system 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 unpermitted armoring that has been in place since 1982 has covered an estimated 3,976 square feet since that time. In addition, as discussed in the project description section above and in order to protect the existing guest cottage, the proposed project would modify the existing (and mostly unpermitted) shoreline armoring by: removing approximately 500 cy of riprap and retaining approximately 700 cy of riprap; removing approximately 36 feet of gabion wall (with a volume of approximately 32 cy) and retaining approximately 39 feet of gabion wall (with an approximate volume of 78 cy). The gabions will not occupy shoreline recreational space, but the 700 cy of riprap will be stacked at a 1:1 slope covering approximately 1,515 square feet of otherwise usable beach space. In short, the project has displaced 3,976 square feet of beach and shoreline recreational space for 36 years, and will occupy 1,515 square feet moving forward. Since this impact is typically calculated by the Commission as a one-time impact, here the Commission has averaged the impact over 56 years (the 36-year duration that the unpermitted riprap has remained in place + the 20-year duration of the approved riprap going forward for which shoreline sand supply impacts have been mitigated) in terms of 36 years at 3,976 square feet and the next 20 years at 1,515 square feet to arrive at a single value of 3,097 square feet for coverage mitigation purposes through 2038.⁹

Fixing the Beach/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 is available to form a beach. As bluff erosion proceeds in a natural setting, the profile of the beach also retreats and the beach area migrates inland with the bluff. This process stops, however, when the backshore is fronted by a hard protective structure, such as a revetment or a seawall. While the shoreline on either side of

⁸ This third impact associated with sand supply refers to the way in which the project impacts creation and maintenance of beach sand. Although this ultimately can translate into beach and other recreational impacts, the discussion here is focused on the sand supply/maintenance issue and the way in which the proposed project would impact sand supply processes.

⁹ $((3976 \times 36) + (1515 \times 20)) / 56 = 3097$

the armor continues to retreat, shoreline in front of the armor 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 moving shoreline and the fixed backshore, and this represents the loss of a beach and recreational shoreline as a direct result of the armor. The coastal squeeze phenomenon caused by armoring is exacerbated by climate change and sea-level rise. As climate change causes the seas to rise ever faster, beach and recreational shoreline areas will be lost at an increasingly faster pace.¹⁰ Eventually, there will be no available dry beach or shoreline recreational 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 armor.

The passive erosion impacts of armoring, or the long-term loss of beach due to fixing the back beach, is equivalent to the footprint of the bluff area that would have become beach due to erosion and is equal to the long-term average annual erosion rate multiplied by the width of property that has been fixed by a resistant shoreline protective device.

In this case, the existing armoring extends along approximately 150 feet of bluff, the proposed modified shoreline armoring would extend along approximately 78.5 feet of bluff, and the average annualized long-term erosion rate on this portion of the bluff has been estimated by the Applicants' geologist (and verified by Dr. Ewing) to be 0.7 feet per year at this location. Therefore the impacts due to the proposed project from fixing the back beach has been the loss of 105 square feet of beach and shoreline recreational area per year (150×0.7) for the last 36 years, or a total of 3780 square feet (105×36), and will implicate the additional loss of at least 54.95 square feet of beach and shoreline recreational area per year moving forward (78.5×0.7). Based on past experience, the Commission has found that shoreline armoring that has been in use for a few decades often needs major maintenance or modifications, or entire redevelopment of an armoring structure during that time frame. As a result, the Commission has in the past used a 20-year initial mitigation time period to establish the length of time over which the initial impacts will be assessed and initial mitigations applied. After this 20-year initial mitigation period, additional impact analysis will be needed (see **Special Condition 5(c)**) to assess the appropriate mitigation necessary at that time.

¹⁰ Sea level has been rising for many years, and there is a growing body of evidence that there has been an increase in global temperature and that acceleration in the rate of sea level rise can be expected to accompany this increase in temperature. The Coastal Commission's Sea Level Rise Policy Guidance (2015) recommends using best available science at the time of application to understand the risks associated with sea level rise over the life of development. In March 2018, the California Ocean Protection Council adopted the updated State Sea-Level Rise Guidance, which incorporates recent scientific information and is now considered the best available science on sea level rise for the State of California. According to the updated state Guidance, the estimated range of sea level rise for this area (based on the Monterey tide gauge) for 2070 is approximately 17 inches to 41 inches; and 24-66 inches for 2090. Additionally, recent scientific studies have analyzed the potential for rapid ice loss and suggest that there could be extreme sea level rise of as much as 10 feet by 2100 (or 5.1 and 8.2 feet of sea level rise for 2070 and 2090, respectively), though this extreme scenario is currently less well understood. The observed trend for global sea level has been a long-term, persistent rise. Mean water level affects shoreline erosion several ways, and an increase in the average sea level will exacerbate all these conditions. On the California coast the effect of a rise in sea level will be the landward migration of the intersection of the ocean with the shore. This, too, leads to loss of the beach as a direct result of the armor as the beach is squeezed between the landward migrating ocean and the fixed backshore.

In this case, approximately 3,780 square feet of beach and shoreline recreational area has been lost in the last 36 years. In addition, over the first 20 year mitigation period, the loss of 54.95 square feet of beach/shoreline annually due to the proposed project would result in a loss of 1,099 square feet of beach/shoreline (54.95×20) that would have been created naturally if the back beach had not been fixed by the armoring. Thus, together, the total project beach/shoreline area impact due to coastal squeeze is the loss of 4,879 square feet of beach and shoreline recreational area from initial placement in 1982 through the first twenty-year mitigation cycle ($3,780 + 1,099$).

Thus, the augmented seawall results in a loss of approximately 7,976 square feet of beach and shoreline recreational area over the next 20 years (3,097 square feet associated with the seawall's fixed footprint and 4,879 square feet associated with coastal squeeze from initial installation through the initial 20-year time frame, as described above). There is no doubt that such impacts represent significant public recreation access impacts, including the loss of the social-economic value of beach and shoreline recreational access, for which the Coastal Act requires mitigation. (See discussion below.)

Retention of Potential Beach Material

Beach sand material comes to the shoreline from inland areas, carried by rivers and streams; from offshore deposits, carried by waves; and from coastal dunes and bluffs. Bluff and shoreline retreat is one of several ways that sand is added to the shoreline sand supply system. 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 of caves, saturation of the bluff soil from groundwater causing the bluff to slough off, and natural bluff deterioration. When the bluff is protected by a shoreline protective device, the natural exchange of material from the bluff to the beach will be interrupted and, if the shoreline is eroding, there will be a measurable loss of material to the beach.

In these cases, bluff sediment would be added to the beach at these locations, as well as to the larger littoral cell sand supply system fronting the bluffs, if natural erosion were allowed to continue. The volume of total material that would have gone into the sand supply system over the lifetime of the shoreline structure would be the volume of material between (a) the likely future bluff face location with shoreline protection; and (b) the likely future bluff face location without shoreline protection. The Applicant's consultants conducted analyses using the Commission's methodology and concluded (and the conclusion was corroborated by Dr. Ewing) that the amount of beach quality sand blocked in this way would be an additional 176 cubic yards of sand over the next 20 years (or 8.8 cubic yards per year). Using this figure, and the fact that the armoring over the past 36 years covered roughly twice as much bluff area as the proposed armoring would moving forward, as a rough calculation, over the last 36 years about double that amount per year has been retained (or 17.6 cubic yards per year), and that over the past 36 years approximately 634 total cubic yards of beach quality sand (17.6×36) would have gone into the sand supply system absent the armoring. Thus, the total sand retention from initial installation through the first twenty year mitigation period is 810 cubic yards of sand ($176 + 634$).

Sand and Beach/Shoreline Area Impact Conclusion

The most obvious in-kind mitigation for these impacts would be to add 810 cubic yards of sand back into the system, and to create a new 7,976 square-foot area of beach/shoreline to replace that which has been lost over the past 36 years and will be lost over the first 20 years with a similar area of beach/shoreline in close proximity to the eliminated beach/shoreline area. In terms of the former, a formal sand replenishment strategy can introduce an equivalent amount of sandy material back into the system over time to mitigate the loss of sand that would be caused by the armoring over these 56 years. Obviously, such an introduction of sand, if properly planned, can feed into the offshore system to mitigate the impact of the project. However, as opposed to other areas with established programs, there are not currently any existing beach nourishment programs directed at this Santa Cruz beach area. Absent a comprehensive regional program that provides a means to coordinate and maximize the benefits of mitigation efforts in the area now and in the future, a piecemeal mitigation effort, such as an Applicant-only project to place equivalent amounts of sand over time at only this location, cannot ensure effective and appropriate mitigation.

As an alternative sand supply mitigation mechanism, 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. In this case, as discussed above, the armoring has and would retain 810 cubic yards of sand through the initial 20-year mitigation horizon, which is sandy material that would have been added to the littoral cell (i.e., almost 15 cubic yards of sand per year). Based on recent estimates of costs for beach quality sand for other projects, the cost of purchasing and delivering 810 cubic yards of beach quality sand is currently approximately \$50 per cubic yard. Thus, an in-lieu fee to address this sand supply impact would be approximately \$40,500 (i.e., \$50/cubic yard x 810 cubic yards = \$40,500).

In terms of the loss of the 7,976 square-foot area of beach/shoreline area (in terms of both occupied beach as well as coastal squeeze) from past impacts and through the first twenty-year cycle, although in concept the idea of creating a new beach area of this size would be the most direct mitigation approach, in reality finding an area that can be turned into a beach and ensuring it does so appropriately over time is very difficult in practice. At the same time, the calculations of affected area do provide an appropriate relative scale for evaluating alternative mitigations. In the past, the Commission has looked at several ways to value such beach and shoreline areas in order to determine appropriate in-lieu mitigation fees, including evaluating the recreational value of the beach/shoreline area in terms of the larger economy, as well as the real estate value of the land that will be taken from public use.

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 areas provide significant direct and indirect revenues to local economies, the state, and the nation. It is well-recognized 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. However, these recreational beach/shoreline values are in

many cases difficult to quantify, including for the pocket beaches along West Cliff Drive (as is the case here) where visitation data needed for certain economic impact models are lacking.

Another method that the Commission has in the past used as a proxy for beach/shoreline value is the real estate valuation method. This method attempts to quantify what it would cost to purchase shoreline property and allow it to erode to become beach over time as a means of offsetting like impacts from armoring, and thus requires an evaluation of the cost of land that could be purchased. In this case, the subject property was purchased for \$3,995,000 in 2014 and totals approximately 21,257 square feet. Thus, based on that purchase price and the property size, a reasonable estimate of cost of coastal property at this location would be \$187.94 per square foot. Applying this land acquisition value to the 7,976 square-foot impact would result in an in lieu fee of \$1,499,009.44 for the loss of beach and shoreline use areas based on the initial 36 years of unpermitted armoring and the initial 20-year mitigation period (i.e., 7,976 square feet x \$187.94/square-foot = \$1,499,009.44). In past cases the Commission has found that this type of in lieu fee is well tied to specific land values in the vicinity of the projects, and is thus both reasonably related, and when calculated can be roughly proportional to the anticipated impacts of armoring.

And finally, a method the Commission has applied (when it is a viable option) is to offset identified impacts via in-kind public access improvement projects. While this option is generally only available with public agency applicants, in this case there is a unique opportunity for these Applicants to work with the City on a series of West Cliff Drive projects that together can appropriately offset these beach and shoreline area recreational access impacts as part of an overall mitigation package. 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 (as opposed to fees that might not be spent for many years, and mitigation not realized as a result). The idea is typically to acknowledge that the value of a fee diminishes over time in terms of what it can result in, and improvements only become more expensive over time, and to place a premium on improvements that can be realized in the near term. The Applicants have been working with the City on just such a strategy, one where the Applicants would fund a series of public access improvements along West Cliff Drive in the vicinity of the project to help offset project impacts. In addition, the Applicants are also willing to dedicate the beach/shoreline area of their property seaward of the bluff edge for public access as part of such a mitigation package as a means of filling out and providing overall commensurate mitigation for project impacts.

Thus, on this point the Applicants are proposing a mitigation package that includes an access easement (see **Special Condition 8**) as well as a series of public access and recreation improvements along West Cliff Drive (see **Special Condition 2**). With respect to the latter, the Applicants have voluntarily agreed to pay for the following City of Santa Cruz projects (see **Exhibit 5**):

- A beach access stairway repair near the intersection of Sunset Avenue and West Cliff Drive
- A beach access stairway repair near to Its Beach
- Widening and improvements to the West Cliff Drive multiuse recreational pathway between Almar Avenue and Swanton Boulevard

- Improvements to an existing public pedestrian path that provides access from Oxford Way to West Cliff Drive through Bethany Curve Park

These types of improvements will enhance public recreational access amenities and utility in the West Cliff Drive project area, appropriately offsetting the beach/shoreline area impacts identified above. In addition, by project design the Applicants will free up almost 2,500 square feet of beach space that has been covered in armoring for the past 36 years, and this will also enhance public beach access in tandem with the required public access easement.

This mitigation package strategy and approach is similar to compensatory projects and mitigation packages required by the Commission in the past,¹¹ and is particularly appropriate in this case given the beach/shoreline characteristics at issue (i.e., the relatively narrow beach space available at the base of the armoring structure except at lower tides). In addition, this approach will allow public access improvements to be realized in the very near term, providing fairly immediate and tangible public benefits as opposed to an overall single fee approach that may not be used or applied for some time, reducing its effectiveness. In addition, the above-described recreational use and access improvement projects will likely be worth much more to users than the cost to develop these improvement projects, as they have an intrinsic value to the shoreline-visiting public, particularly given the significant popularity of West Cliff Drive that is difficult to quantify in this case. Finally, because the mitigation is based on a 20-year impact assessment time frame, **Special Condition 5(c)** requires the Permittee to submit an application for a permit amendment in 20 years to evaluate the need for and if so ensure continued mitigation for the seawall's ongoing impacts beyond the initial 20-year term.

As conditioned, the project satisfies the Coastal Act Section 30235 tests for armoring to protect the existing cottage.

Future Cottage Redevelopment

As described above, the armoring meets the first test of Coastal Act Section 30235 because the guest cottage was originally built in the 1940s prior to the Coastal Act, and there is not compelling evidence that it has been redeveloped since that time. As a result, it retains its 'existing structure' status as long as it does not tip the threshold of redevelopment. In this case, the Applicants have proposed improvements that fall short of redevelopment, but not by much. For example, the Applicants propose to replace 49 percent of the foundation and 38 percent of the exterior walls. If, however, the cottage were to be redeveloped (e.g., an additional 1 percent of foundation work or 12 percent of work on the exterior walls), then it would constitute a new structure that needs to meet all LCP and Coastal Act requirements, including in terms of a blufftop coastal hazard setback without reliance on armoring. In such a case, the cottage would need to be sited and designed to ensure geologic and engineering stability without reliance on shoreline armoring, including the armoring authorized by this CDP. If such re-siting to a location consistent with the LCP's 50-year setback is not possible, the redeveloped cottage would then

¹¹ See, for example, CDP 3-02-107 (Podesto), CDP A-3-SCO-06-006 (Willmott), CDP 3-09-029 (Rusconi), CDP 3-09-042 (O'Neill), 3-10-044 (Crest Apartments), 2-11-009 (Pacifica drainage armoring), A-3-PSB-12-0042 and -0043 (Pismo Beach Oceanview Boulevard Seawalls), CDP A-3-SCO-07-015/3-07-019 (Pleasure Point Seawall and Parkway), and CDP 3-14-0488 (Iceplant LLC).

need to be removed in order to be consistent with the LCP standards outlined above, including removal of the armoring approved here (as it would no longer be necessary to protect an existing structure). Thus **Special Condition 5** outlines the parameters of what would constitute “redevelopment” of the cottage, at which time armoring would no longer be authorized and would be required to be removed.

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. The experience of the Commission in evaluating the consistency of proposed developments with Coastal Act policies regarding development in areas subject to problems associated with geologic instability, flood, wave, or erosion hazard, has been that development has continued to occur despite periodic episodes of heavy storm damage, landslides, or other such occurrences. Oceanfront development is susceptible to bluff retreat and erosion damage due to storm waves and storm surge conditions. Past occurrences statewide have resulted in public costs (through low interest loans, grants, subsidies, direct assistance, etc.) in the tens and hundreds of millions of dollars. As a means of allowing continued development in areas subject to these hazards while avoiding placing the economic burden on the people of the state for damages, the Commission is justified in requiring that Applicants acknowledge site geologic risks and agree to waive any claims of liability on the part of the Commission for allowing the development to proceed.

There are inherent risks associated with development on and around armoring and eroding bluffs in a dynamic coastal bluff environment; this applies to the project proposed as well as for the development landward of the bluffs themselves. The armoring project site, and all development inland of it, are likely to be affected by shoreline erosion in the future. Although the Commission has sought to minimize the risks associated with the development proposed in this application, the risks cannot be eliminated entirely. Given that the Applicants have chosen to pursue the development despite these risks, the Applicants must assume these risks. Accordingly, this approval is conditioned for the Applicants to assume all risks for developing at this location (see **Special Condition 11**).

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 proposed armoring were damaged in the future (e.g. as a result of flooding, landsliding, wave action, storms, etc.), it would lead to a degraded public access condition. In addition, such damages could adversely affect nearby beaches by resulting in debris on the beaches and/or creating a hazard to the public using the beaches. Therefore, in order to find the proposed project consistent with Coastal Act Section 30253, the proposed project must be maintained in its approved state, including with respect to landscaping for public view reasons (see also “Public Views” finding). 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 subject armoring, particularly after major storm events. Such monitoring will ensure that the Permittees and the Commission are aware of any damage to or weathering of the armoring and can determine whether repairs or other actions are necessary to maintain the armoring in their approved state before such repairs or actions are undertaken. To assist in such an effort, monitoring plans should provide vertical

and horizontal reference distances from armoring structures 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 6** requires regular submission of monitoring and maintenance reports. Such reports shall provide for evaluation of the condition and performance of the proposed project and overall bluff stability, and shall provide for necessary maintenance, repair, changes or modifications. **Special Condition 7** allows the Applicants to maintain the project in its approved state, subject to the terms and conditions identified by the special conditions. Such future monitoring and maintenance activities will be understood in relation to clear as-built plans that will be submitted by the Applicants (**Special Condition 4**). In addition, **Special Condition 5** also provides that if in the future the Applicants submit a CDP amendment application to augment the armoring to further protect the remodeled cottage, or to perform repair work to 50 percent or more of the retained armoring, additional mitigation may be required. Such augmentation may not result in any encroachment seaward of the armoring approved here.

Geologic Conditions and Hazards Conclusion

The existing cottage, which will be remodeled but not redeveloped pursuant to CDP Application A-3-STC-16-0016, is in danger from erosion and requires armoring through the proposed project in order to be protected. Conditions are included to ensure that the project will appropriately offset its sand supply and beach/recreational use area impact, and to ensure long term stability. As conditioned, the Commission finds the project consistent with Coastal Act Sections 30235 and 30253.

D. PUBLIC ACCESS AND RECREATION

The Coastal Act grants a high priority to public recreational access uses and activities to and along the coast. The Act protects and encourages lower-cost visitor and recreational facilities where feasible and states a preference for developments providing public recreational opportunities. In addition, the Coastal Act requires that oceanfront land and upland areas suitable for recreational use be protected for recreational uses. Coastal Act Sections 30210 through 30213, 30221 and 30223 specifically protect public access and recreation. In particular:

***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.*

***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.*

***30212.** 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....*

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

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.

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

Coastal Act Section 30240(b) protects sensitive habitat, as well as parks and recreation areas, such as the adjacent beach, and the West Cliff Drive recreational trail and corridor:

30240(b). Development in areas adjacent to environmentally sensitive habitat areas and 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 habitat and recreation areas.

These overlapping policies clearly protect access to and along the shoreline and to offshore waters for public access and recreation purposes, particularly free and low cost access.

Consistency Analysis

Shoreline protective devices have significant adverse impacts to public access and recreation. Section 30210 of the Coastal Act 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 where acquired through use or by legislation. In approving new development, Section 30212 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. Finally, the Coastal Act Section 30210 direction to maximize access represents a different threshold than to simply provide or protect such access, and is fundamentally different from other like provisions in this respect. In other words, it is not enough to simply provide access to and along the coast, and not enough to simply protect access; rather such access must also be maximized. This terminology distinguishes the Coastal Act in certain respects, and provides fundamental direction with respect to projects along the California coast that raise public access issues, like this one. In addition, the mean high tide line will move landward over time depending on the beach profile, seasonal tidal activity, and continued sea level rise. Therefore, it is also critically important that the Commission assess whether the project, which as conditioned will mitigate for coastal resource impacts through 2038 (i.e., the initial mitigation period; see also the preceding "Coastal Hazard" findings), would impact public access and recreation over this time period, and, if so, provide measures to avoid or appropriately mitigate such impacts.

As discussed in the "Coastal Hazards" section above, shoreline structures can have a variety of negative impacts on coastal resources, including adverse effects on beaches and sand supply, which ultimately result in the loss of the beach and associated impacts to public access. The

proposed project's impact to sand supply, and ultimately to beach/shoreline area, would result in measurable impacts to beaches and beach area access. To offset these impacts, the Commission and the Applicants have mutually agreed to a mitigation package that includes a combination of public access improvement projects, conditioning of the project to free up sandy beach areas, and a public access easement over the areas seaward of the blufftop edge. Although these mitigations were required for coastal hazard policy consistency, they also offset impacts from a public access and recreation perspective for the area of the beach below the mean high tide line which would exist and continue to migrate inland but for the existence of the revetment, as discussed above (see **Special Conditions 2 and 8**).

The remaining public access and recreation impacts accrue due to project activities on the blufftop, and from construction overall. With respect to construction impacts, this project will: require the movement of large equipment, workers, materials, and supplies in and around the shoreline area and public access points; include large equipment operations in these areas; result in the loss of public access use areas to a construction zone; and generally intrude and negatively impact the aesthetics, ambiance, serenity, and safety of the recreational experience at these locations. These public recreational use impacts have been (through the Applicant's proposed best management practices) and can be mitigated through construction parameters that limit the area of construction, limit the times when work can take place (e.g., to avoid both weekends and peak summer use months when recreational use is highest), clearly fence off the minimum construction area necessary, keep equipment out of coastal waters, require off-beach equipment and material storage during non-construction times, clearly delineate and avoid to the maximum extent possible public use areas, and restore all affected public access areas at the conclusion of construction. A construction plan is required to implement these measures (see **Special Condition 3**). In addition, to provide maximum information to the beach-going public during all construction, the Applicants must maintain copies of the CDP and approved plans available for public review at the construction sites, as well as provide a construction coordinator whose contact information is posted at the sites to respond to any problems and/or inquiries that might arise (see **Special Condition 3**). In addition, this permit does not constitute a waiver of any public rights that might exist on the property (see **Special Condition 9**).

In conclusion, provided the Applicants implement the mitigation package per the terms and conditions of this approval, including reassessment of such impacts on a twenty-year cycle, these mitigations can appropriately offset the public recreational access impacts associated with the proposed project. As conditioned, the Commission finds the project consistent with the Coastal Act access and recreation policies cited above.

E. MARINE RESOURCES

The Coastal Act protects the marine resources and habitat offshore of this site. 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.*

As discussed above, the project is located on an oceanfront, blufftop parcel and is the only residence located seaward of West Cliff Drive overlooking the Monterey Bay National Marine Sanctuary, which is recognized for its unique and abundant marine life. Runoff here has the potential to discharge into the Sanctuary, including at one of the primary recreational water use areas within the Sanctuary. The Sanctuary is home to some 26 Federal and State Endangered and Threatened species and a vast diversity of other marine organisms. And the area offshore here is a popular surfing and beach activity destination. As such, the Commission recognizes the marine and recreational resources involved with the proposed project as sensitive coastal resources that are of high state and federal importance.

Given the proposed project is located at the shoreline interface with the Pacific Ocean, there is the potential for impacts to marine resources. The project is conditioned to include construction methods required by the Commission in the past to protect water quality and marine resources during armoring construction, including maintaining good construction site housekeeping controls and procedures, the use of appropriate erosion and sediment controls, a prohibition on equipment washing, refueling, or servicing on the beach, etc. (**Special Condition 3**). To further protect marine resources and offshore habitat, **Special Condition 3** requires construction documents to be kept at the site for inspection, and also requires a construction coordinator to be available to respond to any inquiries that arise during construction.

As conditioned, the Commission finds the project consistent with Coastal Act Sections 30230 and 30231 regarding protection of marine resources and offshore habitats.

F. PUBLIC VIEWS

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 land forms, 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.*

The project has been designed to minimize the use of shoreline armoring, including to minimize its impact on public views from along the heavily utilized West Cliff Drive recreational trail and corridor. Indeed, the proposed armoring to be retained would mostly be at the far back of the pocket beach and would mostly only be visible to beach and ocean users. And the project as a whole would reduce the amount of armoring present, along with restoration of the underlying area to natural conditions, which should serve to enhance views in that respect. To offset potential visual impacts, the project is also conditioned to require that the gabion baskets and upper portion of the riprap proposed to be retained be camouflaged with native vegetation in order to minimize impacts to public views, including for beach users (see **Special Condition 1(c)**). Finally, temporary visual impacts during construction would occur, and would be required to be minimized through best management practices as required by **Special Condition 3**. Overall, as conditioned, the proposed project would improve the public viewshed as seen from the ocean, the beach, and West Cliff Drive. As conditioned, the Commission finds the project consistent with the above-cited Coastal Act public viewshed policies.

G. VIOLATION

As discussed above, most of the existing shoreline armoring at the site is not permitted. Specifically, in 1982, in the wake of severe El Niño storms, the prior property owner installed substantial shoreline armoring on the beach and bluff face at the subject location, including gabion baskets and approximately 900 cubic yards (cy)¹² of riprap, in order to protect the main house and guest cottage.¹³ Although that prior property owner initiated an after-the-fact CDP application at that time (CDP Application No. 3-83-152), that process was never completed and thus no CDP was ever issued to authorize the placement of the gabion baskets and 900 cy of riprap on the beach and bluff fronting the residence.¹⁴ Thus, the gabion baskets and 900 cy of riprap have been retained without benefit of a CDP for over three decades, and are currently considered a violation of the Coastal Act.

In 1992, Dr. Cummins applied for a different CDP to place some 300 cy of riprap at the site (CDP Application No. 3-92-078). That CDP was ultimately approved, and 300 cy of riprap was placed per the permit. At that time, the record indicates that the Commission was unaware that the early 1980s unpermitted armoring work had not been permitted, and thus the Commission's CDP did not evaluate or approve that prior work at that time. Thus, 300 cy of riprap has been legally permitted at the site, but the remainder of the armoring (i.e., about 900 cy of riprap and

¹² Application No. 3-83-152 identified the amount as 850 tons of rip rap, however current estimates indicate the amount is closer to 900 cy (see **Exhibit 3**).

¹³ The current owners/Applicants assert that the shoreline protection work was done under a verbal emergency authorization from Coastal Commission staff, though no independent or subsequent written documentation has been identified to substantiate this claim, and Commission staff have not been able to corroborate that staff was involved at all in the decision to undertake the shoreline protection work. Because of this, Commission staff do not consider there to have been any emergency authorization.

¹⁴ Thus, even assuming that the prior owner (Dr. Cummins) did obtain verbal emergency permit authorization from Coastal Commission staff to place the shoreline protection work on a temporary basis (and there is no evidence to suggest same), the armoring never received an actual Emergency CDP nor a regular CDP as required by law, and is unpermitted at this point either way.

the gabion baskets) remains unpermitted, and is currently considered a violation of the Coastal Act that is subject to a Commission enforcement case (V-3-15-0124).¹⁵

The Applicants seek to resolve the violations through this application (by removing a large percentage of the unauthorized armoring) and the CDP is conditioned to limit the shoreline armoring to the minimum necessary to protect the existing cottage as discussed above, and to offset impacts from the time armoring was installed in 1982 through the initial 20-year mitigation period, for a total of 56 years (i.e., through 2038). Approval of this application pursuant to the staff recommendation, issuance of the CDP, and the Applicant's subsequent compliance with all terms and conditions of the CDP will result in resolution of the above described violations.

Although development has taken place prior to submission of this permit application, consideration of this application by the Commission has been based solely upon the Chapter 3 policies of the Coastal Act. Commission review and action on this CDP does not constitute a waiver of any legal action with regard to the alleged violations, nor does it constitute an implied statement of the Commission's position regarding the legality of development, other than the development addressed herein, undertaken on the subject site without a coastal permit. In fact, approval of this CDP is possible only because of the conditions included herein and failure to comply with these conditions would also constitute a violation of this CDP and of the Coastal Act. Accordingly, the Applicants remain subject to enforcement action unless and until the conditions of approval included in this CDP are satisfied.

H. OTHER AGENCY APPROVALS

California State Lands Commission

The California State Lands Commission (SLC) has not been contacted by the Applicants for a jurisdictional determination. This approval is conditioned to require written evidence either of SLC approval of the project (as conditioned and approved by this CDP) or evidence that such approval is not required (see **Special Condition 10**).

Central Coast Regional Water Quality Control Board

The Central Coast Regional Water Quality Control Board (RWQCB) has regulatory authority over the proposed project under Section 401 of the Clean Water Act. This approval is conditioned to require written evidence either of RWQCB approval of the project (as conditioned and approved by this CDP) or evidence that such approval is not required (see **Special Condition 10**).

Monterey Bay National Marine Sanctuary

The Monterey Bay National Marine Sanctuary (MBNMS) has regulatory authority over the proposed project under the National Marine Sanctuaries Act. This approval is conditioned to

¹⁵ The 1983 application (which was never filed) to recognize the unpermitted armoring stated that 850 *tons* of riprap was placed at the site in 1982. The current Applicants' geotechnical consultant estimates that there is a total of about 1,200 cy of riprap present at the site. Given that CDP 3-92-078 authorized the placement of 300 cy of riprap, the 1982 riprap is estimated to equal about 900 cy.

require written evidence either of MBNMS approval of the project (as conditioned and approved by this CDP) or evidence that such approval is not required (see **Special Condition 10**).

Army Corps of Engineers

The U.S. Army Corps of Engineers (ACOE) has regulatory authority over the proposed project under Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 1344) and Section 404 of the Clean Water Act. Section 10 of the Rivers and Harbors Act regulates the diking, filling and placement of structures in navigable waterways. Section 404 of the Clean Water Act regulates fill or discharge of materials into waters and ocean waters. Portions of the project appear to be located within the jurisdiction of ACOE and the use of equipment and machinery on the beach up to the high tide line. Accordingly, this approval is conditioned to ensure that the project (as conditioned and approved by this CDP) has received all necessary authorizations (or evidence that none are necessary) from ACOE (see **Special Condition 10**).

I. OTHER

Disclosure

The proposed project represents a unique set of facts, including being the only residential development on the seaward side of West Cliff Drive in Santa Cruz. And this CDP includes important conditions reflecting the set of facts as they apply to this approval, including the required conditions of approval. In order to ensure that the terms and conditions of this approval are clear to these Applicants as well as any future owners, this approval requires that the CDP terms and conditions be recorded as covenants, codes, and restrictions against use and enjoyment of the property, and that all real estate disclosures include clear explanation of the CDP and its terms and conditions (see **Special Conditions 12 and 13**).

Indemnification

Coastal Act Section 30620(c)(1) authorizes the Commission to require applicants to reimburse the Commission for expenses incurred in processing CDP applications.¹⁶ Thus, the Commission is authorized to require reimbursement for expenses incurred in defending its action 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 requiring reimbursement for any costs and attorneys' 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 (**Special Condition 14**).

J. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Section 13096 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 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 that the activity may have on the environment.

¹⁶ See also California Code of Regulations Title 14 Section 13055(g).

On September 9, 2017, the City of Santa Cruz, acting as lead CEQA agency, determined that the proposed project was categorically exempt from CEQA review under CEQA Guideline Section 15301(d) (applicable to restoration or rehabilitation of deteriorated or damaged structures). 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. The preceding CDP findings discuss the relevant coastal resource issues with the proposal, and the CDP conditions identify appropriate modifications to avoid and/or lessen any potential for adverse impacts to said resources. All public comments received to date have been addressed in the findings above, which are incorporated herein in their entirety by reference.

As such, there are no additional feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse environmental effects which approval of the proposed project, as conditioned, would have on the environment within the meaning of CEQA. Thus, if so conditioned, 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)

APPENDIX A – SUBSTANTIVE FILE DOCUMENTS

- Bowman and Williams, Topographic Map and Boundary Survey Map, dated revised 8/21/17
- Gary Griggs, Evaluation of Preferred Alternative for Coastal Protection, Honjo Home, dated 8/20/2017
- Haro, Kasunich and Associates (HKA), Geotechnical Response to Coastal Commission Appeal, dated 3/15/16
- HKA, Geotechnical Information and Coastal Protection Alternative Analysis, dated 9/8/2017
- HKA, Wave Runup/Erosion and Bluff Instability Report, dated 9/8/2017
- HKA, Beach Sand Replenishment – in lieu worksheets, dated 9/6/2017 and 9/21/2017
- HKA, Supplemental Alternative Analysis Vertical Seawall, dated 9/21/2017
- John Pearse, Biological Aspects of Rip-rap at 1307 West Cliff Drive, dated 7/26/2017
- Stewart Title, Preliminary Title Report, dated 7/14/17
- Erik Zinn and Associates (Zinn), Response to CCC Request for Supplemental Information, dated 9/5/2017
- Zinn, Revised 25 August 2016 Geological findings regarding prospective removal of armoring.
- Zinn, Geologic Findings Regarding prospect of removal of armoring, dated revised 8/25/2016

APPENDIX B – STAFF CONTACT WITH AGENCIES AND GROUPS

- City of Santa Cruz Planning, Public Works, and Parks Departments
- California State Lands Commission
- Monterey Bay National Marine Sanctuary
- National Marine Fisheries Service
- Regional Water Quality Control Board
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service