CALIFORNIA COASTAL COMMISSION
SAN DIEGO AREA
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SAN DIEGO, CA 92108-4402
(619) 767-2370

Th14.5a

Addendum

August 7, 2012

To: Commissioners and Interested Persons

From: California Coastal Commission
San Diego Staff

Subject: Addendum to **Item Th14.5a**, Coastal Commission Permit Application **#6-11-010 (Oceanus GHAD)**, for the Commission Meeting of August 9, 2012.

Staff recommends the following changes be made to the above-referenced staff report. Language to be added is underlined; language to be deleted is shown in strikeout:

1. On Page 7 and 8 of the staff report, Special Condition 2b shall be revised as follows:

   b. Any future redevelopment of the blufftop residential condominium structure shall constitute new development and shall not rely on the permitted seawall to establish geologic stability or protection from hazards. Any future redevelopment on the site shall be sited and designed to be safe without reliance on shoreline or bluff protective devices. As used in this condition, "redevelopment" is defined to include: (1) one or more additions to the structure that, individually or cumulatively, exceeds 50% or more of the square footage of the existing structure; (2) ~~expansions; (3)~~ demolition~~, renovation~~ and/or replacement that would result in ~~alteration to~~ replacement of 50 percent or more of ~~an~~ the existing structure, including but not limited to, ~~alteration~~ demolition of 50 percent or more of ~~structural interior wall area,~~ structural exterior wall area, structural flooring or structural roofing area or any combination of these areas; or ~~(4)~~ (3) any demolition~~, renovation~~ or replacement of less than 50 percent of the existing residential structure where multiple proposed ~~remodels~~ demolitions or additions would result in a combined ~~alteration~~ replacement of 50 percent or more of the structure (including previous alterations) from its condition in August 2012;

2. On Page 9 and 10, the second paragraph of Special Condition 5 shall be revised as follows:

> The required mitigation payment covers impacts only through the identified 20-year ~~design~~ permit life of the seawall. No later than 19 years after the issuance of this permit, the permittees or their successor in interest shall apply for and obtain an amendment to this permit that either requires the removal of the seawall within its initial ~~design~~ permit life or requires mitigation for the effects of the seawall on shoreline sand supply and public recreational use, for the expected life of the seawall beyond the initial 20 year ~~design~~ permit life. If within the initial ~~design~~ permit life of the seawall, the permittees or their successor in interest obtain a coastal development permit or an amendment to this permit to enlarge or reconstruct the seawall or perform repair work that extends the expected life of the seawall, the permittee shall provide mitigation for the effects of the additional size of the seawall or the extended effects of the existing seawall on shoreline sand supply and public recreational use for the expected life of the seawall beyond the initial 20 year ~~design~~ permit life.

3. On Page 15 and 16 of the staff report, Special Condition 17 shall be revised as follows:

> **17. Condition Compliance**. **WITHIN 90 DAYS OF COMMISSION ACTION ON THIS COASTAL DEVELOPMENT PERMIT**, or within such additional time as the Executive Director may grant for good cause, the applicant shall satisfy all requirements specified in the conditions of the subject permit that the applicant is required to satisfy prior to issuance of this permit. **WITHIN 60 DAYS OF ISSUANCE OF THIS COASTAL DEVELOPMENT PERMIT,** or within such additional time as the Executive Director may grant for good cause, the applicant shall have completed removal of all existing rip-rap and debris seaward of the proposed seawall in conformance with the approved Final Plans. Failure to comply with this requirement may result in the institution of enforcement action under the provisions of Chapter 9 of the Coastal Act.

4. On page 24 of the staff report, the first full paragraph shall be revised as follows:

> Special Condition 2 defines redevelopment to include additions and expansions, or any demolition~~, renovation~~ or replacement which would result, cumulatively, in alteration or reconstruction of 50 percent or more of an existing structure. Thus, this condition requires that if an applicant submits an application to ~~remodel~~ demolish or replace 30% of the existing condominium structure, then 5 years later seeks approval of an application to ~~remodel~~ demolish or replace an additional 30% of the condominium structure, this would constitute redevelopment, triggering the requirement to ensure that the redeveloped structure is sited safely, independent of any shoreline protection. In addition, the condition acknowledges future development on the site beyond repair and maintenance to the existing structure must meet the requirements of Section 30253 of the Coastal Act and not require bluff or shoreline protective devices that alter the natural landform of the bluffs.

5. On Page 29 of the staff report, the first complete paragraph shall be revised as follows:

> The methodology used by the Commission in developing this quantity and value of beach material uses site-specific information provided by the applicant as well as estimates, derived from region-specific criteria, of both the loss of beach material and beach area which could occur over the life of the structure without maintenance, and of the cost to purchase an equivalent amount of beach quality material and to deliver this material to beaches in the project vicinity. The methodology provides a means to quantify the sand and beach area that would be available for public use, were it not for the presence of the proposed bluff protection. The methodology addresses the sand volume impacts from wall and infill encroachments, denial of sand to the littoral cell and passive erosion, as discussed above. **The applicant states that the design life of the armoring without maintenance is 30 years and that the design life with maintenance is 75 years. However, for purposes of calculating the impacts of the seawall, the Commission is using 20 years as the "design life" of the seawall, as that is the initially permitted life of the seawall pursuant to Special Condition #3.

6. On Page 31 of the staff report (appendix B), please revise the first complete paragraph as follows:

> In the past, the Commission has required payment to fund beach sand replenishment as mitigation for the identified direct impacts of the proposed shoreline protective device on beach sand supply and shoreline processes over the 20-year ~~design~~ permit life of the project. However, in this case, this is a relatively low quantity of sand retained by the proposed seawall and the small pocket beach in front of the proposed seawall likely would not hold sand well due to its shallow nature and regular tidal inundation. The subject beach and the beaches in its vicinity were not included in SANDAG's 2001 Regional Beach Sand Project and are not proposed to be included in its 2012 Regional Beach Sand Project II, thus, it appears that contributing to a regional sand fund would not likely yield a noticeable sand increase to the pocket beaches in the Sunset Cliffs area.

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Th14.5a

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Staff:	E. Stevens-SD
Staff Report:	7/26/2012
Hearing Date:	8/9/2012

STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: **6-11-010**

APPLICANT: **Oceanus Geologic Hazard Abatement District (Oceanus GHAD)**

AGENT: Walter Crampton

LOCATION: On the public bluff and beach and the closed Ocean Street Right-of-Way seaward of 4848 Bermuda Avenue, San Diego, San Diego County (APN Nos: 448-242-27-01 through 13).

PROJECT DESCRIPTION: Removal of existing rip-rap and failed seawall from the beach and bluff and construction of a new approximately 120 ft. long, 14-20 ft. high, 2 ½ ft. thick tied back shotcrete seawall with installation of rip-rap placed landward of the seawall.

STAFF RECOMMENDATION: Approval with Conditions.

SUMMARY OF STAFF RECOMMENDATION

Staff recommends that the Commission **approve** the applicant's request for the construction of an approximately 120 ft. long, 14-20 ft. high, 2 ½ ft. thick tied back shotcrete seawall on and adjacent to rock shelves that form a part of a public bluff, in order to provide protection for a 13-

unit condominium structure on a blufftop and the removal of a large quantity of unpermitted rip-rap stones from the public beach seaward of the blufftop lot. Staff is recommending approval of the subject seawall development as the applicant has demonstrated the blufftop condominium structure (which was originally constructed pre-Coastal Act and pre-Prop 20) is in danger from erosion. The applicant's engineer has conducted a geotechnical assessment and determined that due to ongoing bluff collapse, a low factor of safety based on a slope stability analysis, and the close proximity of the condominium structure to the bluff edge, that the condominium structure is in danger from erosion. The Commission's staff engineer and geologist have reviewed the applicant's geotechnical assessment and concur with its conclusions.

Staff is recommending approval with a number of conditions that address the direct impact of the proposed seawall on coastal resources such as scenic quality, public access and recreation opportunities, and shoreline sand supply and the direct, indirect and long-term effects on the adjacent public beach and State tidelands that results from armoring the bluffs. In addition, special conditions address potential impacts to surfgrass beds, an important marine resource, and to ocean water quality that may result from the proposed project. Finally, unpermitted development previously occurred on the subject site. In this particular case, the seawall is located on publicly-owned beach and bluffs and partially within the closed paper street, Ocean Boulevard.

Due to the uncertainties inherent in providing shoreline protection in a dynamic environment, including the unknown effects of climate change and sea level rise, staff is recommending that the proposed seawall only be authorized for 20 years. Such authorization for a limited period of time acknowledges the seawall is not necessarily a permanent structure and allows for a reassessment of site conditions in the future. After 20 years, an amendment to this permit will be required to allow the Commission to reevaluate the seawall's efficacy and the impacts it causes to public resources. Any reauthorization of the seawall will be based on the conditions at that time taking into consideration the status of the existing development requiring protection, impacts and mitigation and when the seawall might be removed.

A Special Condition of this CDP requires the applicant to submit a payment of $86,000 to the SANDAG Public Access and Recreation Fund to mitigate for loss of beach area available for public use, and thus, loss of public access and recreational opportunities. The funds shall be used for public access improvements in the vicinity of Bermuda Street as a first priority, then the Sunset Cliffs area of Ocean Beach. However, if after ten years of approval of this CDP, the funds have not been spent, they may be used for other public beach access and recreational opportunities within the City of San Diego.

With the required public access and recreation mitigation, as well as the limitation on the time for which the seawall is approved, the impacts of the proposed shoreline protection on regional sand supply and public access and recreation will be mitigated to the extent feasible. To ensure that any future redevelopment of these properties is consistent with Chapter 3 of the Coastal Act, this permit requires that any redevelopment of the bluff-top properties cannot rely upon this seawall to determine site suitability for such redevelopment. Other conditions involve an in-depth alternatives analysis for future reauthorization of the seawall, the appearance of the seawall, and approval from other agencies.

Commission staff recommends **approval** of coastal development permit application 6-11-010, as conditioned.

Standard of Review: Chapter 3 policies of the Coastal Act.

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APPENDICES

EXHIBITS

I. MOTION AND RESOLUTION

Motion:

*I move that the Commission **approve** Coastal Development Permit No. 6-11-010 pursuant to the staff recommendation.*

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution:

The Commission hereby approves a coastal development permit for the proposed development 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 and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. 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

The permit is subject to the following conditions:

1. **Revised Final Plans.** PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit for review and written approval of the Executive Director, final plans for the proposed seawall that are in substantial conformance with the submitted plan titled "Emergency Shoreline Stabilization Project Oceanus Geologic Hazard Abatement District" submitted on July 2, 2012 by TerraCosta Consulting, except they shall be revised to include the following:

   a. Technical details regarding the construction method and technology utilized for texturing and coloring the seawall. Said plans shall be of sufficient detail to ensure that the Executive Director can verify that the seawall closely matches the color and texture of the natural bluffs adjacent to the proposed seawall, including provision of a color board indicating the color of the material.

   b. Technical and descriptive detail regarding the construction method and technology utilized for constructing the seawall so as to demonstrate that the seawall is designed in a manner so that it will physically blend into the adjacent natural bluff at each end of the seawall. The north side of the seawall shall be designed and constructed to minimize the erosive effects of the approved seawall on the adjacent bluffs.

   c. Any existing permanent irrigation system located on the subject site that drains anywhere on or over the bluff top/face shall be removed or capped.

   d. All runoff from impervious surfaces on the top of the bluff shall be collected and directed away from the bluff edge towards the street.

   e. Existing accessory improvements (i.e., decks, patios, walls, windscreens, etc.) located in the geologic setback area on the residential site shall be detailed and drawn to scale on the final approved site plan and shall include measurements of the distance between the accessory improvements and the bluff edge (as defined by Section 13577 of the California Code of Regulations) taken at three or more locations. The locations for these measurements shall be identified through permanent markers, benchmarks, survey position, written description, or other method that enables accurate determination of the location of structures on the site. No modifications to, removal and/or replacement of any existing accessory structures is authorized by this permit and any such actions shall require a separate coastal development permit or permit amendment.

f. New/re-used rip-rap proposed to be placed landward the seawall shall not be grouted; the existing and proposed rip-rap landward of the seawall shall be covered with soil and revegetated with native drought tolerant vegetation; and all existing rip-rap and debris from the existing revetment seaward of the subject property shall be either removed from the beach area or re-used landward of the new seawall as shown on the final plan dated 7/2/2012. If the existing rip-rap and debris from the existing revetment to be removed is proposed to be disposed of within the Coastal Zone, an additional Coastal Development Permit must be obtained (placement of the existing rip-rap landward of the new seawall as shown in plans dated 7/2/2012 does not require an additional Coastal Development Permit).

g. Details regarding any construction techniques or structures necessary to assure worker safety during construction of the seawall.

h. Submit detailed sand mitigation calculations for the approved shoreline armoring structure for review and written approval of the Executive Director.

The applicant shall undertake the development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the final plans shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

2. **Future Redevelopment/Encroachment on Public Property**. By acceptance of this permit, the applicant agrees, on behalf of itself and all its successors and assigns, to the following limitations on use of the blufftop residential parcels (APN #s 448-242-27-01 through 13):

a. This coastal development permit authorizes the proposed seawall for twenty years from the date of Commission approval of the coastal development permit (i.e., until August 9, 2032). The applicant shall not modify or expand the approved seawall, nor shall the applicant construct additional bluff or shoreline protective structures without approval of an amendment to this coastal development permit by the Coastal Commission;

b. Any future redevelopment of the blufftop residential condominium structure shall constitute new development and shall not rely on the permitted seawall to establish geologic stability or protection from hazards. Any future redevelopment on the site shall be sited and designed to be safe without reliance on shoreline or bluff protective devices. As used in this condition, "redevelopment" is defined to include: (1) one or more additions to the structure that, individually or cumulatively, exceeds 50% or more of the square footage of the existing structure; (2) expansions; (3) demolition, renovation or replacement that would result in alteration to 50 percent or more of an existing structure, including but not limited to, alteration of 50 percent or more of structural interior wall area, structural exterior wall area, structural flooring or structural roofing area or a any combination of these areas; or (4) any demolition, renovation or replacement of less than 50 percent of the existing residential structure where multiple proposed remodels or

additions would result in a combined alteration of 50 percent or more of the structure (including previous alterations) from its condition in August 2012;

PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit written evidence that the City of San Diego has received a copy of the conditions of this Commission-approved coastal development permit and that it authorizes the proposed encroachment on City property.

3. **Extension of Seawall Authorization or Seawall Removal.** Prior to the expiration of the twenty year authorization period for the permitted seawall, the property owners shall submit to the Commission an application for a coastal development permit amendment to either remove the seawall in its entirety, change or reduce its size or configuration, or extend the length of time the seawall is authorized. Provided a complete application is filed before the 20-year permit expiration, the expiration date shall be automatically extended until the time the Commission acts on the application. Any amendment application shall conform to the Commission's permit filing regulations at the time and shall also conform to the following requirements:

a) An analysis, based on the best available science and updated standards, of beach erosion, wave run-up, sea level rise, inundation and flood hazards prepared by a licensed civil engineer with expertise in coastal engineering and a slope stability analysis, prepared by a licensed Certified Engineering Geologist and/or Geotechnical Engineer or Registered Civil Engineer with expertise in soils;

b) An evaluation of alternatives that will increase stability of the existing principal structure(s) for its remaining life, or re-site new development to an inland location, such that further alteration of natural landforms and/or impact to adjacent City-owned bluffs and beach, tidelands or public trust lands is avoided;

c) An analysis of the condition of the existing seawall and any impacts it may be having on public access and recreation, scenic views, sand supply, and other coastal resources;

d) An evaluation of the opportunities to remove or modify the existing seawall in a manner that would eliminate or reduce the identified impacts, taking into consideration the requirements of the LCP and any applicable Chapter 3 policies of the Coastal Act;

e) For amendment applications to extend the authorization period, a proposed mitigation program to address unavoidable impacts identified in subsection (C) above;

f) A legal description and graphic depiction of all subject property lines and the mean high tide line surveyed by a licensed surveyor as of a recent date along with written evidence of full consent/approval of any underlying land owner, including, but not limited to the City or State Lands Commission, or any other entity of the proposed amendment application. If application materials indicate that development may impact or encroach on tidelands or public trust lands, written authorization from the underlying public trust lands trustee (City of San Diego or the State Lands Commission, if applicable) of the

proposed amendment shall be required prior to issuance of the permit amendment to extend the authorization period.

4. **Future Response to Erosion**. In addition to the 20 year authorization period discussed in Special Condition #3, if in the future the permittee seeks a coastal development permit to construct additional bluff or shoreline protective devices, the permittee agrees, by acceptance of this permit, to include in the permit application information concerning alternatives to the proposed bluff or shoreline protection that will eliminate impacts to scenic visual resources, public access and recreation and shoreline processes. Alternatives shall include, but not be limited to: relocation of all or portions of the principal structure that are threatened, structural underpinning, and other remedial measures capable of protecting the principal residential structure and allowing reasonable use of the property, without constructing additional bluff or shoreline stabilization devices. The information concerning these alternatives must be sufficiently detailed to enable the Coastal Commission or the applicable certified local government to evaluate the feasibility of each alternative, and whether each alternative is capable of protecting the relevant existing principal structure for the remainder of its economic life. No additional bluff or shoreline protective devices shall be constructed on the adjacent bluff face above the proposed seawall or on the beach in front of the proposed seawall unless the alternatives required above are demonstrated to be infeasible. No shoreline protective devices shall be constructed in order to protect ancillary improvements (patios, decks, fences, landscaping, etc.) located between the principal residential structure and the ocean. Any future redevelopment on the lots shall not rely on the subject shoreline protective devices to establish geological stability or protection from hazards.

5. **Mitigation for Impacts to Public Access and Recreational Opportunities/Sand Supply**. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants shall provide evidence, in a form and content acceptable to the Executive Director, that a payment of $86,000 has been deposited in the Public Access and Recreation Fund, an interest bearing account established at SANDAG, or other account designated by the Executive Director, in-lieu of providing sand to replace the beach area lost due to the impacts of the proposed protective structure and to mitigate for the loss of public recreational use over 20 years resulting from the placement of the structure on the public beach and bluff. All interest earned by the account shall be payable to the account for the purposes stated below.

   The required mitigation payment covers impacts only through the identified 20-year design life of the seawall. No later than 19 years after the issuance of this permit, the permittees or their successor in interest shall apply for and obtain an amendment to this permit that either requires the removal of the seawall within its initial design life or requires mitigation for the effects of the seawall on shoreline sand supply and public recreational use, for the expected life of the seawall beyond the initial 20 year design life. If within the initial design life of the seawall the permittees or their successor in interest obtain a coastal development permit or an amendment to this permit to enlarge or reconstruct the seawall or perform repair work that extends the expected life of the seawall, the permittee shall provide mitigation for the effects of the additional size of the seawall or the extended

effects of the existing seawall on shoreline sand supply and public recreational use for the expected life of the seawall beyond the initial 20 year design life.

The purpose of the mitigation payment is for provision, restoration or enhancement of public access and recreation opportunities to the pocket beach at the terminus of Bermuda Avenue, including but not limited to, public access improvements, recreational amenities and/or acquisition of privately-owned beach or beach-fronting property for such uses. The funds shall be used solely for permanent long-term public access and recreation improvements which provide public access or recreational opportunities along the shoreline, not to fund operations, maintenance or planning studies. Any portion of the fund that remains after ten years may be used for other public beach access and recreation projects within the City of San Diego. The funds shall be released only upon approval of an appropriate project by the Executive Director of the Coastal Commission. The funds shall be released as provided for in a MOA between SANDAG, or a Commission-approved alternate entity, and the Commission; setting forth terms and conditions to assure that the fund will be expended in the manner intended by the Commission. If the MOA is terminated, the Commission can appoint an alternative entity to administer the fund.

6. **Monitoring and Reporting Program**. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director for review and written approval, a monitoring program prepared by a licensed civil engineer or geotechnical engineer to monitor the performance of the seawall which requires the following:

   a. An annual evaluation of the condition and performance of the seawall addressing whether any significant weathering or damage has occurred that would adversely impact the future performance of the structure. This evaluation shall include an assessment of the color and texture of the seawall and concrete backfill comparing the appearance of the structure to the surrounding native bluffs.

   b. Annual measurements of any differential retreat between the natural bluff face and the seawall face, at the north and south ends of the seawall and at 20-foot intervals (maximum) along the top of the seawall face/bluff face intersection. The program shall describe the method by which such measurements shall be taken.

   c. Provisions for submittal of a report to the Executive Director of the Coastal Commission by May 1 of each year (beginning the first year after construction of the project is completed) for a period of three years and then, each third year following the last annual report, for the 20 years for which this seawall is approved. In addition, reports shall be submitted in the Spring immediately following either:

      1. An “El Niño” storm event – comparable to or greater than a 20-year storm.

      2. An earthquake of magnitude 5.5 or greater with an epicenter in San Diego County.

Thus, reports may be submitted more frequently depending on the occurrence of the above events in any given year.

d. Each report shall be prepared by a licensed civil engineer, geotechnical engineer or geologist. The report shall contain the measurements and evaluation required in sections a and b above. The report shall also summarize all measurements and analyze trends such as erosion of the bluffs, changes in sea level, the stability of the overall bluff face, including the upper bluff area, and the impact of the seawall on the bluffs to either side of the wall. In addition, each report shall contain recommendations, if any, for necessary maintenance, repair, changes or modifications to the seawall.

e. An agreement that, if after inspection or in the event the report required in subsection c above recommends any necessary maintenance, repair, changes or modifications to the project including maintenance of the color of the structure to ensure a continued match with the surrounding native bluffs, the permittee shall contact the Executive Director to determine whether a coastal development permit or an amendment to this permit is legally required, and, if required, shall subsequently apply for a coastal development permit or permit amendment for the required maintenance within 90 days of the report or discovery of the problem.

The applicant shall undertake monitoring and reporting in accordance with the approved final monitoring and reporting program. Any proposed changes to the approved final monitoring and reporting program shall be reported to the Executive Director. No changes to the approved final monitoring and reporting program shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

7. **Storage and Staging Areas/Access Corridors**. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director for review and written approval, final plans indicating the location of access corridors to the construction site and staging areas. The final plans shall indicate that:

a. No overnight storage of equipment or materials shall occur on sandy beach or public parking spaces. During the demolition and construction stages of the project, the permittee shall not store any construction materials or waste where it will be or could potentially be subject to wave erosion and dispersion. In addition, no machinery shall be placed, stored or otherwise located in the intertidal zone at any time, except for the minimum necessary to construct the seawall. Construction equipment shall not be washed on the beach or public parking lots or access roads.

b. Construction access corridors shall be located in a manner that has the least impact on public access to and along the shoreline.

c. No work shall occur on the beach on weekends, holidays or between Memorial Day weekend and Labor Day of any year.

d. The applicant shall submit evidence that the approved plans and plan notes have been incorporated into construction bid documents. The applicant shall remove all construction materials/equipment from the staging site and restored the staging site to its prior-to-construction condition immediately following completion of the development.

The permittee shall undertake the development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the final plans shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

8. **Water Quality--Best Management Practices**. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit for review and written approval of the Executive Director, a Best Management Plan that effectively assures no shotcrete or other construction byproduct will be allowed onto the sandy beach and/or allowed to enter into coastal waters. The Plan shall apply to both concrete pouring/pumping activities as well as shotcrete/concrete application activities. During shotcrete/concrete application specifically, the Plan shall at a minimum provide for all shotcrete/concrete to be contained through the use of tarps or similar barriers that completely enclose the construction area and that prevent shotcrete/concrete contact with beach sands and/or coastal waters. All shotcrete and other construction byproduct shall be properly collected and disposed of off-site.

The applicant shall undertake the development in accordance with the approved Plan. Any proposed changes to the approved Plan shall be reported to the Executive Director. No changes to the Plan shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

9. **Surfgrass Avoidance Plan**. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit a Surfgrass Avoidance Plan to the Executive Director for review and approval that includes the following:

a. The contractor shall be advised of the adjacent surfgrass beds and the need to protect and avoid these resources (shown in plan titled Direct Biological Impact Analysis Map dated 5/26/2011 and included as Exhibit 10).

b. Temporary fences shall be erected each day by a qualified biologist during removal of the existing rip-rap and any other time that mechanized equipment is used on the beach to mark the maximum extent of beach within which work can be done.

c. All work shall be monitored during removal of the existing rip-rap and any other time that mechanized equipment is used on the beach. Monitoring shall be completed by a qualified biologist who shall be given authority to stop work if it threatens to impact the surfgrass beds.

d. No work shall be conducted from the lower formational terrace supporting algal turf or surfgrass resources.

The applicant shall undertake the development in accordance with the approved Plan. Any proposed changes to the approved Plan shall be reported to the Executive Director. No changes to the Plan shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

10. **Storm Design/Certified Plans**. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director, for review and approval, certification by a registered civil engineer that the proposed shoreline protective device has been designed to withstand storms comparable to the winter storms of 1982-83 that took place in San Diego County.

In addition, **within 60 days following construction**, the permittee shall submit certification by a registered civil engineer, acceptable to the Executive Director, verifying the seawall has been constructed in conformance with the approved plans for the project.

11. **Other Permits**. PRIOR TO COMMENCEMENT OF CONSTRUCTION, the applicant shall submit to the Executive Director for review, copies of all other required local, state or federal discretionary permits, including any required permit from the U.S. Army Corps of Engineers, for the development authorized by CDP #6-11-010.

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall also submit to the Executive Director for review written permission from the City of San Diego authorizing any portion of the development proposed to encroach upon or affect any portion of publicly owned property and/or, with the City acting as trustee of the public trust submerged and tide lands, State submerged and tide lands.

The applicant shall inform the Executive Director of any changes to the project required by other local, state or federal agencies. Such changes shall not be incorporated into the project until the applicant obtains a Commission amendment to this permit, unless the Executive Director determines that no amendment is legally required.

12. **Construction Site Documents & Construction Coordinator**. DURING ALL CONSTRUCTION:

a. **Construction Site Documents.** Copies of the signed coastal development permit and the approved Construction Plan shall be maintained in a conspicuous location at the construction job site at all times, and such copies shall be available for public review on request. All persons involved with the construction shall be briefed on the content and meaning of the coastal development permit and the approved Construction Plan, and the public review requirements applicable to them, prior to commencement of construction.

b. **Construction Coordinator**. A construction coordinator shall be designated to be contacted during construction should questions arise regarding the construction (in case of both regular inquiries and emergencies), and the coordinator's contact information (i.e., address, phone numbers, etc.) including, at a minimum, a telephone number that will be made available 24 hours a day for the duration of construction, shall be conspicuously posted at the job site where such contact information is readily visible from public viewing areas, along with an 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 name, phone number, 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.

13. **As-Built Plans.** WITHIN THREE MONTHS OF COMPLETION OF CONSTRUCTION, the Permittee shall submit two copies of As-Built Plans showing all development completed pursuant to this coastal development permit; all property lines; and all residential development inland of the seawall structure. The As-Built Plans shall be substantially consistent with the approved project plans described in Special Condition 1 above, including providing for all of the same requirements specified in those plans, and shall account for all of the parameters of Special Condition 7 (Monitoring and Reporting) and Special Condition 8 (Future Maintenance). The As-Built Plans shall include a graphic scale and all elevation(s) shall be described in relation to National Geodetic Vertical Datum (NGVD). The As-Built Plans shall include color photographs (in hard copy and jpg format) that clearly show all components of 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 representative viewpoints from the beaches located directly upcoast, downcoast, and seaward of the project site. 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 seawall has been constructed in conformance with the approved final plans.

14. **Public Rights**. The Coastal Commission's approval of this permit shall not constitute a waiver of any public rights that exist or may exist on the property. By acceptance of this permit, the applicant acknowledges, on behalf of him/herself and his/her successors in interest, that issuance of the permit and construction of the permitted development shall not constitute a waiver of any public rights which may exist on the property.

15. **Assumption of Risk, Waiver of Liability and Indemnity**.

a. By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from erosion and coastal bluff collapse (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to

indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

b. Liability for Costs and Attorneys Fees: The permittee shall reimburse the Coastal Commission in full for all Coastal Commission costs and attorneys fees -- including (1) those charged by the Office of the Attorney General, and (2) any court costs and attorneys fees that the Coastal Commission may be required by a court to pay -- that the Coastal Commission incurs in connection with the defense of any action brought by a party other than the applicant against the Coastal Commission, its officers, employees, agents, successors and assigns challenging the approval or issuance of this permit. The Coastal Commission retains complete authority to conduct and direct the defense of any such action against the Coastal Commission.

16. **Deed Restriction/CC&R's Modification.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant's homeowners' association (HOA) shall do one of the following:

a. Submit to the Executive Director for review and approval documentation demonstrating that the applicant has executed and recorded a deed restriction in a manner that will cause said deed restriction to appear on the title to the individual condominium units, and otherwise in a form and content acceptable to the Executive Director: (1) indicating that, pursuant to this permit, 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 permit, as they apply to the HOA, as covenants, conditions and restrictions on the use and enjoyment of the individual condominium units. The deed restriction shall include a legal description of the entire parcel or parcels against which it is recorded. 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 permit shall continue to restrict the use and enjoyment of the subject property so long as either this permit or the development it authorizes, or any part, modification, or amendment thereof, remains in existence on or with respect to the subject property, or;

b. Modify the condominium association's Declaration of Restrictions or CC&Rs, as applicable, in a form and content acceptable to the Executive Director, to reflect the obligations imposed on the homeowners' association by the special conditions of CDP #6-11-10. This addition to the CC&Rs shall not be removed or changed without a Coastal Commission-approved amendment to this coastal development permit.

17. **Condition Compliance**. **WITHIN 90 DAYS OF COMMISSION ACTION ON THIS COASTAL DEVELOPMENT PERMIT**, or within such additional time as the Executive Director may grant for good cause, the applicant shall satisfy all requirements specified in the conditions of the subject permit that the applicant is required to satisfy prior to issuance

of this permit. **WITHIN 60 DAYS OF ISSUANCE OF THIS COASTAL DEVELOPMENT PERMIT** the applicant shall have completed removal of all existing rip-rap and debris seaward of the proposed seawall in conformance with the approved Final Plans. Failure to comply with this requirement may result in the institution of enforcement action under the provisions of Chapter 9 of the Coastal Act.

IV. FINDINGS AND DECLARATIONS.

A. PROJECT DESCRIPTION

The applicant is proposing development which includes the removal of existing rip-rap and remnants of a failed seawall on the beach seaward of 4848 Bermuda Avenue, and the construction of a new approximately 120 ft. long, 14-20 ft. high, 2 ½ ft. thick tied-back shotcrete seawall with rip-rap backfill on top of and adjacent to a rock shelf that forms the public bluff. The rip-rap that currently exists landward of the center and southern portions of the proposed seawall will be retained and additional rip-rap will be placed landward of the northern portion of the proposed seawall. The existing and proposed rip-rap will be covered with soil and revegetated with native drought tolerant vegetation (Exhibit 5-7). A geosynthetic drainboard with outlets at elevation +10 ft. has been incorporated into the seawall design to limit saturated soil conditions behind the seawall to help encourage vegetative growth on the topsoil-covered rip-rap.

The blufftop lot at 4848 Bermuda Avenue contains an existing three-story, 13-unit condominium and is located in the Ocean Beach community of the City of San Diego (Exhibit 1). The condominium structure was constructed prior to the Coastal Act and is currently located as close as 15 ft. from the bluff edge. The seawall is proposed to be located on public property seaward of the applicant's western property line including the closed Ocean Street Right of Way (paper street) and City Beach. The seawall will only be located in front of the condominium structure at 4848 Bermuda Avenue. The bluff fronting the proposed seawall is approximately 30 ft.-high. During low tides, a pocket beach exists below the condominium structure. The applicant's biological report states: "…*Other physical features of the site worthy of note include the presence of small pockets of sand at the base of the bluff. Based on conversations with the property owners, a transient sand beach is present during the late summer and fall.*" Commission staff confirmed that the pocket beach also exists in the winter, during a site visit on February 9, 2012 (Exhibit 3 & 11). However, due to a rock headland on the southern border of the subject site and debris from a previous failed seawall and extensive rip-rap, the pocket beach is only accessible by scrambling over rocks, wading through shallow water or occasionally by crossing wet sand on very low tides. To the south of the subject site is a public street end, with a public stairway leading down to a highly used sandy beach. To the north of the subject site are two detached duplexes (1466-1472 Pescadero Drive) which are a part of the Oceanus GHAD. The two detached duplexes are not proposed to be protected by the new seawall. To the north of the detached duplexes are various multi-family residential structures which are protected by existing rip-rap and a pre-Coastal Act seawall. To the north of the multi-family structures is another public stairway leading down to a pocket beach at the seaward end of Pescadero Avenue (Exhibit 2).

The new seawall will tie into an existing wall, owned by the City of San Diego, directly to the south and extend upcoast across almost the entire length of the subject property (4848 Bermuda Avenue) where it will be keyed into the bluff face. The southern and center portions of the proposed seawall will have a top of wall elevation of approximately 20 ft. mean sea level (MSL), while the northern portion will have a top of wall elevation of only approximately 14 ft. MSL. The base of wall elevation will be approximately -0.05 ft. MSL for the majority of the wall and

approximately -3 ft. MSL for a small section of the wall. The applicant has attempted to place the wall landward of the existing MHTL by placing the wall atop an existing rock shelf or shaving back the existing vertical bedrock shelf. The location where the base of the wall is at -3 MSL is the result of a surge channel that has eroded the bedrock shelf. In this location, the proposed wall would encroach on area seaward of the MHTL and thus, would be located on the public trust tidelands. There is currently ½-ton to 2-ton grouted quarry stone rip-rap located landward of the southern and center portions of proposed wall, which will remain in place. Some of the existing un-permitted rip-rap on the public beach will be placed landward of the northern portion of the proposed wall. The new/re-used rip-rap will not be grouted (Exhibits 5-7). Both the existing rip-rap and the new rip-rap are proposed to be covered in soil and vegetated. One 8-ton rock is proposed to be placed on top of the shore platform to the north of the proposed wall to prevent flanking. The existing and proposed rip-rap landward of the new seawall will allow for smooth transition from the top of the wall to the edge of the bluff. The proposed development also proposes to remove a large quantity of rip-rap that is located seaward of the MHTL and to remove the remnants of a failed seawall and a failed seawall/retaining wall which are currently on the public beach.

B. SITE HISTORY

The 13-unit condominium structure was constructed prior to the passage of the Coastal Act. In addition, the applicant states that a 5 ½ to 7 ½ ft.-high reinforced concrete seawall existed on the site prior to the Coastal Act. In 1983, the City of San Diego completed a large scale project to stabilize the coastal bluffs between Newport Avenue and Osprey Street (*Sunset Cliffs Shoreline and Upper Cliff Stabilization Project).* The subject site is located within the aforementioned Stabilization Project area. However, the applicant states that the subject site was not deemed to be threatened at the time of this project because it already had a seawall. Thus, no stabilization measures were undertaken for the subject site during the *Sunset Cliffs Shoreline and Upper Cliff Stabilization Project*.

In January 2001, the existing 5 ½ to 7 ½ ft.-high reinforced concrete seawall fronting the subject property collapsed. Following the collapse of the seawall, the Executive Director of the Coastal Commission issued an emergency CDP to place rip-rap (consisting of ½-ton to 2-ton quarry stone) with minimal grouting on the bluff face and the beach fronting the 13-unit condominium structure (CDP 6-01-006-G). The proposed rip-rap was to be kept at a minimum consistent with the angle of repose of the slope. However, a much greater quantity of rip-rap was placed in 2001 than was permitted with the emergency CDP. In addition, the rip-rap approved pursuant to the emergency CDP was conditioned to require that a performance bond be issued within 10 days of approval to pay for its removal within 150 days of installation, unless a regular CDP was issued. However, the applicant never submitted evidence of a performance bond to the Commission and the rip-rap has been in place for greater than 11 years in apparent violation of the emergency CDP. In December 2009, an additional retaining wall along the northern bluff portion of the property failed. The origin of the failed retaining wall is unknown. Following the most recent retaining wall failure, erosion has flanked the northern edge of the existing rip-rap and has undermined the condominium patio and further threatens the stability of the condominium.

I. GHAD Formation

On December 7, 2010, the San Diego City Council approved the formation of the Oceanus Geologic Hazard Abatement District (Oceanus GHAD) in compliance with the GHAD formation procedures pursuant to Public Resources Code, section 26500, et. seq. The Oceanus GHAD includes a 13-unit three-story bluff top condominium structure at 4848 Bermuda Avenue and two detached single-story bluff top duplexes at 1466-1472 Pescadero Drive (Exhibit 4). The State of California Department of Conservation provides the following information about GHADs:

> *"… [GHADs] provide for the formation of local assessment districts for the purpose of prevention, mitigation, abatement, or control of geologic hazards…The Geologic Hazard Abatement District [GHAD] is a potentially useful tool to effectively abate a landslide hazard that crosses property boundaries. It is a mechanism that responds to the physical realities of landslides, and allows property owners to cooperate in solving a common problem. It removes much of the stigma of legal liabilities among adjacent landowners and allows them to cooperate rather than litigate. It also provides for a cost-effective solution, requiring only one geotechnical engineering firm and one plan to solve the problems of several landowners."*

Pursuant to section 13056(g) of the Commission's regulations, the Commission may require an applicant to reimburse it for any additional reasonable expenses incurred in processing permit applications including litigation costs or fees that the Commission may incur in defending a judicial challenge to the Commission's approval of the permit. Therefore, the Commission, in approving this permit, imposes Special Condition 15, requiring the applicant to reimburse the Commission in full for all Coastal Commission costs and attorneys fees in connection with defending any action brought by a party, other than the applicant, challenging the Commission's approval or issuance of this permit. In addition, Special Condition 15 ensures that the applicant assume all risk associated with this project and its development within an area that is highly susceptible to erosion.

The project site is located partially within the City of San Diego appealable jurisdiction and partly within the Coastal Commission original jurisdiction. Pursuant to Coastal Act section 30601.3, with the consent from the applicant and the City, the permit for the entire project is being processed as a consolidated permit by the Coastal Commission, with Chapter 3 policies of the Coastal Act as the legal standard of review, with the City's certified LCP used as guidance.

C. GEOLOGIC CONDITIONS AND HAZARDS

Section 30235 of the Coastal Act states, in part:

> *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.*

In addition, Section 30253 of the Coastal Act states, in part:

> *New development shall do all of the following:*
>
> *(a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
>
> *(b) 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...*

The proposed project involves the construction of an approximately 120 ft.-long, 14-20 ft. high, 2 ½ ft. thick colored and textured concrete tiedback seawall, and rip-rap backfill on a public beach and bluff below a 13-unit condominium structure. In addition, the applicant proposes to remove a large quantity of unpermitted rip-rap from the public beach fronting the site. The applicant's engineer has identified the upper and lower bluff hazards threatening the blufftop properties:

> *"…In 2001, a portion of the seawall fronting 4848 Bermuda Avenue failed, threatening the bluff-top structure and necessitating the placement of an emergency rock revetment…Additional recent retaining wall failures now threaten the northwest building corner of 4848 Bermuda Avenue…Erosion in front of the Pescadero Drive property [1466-1472 Pescadero Drive] threatens to flank seawall improvements at 1476-1480 Pescadero Drive [2 properties to the north of the subject site], and has contributed to the erosional problems experienced in front of the Oceanus property [4848 Bermuda Avenue]...*
>
> *The Point Loma Formation…comprises the lower near-vertical portion of the sea cliff, extending up to elevations of 10 to 12 feet (MSLD) in the site vicinity…Although the Point Loma Formation is generally very resistant to wave erosion, some of the highly-fractured shale interbeds, especially those containing significant amounts of clay, have been subjected to accelerated wave erosion, locally resulting in upwards of 10 feet of sea cliff retreat.*
>
> *The Bay Point Formation is approximately 25 feet in thickness at the site, and forms the upper sloping part of the coastal bluff above approximately elevation 10 to 12 feet (MSLD)…The Bay Point Formation…consists of nearshore marine, poorly-consolidated, fine- to medium-grained sandstone, and is more susceptible to erosion than the underlying Point Loma Formation. On site, rilling is prevalent throughout the upper portion of the bluff, and active coastal bluff erosion is progressively encroaching upon the various bluff-top improvements…"*
>
> *(Ref. "Geotechnical Basis of Design & Alternatives Analysis Oceanus Geologic Hazard Abatement District" TerraCosta Consulting Group dated 1/26/11)*

While the existing condominium structure is set back from the bluff approximately 15 feet, the slope stability analysis performed by the applicant's engineer indicates that further collapse of the upper bluff would threaten the residences at the top of the bluff. Slope stability analyses for the bluff at 4848 Bermuda Avenue demonstrate a factor of safety of 1.24. The factor of safety is an indicator of slope stability where a value of 1.5 is the industry-standard value for geologic stability of new development placed on a slope. In theory, failure should occur when the factor of safety drops to 1.0, and no slope area with a proposed new-development footprint should have a factor of safety less than 1.0. This factor of safety alone may not necessitate shoreline protection. However, when taken in combination with the high rates of past and present bluff retreat and the close proximity of the condominium structure to the bluff edge it is clear that shoreline protection is warranted. The Commission Geologist and the Commission Engineer have reviewed the geotechnical information provided by the applicant and concur that the proposed seawall is necessary to protect the existing 13-unit condominium structure at 4848 Bermuda Avenue and that the seawall has been adequately designed to minimize its encroachment on public property. Following construction of the proposed approximately 120 ft.-long seawall, the applicant's engineer has demonstrated that the factor of safety for the condominium structure will be increased at this currently non-reinforced section of the bluff to a factor of safety of 1.5.

Thus, given the significant bluff retreat that has occurred over the recent years, the low factor of safety on the subject bluffs, and the close proximity of the condominium structure to the bluff edge, substantial evidence has been provided to document that the existing primary blufftop structure is in danger from erosion. However, there are a variety of ways in which the threat from erosion could be addressed. Under the policies of the Coastal Act, the project must eliminate or mitigate adverse effects on shoreline sand supply and minimize adverse effects on public access, recreation, and the visual quality of the shoreline.

I. Alternatives

The applicant's geotechnical report includes an alternatives analysis to demonstrate that no other feasible less-environmentally-damaging structural alternatives exist to address the threats to the residence at the top of the bluff (Ref. Geotechnical Basis of Design & Alternatives Analysis Oceanus Geologic Hazard Abatement District" TerraCosta Consulting Group dated 1/26/11).

Rock rip-rap alone with no seawall

While the applicant's engineer states that this alternative would protect the condominium structure, it would not be preferable as large 8-ton rocks would need to be used in order to not be displaced by storm events and large waves. The needed rock rip-rap would result in a much larger area of beach encroachment compared to the proposed seawall and thus would further eliminate usable public beach area and beach access.

Drilled pier wall installed a few feet landward of the existing bluff edge

This alternative would not be preferable because the piers would soon become exposed and would need tiebacks and grade beams to continue protecting the existing structure, which would be aesthetically unappealing.

Demolish all or a portion of the existing structure and relocate it on-site to a location further from the bluff edge

The applicant states that the lot area is not large enough to re-locate the 13-unit condominium structure far enough from the bluff edge to be safe from future bluff retreat. Thus, the applicant states that relocation would only delay the need for shoreline armoring.

No project alternative

This alternative was not preferable because it would rely on the current unpermitted rip-rap protecting the site. The current rip-rap is also too small and would continue to be displaced during storm and wave events. In addition, erosion would likely flank the existing seawall to the south of the subject site which supports a public stairway and the existing condominium structure would not be adequately protected.

The applicant's engineer concluded that the proposed seawall represents the minimum necessary effort to prevent upper bluff collapse along this section of coastline and to adequately protect the existing primary structure at 4848 Bermuda Avenue. The Commission staff engineer has reviewed the project and concurs that the currently proposed seawall design is the best alternative to lessen any significant adverse effects the seawall may have on the environment.

II. Impacts to Adjacent Properties

In addition to the adverse impacts the seawall will have on the beach as detailed above, all seawalls can have some end effects -- unintended impacts to adjacent properties. There will almost always be some effects at the junction between two different materials, but the proposed wall design has attempted to reduce these end effects on the unprotected bluff directly to the north as much as possible (the southern end of the proposed seawall will connect to an existing seawall). One effect occurs simply due to the different materials and the positional change between the seawall, built in front of the bluff face, and the unprotected bluff face. The angle at the seawall's end can deflect some unquantifiable wave energy into the adjacent bluff. The sharper the angle and larger the difference between the face of the seawall and face of the bluff, the larger the likely amount of wave energy that can be reflected. The face of the seawall will transition into the upcoast bluff face in an attempt to minimize upcoast end effects. The second effect from seawalls can occur when waves impact the wall and then propagate along the face of the wall until they reach the unprotected bluff face and cause greater erosion there. Special Condition 1 requires the applicant to design and construct the proposed seawall to minimize the erosive effects on the adjacent bluffs. Since the seawall will have a textured face that is contoured to the existing bluff profile, the wall shape (i.e. contoured to the bluff) and the textured surface will reduce the likelihood that a wave will propagate uninterrupted along the face of the seawall. The seawall is not likely to have any positive benefits to the adjacent unprotected bluff; the unprotected bluff face adjacent to the seawall will continue to erode, there will be, over time

a difference in the position of the unprotected bluff and the seawall. This will not be a consequence of the seawall, but an indication of the ongoing erosion that is being interrupted by the seawall, but left unchecked on the unprotected property. Although, the continued erosion of the site at 1466-1472 Pescadero Avenue threatens to flank seawall improvements to the north at 1476-1480 Pescadero Drive, measures have been taken by applicant to design the proposed seawall so as the 13-unit condominium structure at 4848 Bermuda will be adequately protected.

III. 20 Year Authorization of Seawall and Redevelopment

Special Condition 2 provides the applicant with a 20-year authorization period which allows the Commission to revisit the applicant's need for the seawall to protect the existing structure. Special Condition 3 establishes a process that requires submittal of an amendment to the seawall permit with the Commission prior to the expiration of the 20 year authorization of the permit. As the blufftop lot redevelops and the structure is potentially moved inland or reduced in size, this could reduce or eliminate the need for the seawall. Special Condition 3 & 4 therefore requires the amendment application to include the submittal of sufficient information for the Commission to consider the need and alternatives to continued authorization of a seawall at this location.

A twenty-year period better responds to such potential changes and uncertainties, including to allow for an appropriate reassessment of continued armoring and its effects at that time in light of what may be differing circumstances than are present today, including with respect to its physical condition after twenty years of existence. In addition, with respect to climatic change and sea level rise specifically, the understanding of these issues should improve in the future, given better understanding of the atmospheric and oceanic linkages and more time to observe the oceanic and glacial responses to increased temperatures, including trends in sea level rise. Such an improved understanding will almost certainly affect CDP armoring decisions, including at this location. Of course it is possible that physical circumstances as well as local and/or statewide policies and priorities regarding shoreline armoring are significantly unchanged from today, but it is perhaps more likely that the baseline context for considering armoring will be different – much as the Commission's direction on armoring has changed over the past twenty years as more information and better understanding has been gained regarding such projects, including their effect on the California coastline. For these reasons, the Commission is authorizing the proposed seawall for 20 years from the date of this approval. This limitation is implemented through Special Conditions 2.

The intent of these conditions is to limit further encroachment on the public resources (adjacent bluff and beach) with additional bluff protective devices, and to allow for potential removal of the approved seawall when it is no longer necessary to protect the development that required the seawall. The conditions are also to put the property owners on notice that redevelopment of the parcels should not rely on bluff or shoreline protective works for stability and such alternatives as removing the seaward portion(s) of the structure, relocation inland, and/or reduction in size should be considered to avoid the need for bluff or shoreline protective devices in this hazardous area. Such options are all feasible for new development and would stop the perpetuation of development in non-conforming locations that would eventually lead to complete armoring of the bluffs and long-term, adverse impacts to the adjacent public beach and State tidelands. Special Condition 2 recognizes that the proposed seawall is being approved under Section 30235

to protect the *existing* 13-unit condominium structure in danger from erosion. Any future redevelopment of the affected property will re-evaluate current conditions and new development should be sited safely, independent of any shoreline protection.

Special Condition 2 defines redevelopment to include additions and expansions, or any demolition, renovation or replacement which would result, cumulatively, in alteration or reconstruction of 50 percent or more of an existing structure. Thus, this condition requires that if an applicant submits an application to remodel 30% of the existing condominium structure, then 5 years later seeks approval of an application to remodel an additional 30% of the condominium structure, this would constitute redevelopment, triggering the requirement to ensure that the redeveloped structure is sited safely, independent of any shoreline protection. In addition, the condition acknowledges future development on the site beyond repair and maintenance to the existing structure must meet the requirements of Section 30253 of the Coastal Act and not require bluff or shoreline protective devices that alter the natural landform of the bluffs.

Additional conditions of approval ensure that the applicant and the Commission know when repairs or maintenance are required, by requiring the applicant to monitor the condition of the seawall annually, for three years and at three-year intervals after that, unless a major storm event occurs. The monitoring will ensure that the applicant and the Commission are aware of any damage to or weathering of the seawall and can determine whether repairs or other actions are necessary to maintain the seawall in its approved state. Special Condition 6 requires the applicant to submit a monitoring report that evaluates the condition and performance of the seawall and overall site stability, and to submit an annual report with recommendations, if any, for necessary maintenance, repair, changes or modifications to the project. In addition, the condition requires the applicant to perform the necessary repairs through the coastal development permit process, when required.

IV. Monitoring

Special Condition 1 requires the applicant to submit final plans for the project indicating that the seawall conforms to the bluff contours and that demonstrate that any existing irrigation systems on the blufftop have been removed, as these would impact the ability of the seawall and other shoreline protection devices to adequately stabilize the site. The final plans shall also detail the location of any existing accessory improvements on the site. In addition, all runoff from the subject site shall be directed towards the street, new rip-rap proposed behind the seawall shall not be grouted, and sufficient detail shall be provided to assure worker safety during construction of the seawall.

To assure the proposed shore/bluff protection has been constructed properly, Special Condition 13 has been proposed. This condition requires that, within 90 days of completion of the project, as built-plans and certification by a registered civil engineer be submitted that verifies the proposed seawall has been constructed in accordance with the approved plans. The Commission typically requires that any proposed shore/bluff protection be constructed to withstand serious episodic storms. Special Condition 10 has been attached which requires the applicant to submit certification by a registered civil engineer verifying the seawall, as proposed herein, has been designed to withstand storms comparable to the winter storms of 1982-83. Special Condition 11

requires the applicant to submit a copy of any required permits from other local, state or federal agencies to ensure that no additional requirements are placed on the applicant that could require an amendment to this permit. Special Condition 12 has been attached, which requires that during all construction, copies of the signed coastal development permit and approved construction plan shall be maintained on-site and that a construction coordinator be designated. In this case, the applicant is a GHAD and is not required to obtain local approval for work on private property, within the GHAD boundaries. However, upon approval of the GHAD boundaries by the San Diego City Council, public property was excluded from the boundaries of the GHAD. The vast majority of the proposed development included in this CDP application is on public property (Appendix C). Therefore, consistent with the section of the City of San Diego's certified Land Development Code, which is used for guidance, Special Condition 11 requires that the applicant provide written permission from the City before this CDP can be issued as property owner and as trustee of the adjacent public trust lands. This stretch of beach and bluff has historically been used by the public for access and recreation purposes. Special Condition 14 acknowledges that the issuance of this permit does not waive the public rights that may exist on the property.

Section G. 143.0144(a) of the City of San Diego's Coastal Bluffs and Beaches section of the certified LCP states:

> *Development on Coastal Beaches*
>
> *[…]*
>
> *Where erosion control devices are proposed to encroach upon or affect any portion of property owned by the City of San Diego or other public agency, or on lands subject to the public trust, the applicant shall provide written permission from the City Manager or pubic property owner before approval of any permit. If the protective device encroaches directly on or otherwise affects State tidelands or publicly-owned property, the property owner shall be required to compensate for the use of public property and to mitigate the impacts of the protective device on public beaches.*

V. Deed Restriction and Liability

Also, due to the inherent risk of shoreline development, Special Condition 15 requires the applicant to waive liability and indemnify the Commission against damages that might result from the proposed shoreline devices or their construction. The risks of the proposed development include that the proposed shoreline devices will not protect against damage to the condominium structure from bluff collapse and erosion. In addition, the structure itself may cause damage either to the condominium structure or to neighboring properties by increasing erosion of the bluffs. Such damage may also result from wave action that damages the seawall. Although the Commission has sought to minimize these risks, the risks cannot be eliminated entirely. Given that the applicant has chosen to construct the proposed shoreline device despite these risks, the applicant must assume the risks. Special Condition 16 requires the applicant to execute and record a deed restriction against each individual condominium unit that will be governed by this CDP or modify the condominium association's Declaration of Restrictions or

CC&Rs to reflect the special conditions of this CDP. Only as conditioned can the proposed project be found consistent with Sections 30235 and 30253 of the Coastal Act.

In summary, the applicant has documented that the existing primary blufftop condominium structure (which was originally constructed prior to the Coastal Act's enactment and pre-Proposition 20) is in danger from erosion and subsequent bluff collapse. As conditioned, there are no other less damaging structural alternatives available to reduce the risk from bluff erosion. Since the proposed seawall deplete sand supply, occupy public beach and bluff and fix the back of the beach, Special Condition 5 requires the applicant to make a payment to offset this impact. Given the documented coastal bluff erosion over the past several years, the low factor of safety on the subject bluff, and the close proximity of the existing condominium structure to the bluff edge, substantial evidence has been provided to document that the existing primary blufftop structure is in danger from erosion and that the proposed seawall is necessary to protect the structure. In addition, the above-described alternatives presented by the applicant support a conclusion that there is not a less-environmentally-damaging feasible structural alternative. The Commission's staff geologist and coastal engineer have reviewed the applicant's geotechnical assessment of the site along with the alternatives analysis and concur that the proposed seawall is necessary to protect the primary structure at 4848 Bermuda Avenue. Therefore, the Commission finds that the proposed seawall, as conditioned, is consistent with Sections 30235 and 30253 of the Coastal Act and is the least environmentally damaging feasible structural alternative.

D. IMPACTS TO SAND SUPPLY, PUBLIC ACCESS AND RECREATION

Shoreline protective devices have significant adverse impacts to public access and recreation. Coastal Act Section 30604(c) requires that every coastal development permit issued for any development between the nearest public road and the sea "shall include a specific finding that the development is in conformity with the public access and public recreation policies of [Coastal Act] Chapter 3." The proposed project is located seaward of the first through public road, on and adjacent to a rock shelf which forms part of the public coastal bluff. Coastal Act Sections 30210 through 30213, as well as Sections 30220 and 30221 specifically protect public access and recreation, and state:

> ***Section 30210****: In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*
>
> ***Section 30211****: Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.*
>
> ***Section 30212(a)****: Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects…*

> ***Section 30213****: Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. …*
>
> ***Section 30220****: Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.*
>
> ***Section 30221****: Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.*

Coastal Act Section 30240(b) also protects parks and recreation areas such as the adjacent public beach park. Section 30240(b) states:

> ***Section 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.*

Section 30235 of the Coastal Act states, in part:

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

Section 30235 of the Coastal Act requires that shoreline protection be designed to eliminate or mitigate adverse impacts on local shoreline sand supply. There are a number of adverse impacts to public resources associated with the construction of shoreline protection[1]. The natural shoreline processes referenced in Section 30235, such as the formation and retention of sandy beaches, can be significantly altered by construction of a seawall, since bluff retreat is one of several ways that beach area and beach quality sand is added to the shoreline. This retreat is a natural process resulting from many different factors such as erosion by wave action causing cave formation, enlargement and eventual collapse, saturation of the bluff soil from ground water causing the bluff to slough off and natural bluff deterioration. When a seawall or other armoring is constructed on the beach at the toe of the bluff, it directly impedes these natural processes.

[1] Griggs, G.B., 2005, The impacts of coastal armoring: Shore and Beach, v. 73, no. 1, p. 13–22; Griggs, G.B., 2010, The effects of armoring shorelines—The California experience, in Shipman, H., Dethier, M.N.,Gelfenbaum, G., Fresh, K.L., and Dinicola, R.S., eds., 2010, Puget Sound Shorelines and the Impacts of Armoring—Proceedings of a State of the Science Workshop, May 2009: U.S. Geological Survey Scientific Investigations Report 2010-5254, p. 77-84.

Some of the effects of a shoreline protective structure on the beach, such as scour, end effects and modification to the beach profile are temporary or difficult to distinguish from all the other actions which modify the shoreline. Seawalls also have non-quantifiable effects to the character of the shoreline and visual quality. However, some of the effects which a structure may have on natural shoreline processes can be quantified. Three of the effects from a shoreline protective device which can be quantified are: 1) loss of the beach/bluff area on which the structure is located; 2) the long-term loss of beach/bluff which will result when the back beach/bluff location is fixed on an eroding shoreline; and 3) the amount of material which would have been supplied to the beach if the back beach or bluff were to erode naturally.

Loss of beach material and loss of beach area are two separate concerns. A beach is the result of both sandy material and a physical area between the water and the back beach. Thus, beach area is not simply a factor of the quantity of sandy beach material. In the Ocean Beach/Sunset Cliffs area of San Diego, the shoreline is a gently sloping sedimentary rock Point Loma Formation covered by a thin veneer of sand. The bedrock layer provides an area for collection of sandy material. The sand material is important to the overall beach experience, but even without the sand, the bedrock layer provides an area for coastal access between the coastal bluff and the ocean.

The proposed seawall will be approximately 120 feet long and will encroach 2 ½ feet onto and adjacent to a rock ledge that forms part of the public bluff. The total encroachment that will occur from the proposed seawall will be approximately 300 square feet (2 ½ ft. x 120 ft.) of rock shelf bluff area that will no longer be available for public use. In addition, if the natural shoreline were allowed to erode, the beach and bluff would retreat inland. However, when the back shoreline location is fixed, the inland migration of the beach is halted. This will result in a long-term loss of recreational opportunity as the development of new inland beach land fails to keep pace with the loss of or inundation of the seaward portion of the beach. Over a 20 year period, with a long-term average annual retreat rate of 0.2 ft/yr (retreat rate provided by the applicant's engineer), approximately 480 square feet of beach will be inundated and will not be replaced by new inland beach area (.2 ft./yr [erosion rate] x 120 ft. [length of seawall] x 20 years). These two impacts from the seawall, the encroachment and the fixing of the back beach, will result in the immediate loss of approximately 300 square feet of public bluff/beach and the on-going loss of beach area (480 sq. ft.), for a total of 780 sq. ft after 20 years.

The proposed seawall will also halt or slow the retreat of the entire bluff face. The bluff, composed of Point Loma and Bay Point Formation, consists of a significant amount of compacted sand. As the bluff retreated historically, this sand was contributed to the littoral sand supply to nourish beaches throughout the region. The proposed seawall will halt this contribution to the littoral cell. Based on bluff geometry and the composition of the bluff materials, the Commission staff has estimated that the seawall will prevent approximately 292 cubic yards of sand from reaching the littoral cell (based on a bluff erosion rate of 0.2 ft/yr and the wall remaining in place for 20 years). The applicant submitted detailed calculations for the amount of bluff material that would be blocked by the wall with the original project submittal. However, the proposed project has been significantly modified since that time and the submitted calculations are no longer applicable. However, the Commission engineer was able to combine the previously submitted calculations and the plans for the proposed seawall design to estimate a

reasonably close approximation of the amount of bluff material that would be retained by the new seawall. Special Condition 1 requires that the applicant submit detailed sand mitigation payment calculations for review and written approval of the Executive Director of the Coastal Commission.

The methodology used by the Commission in developing this quantity and value of beach material uses site-specific information provided by the applicant as well as estimates, derived from region-specific criteria, of both the loss of beach material and beach area which could occur over the life of the structure, and of the cost to purchase an equivalent amount of beach quality material and to deliver this material to beaches in the project vicinity. The methodology provides a means to quantify the sand and beach area that would be available for public use, were it not for the presence of the proposed bluff protection. The methodology addresses the sand volume impacts from wall and infill encroachments, denial of sand to the littoral cell and passive erosion, as discussed above.

The project site is primarily located on a public beach and bluff owned by the City of San Diego, which is utilized during low tides by local residents and visitors for a variety of recreational activities such as swimming, jogging, walking, surf fishing, beachcombing and sunbathing. The site is located just north of the Bermuda Avenue public beach access stairway and pocket beach and just south of the Pescadero Avenue public beach access stairway and pocket beach (Exhibit 2). The proposed seawall, which will be approximately 120 ft. long and 2 1/2 ft. wide will be constructed on and adjacent to rock shelves which are a part of the coastal bluff owned by the public that would otherwise be available for public use and, therefore, will have both immediate and long-term adverse impacts on public access and recreational opportunities.

The beach fronting the subject site is narrow, and at mid and high tides throughout the year it is inaccessible and/or inundated with water. However, during low tides, the beach is accessible by climbing over rock headlands and existing rip-rap to the south and north of the subject site. At very low tides the beach can be accessed by walking around an existing rock headland to the south of the site. Currently, there is a large amount of rip-rap stones on the pocket beach fronting the subject site, which makes the beach more difficult to access and to utilize. The rip-rap has been in place since 2001 and is considered unpermitted. Although the applicant received an emergency permit from the Commission for the temporary placement of rip-rap seaward of the existing structure (CDP 6-01-006-G), it appears that far more rip-rap was placed than allowed through the emergency permit. The emergency permit required: "…stone will be kept at a minimum consistent with angle of repose…" In addition, pursuant to the emergency permit, the rip-rap was to be removed within 150 days of issuance of the Emergency CDP and replaced through a follow-up permit, with a more permanent solution that did not occupy so much of the public beach area. Prior to the placement of the rip-rap, it is likely that the beach was used more often by the public as there was a greater amount of beach area, and the beach was likely more accessible by walking on the rock shelves which form the public coastal bluff. The proposed removal of the existing rip-rap and failed seawall seaward of 4848 Bermuda Avenue through this follow-up permit will open up a larger amount of beach area for public use. However, this 'new' beach area would not be considered mitigation because the rock to be removed is unpermitted.

The applicant asserts that the proposed seawall will be located in the same location or landward of the seawall that partially failed in 2001 and completely failed in 2009. Additionally, the proposed seawall will be significantly further landward than the existing unpermitted rip-rap. Additionally, the applicant has attempted to locate the majority of the proposed seawall above the MHTL, although at least a portion appears to be located below the MHTL on public trust land. Moreover, as originally proposed, the project included greater than 2,000 sq. ft. of toestone/rip-rap located seaward of the proposed wall and to the north of the proposed wall; however, at the direction of Commission staff, the applicant has since revised the proposed project to remove all portions of the toestone/rip-rap located seaward and to the north of the proposed wall. The applicant's engineer confirmed that the structural stability of the new proposed seawall would not be dependent on the toestone/rip-rap that was originally proposed, and that the rip-rap's primary purpose would have been to prevent shaking of the condominium structure during large storm events. Therefore, Commission staff coordinated with the applicant to revise the proposed project, which included removal of all the proposed rip-rap seaward and to the north of the proposed wall, thereby enhancing the area of useable beach. Thus, as now proposed, the project will occupy the minimum footprint on the public beach and public bluffs, while continuing to ensure the geologic and engineering stability of the blufftop condominium structure.

However, an encroachment of any amount, especially 2 1/2 ft. for a length of 120 feet on and adjacent to the coastal bluff reduces the accessibility of the beach area, and thus reduces the amount of time that the public can use the small beach, and is therefore a significant adverse impact on public access along the coast. This is particularly true given the existing beach profiles and relatively narrow beach where access is only available at low tides and/or by climbing on rock headlands and rip-rap. In addition, were it not for the proposed seawall, the seaward face of the bluff would naturally recede, making additional beach area available for public use. The applicant's engineer estimates that the bluff will erode approximately 0.2 ft. per year. As calculated previously, approximately 780 sq. ft. of beach and bluff area would be available for public use during the next 20 years if the proposed seawall were not constructed.

In addition, the amount of beach material that would have been added to the beach if natural erosion had been allowed to continue at the site has been calculated to be approximately 292. cubic yards. At estimated sand cost of $17.29 per cubic yard (provided by the applicant, and based on judgment and three estimates from local contractors), this sand would have a value of $5,050. (Appendix B).

Appropriate mitigation for the subject development would be creation of additional public beach area in close proximity to the impacted beach area. However, all of the beach areas in the Ocean Beach/Sunset Cliffs area of San Diego are already in public ownership, such that there is not private beach area available for purchase. In addition to the more qualitative social benefits of beaches (recreational, aesthetic, habitat values, etc.), beaches provide significant direct and indirect revenues to local economies, the state, and the nation. The loss of or any decrease in access to a public beach in an urban area such as San Diego represents a significant impact to public access and recreation, including a loss of the social and economic value of this recreational opportunity. The question becomes how to adequately mitigate for these qualitative

impacts on public recreational beach use and in particular, how to determine a reasonable value of this impact to serve as a basis for mitigation.

In the past, the Commission has required payment to fund beach sand replenishment as mitigation for the identified direct impacts of the proposed shoreline protective device on beach sand supply and shoreline processes over the 20-year design life of the project. However, in this case, this is a relatively low quantity of sand retained by the proposed seawall and the small pocket beach in front of the proposed seawall likely would not hold sand well due to its shallow nature and regular tidal inundation. The subject beach and the beaches in its vicinity were not included in SANDAG's 2001 Regional Beach Sand Project and are not proposed to be included in its 2012 Regional Beach Sand Project II, thus, it appears that contributing to a regional sand fund would not likely yield a noticeable sand increase to the pocket beaches in the Sunset Cliffs area.

In recent years, the Commission has sought additional ways to quantify the adverse impacts to public access and recreation that result from shoreline protective devices and, thereby, develop more appropriate mitigation for those impacts. As a filing requirement for seawall applications, the applicant was asked to address the adverse impacts of shoreline devices on public access and recreation opportunities and to consider ways those impacts could be mitigated. Mitigation might be in the form of a particular public access or recreational improvement to be located in close proximity to the project or might involve a payment to be used sometime in the future for a public access/recreation improvement.

In discussions with staff regarding potential mitigation opportunities, the applicant has offered $81,000 toward repairs to an adjacent publicly owned seawall (Exhibits 12-13). However, it appears that the seawall's primary purpose is to protect a buried concrete sewage outflow vault that has not been used for decades. The southern portion of the seawall does partially support a public access stairway; however, that portion of the seawall appears to have already been repaired in the last 5 years. The applicant is proposing to repair the northern portion of the seawall, which does not support the public access stairway. The applicant's engineer has told Commission staff that the proposed repairs will not stabilize the public access stairway and the Commission engineer concurs that the applicant has not provided any information to show that the seawall repairs are needed to protect the public access stairway. The stairway itself is functional, but in poor condition. An engineer with the City of San Diego determined that the existing stairway structure currently has major cracks and spalling and a stairway repair would not be worthwhile as it would not appreciably lengthen the lifespan of the stairway. It appears that a longer term effort to redesign the city-owned seawall and stairway in the future may be more consistent with Commission policies that require seawalls only be approved to protect primary structures and essential public infrastructure.

In addition, City engineering staff has indicated that even if the proposed city-owned seawall repair was needed to protect the stairway, which it is not, the stairway in its current condition is not worth protecting and should instead be demolished and reconstructed in its current alignment. However, the an alternative stairway replacement design may be possible or a different type of public access or recreational opportunity may be available for this beach. One possible alternative stairway design that would potentially be far less expensive than replacing

the stairway in its current alignment would be incorporating a new stairway into the private seawall that has been approved, but not yet constructed, along the back of the Bermuda pocket beach.

The proposed Oceanus seawall impacts lateral public beach access and recreational opportunities at the pocket beach seaward of the proposed seawall. In order to access the beach in front on the proposed seawall, the public must use the existing public access stairway. Due to the nature of the shoreline in this location, providing public access to the pocket beaches and preventing impacts to lateral access from shoreline structures is critical to maintaining and enhancing public access. Therefore, a future replacement of the stairway or other recreational opportunity in this vicinity would be the best mitigation for the public access impacts of the proposed seawall.

Therefore, Special Condition 5 requires that prior to issuance of the CDP; the applicant shall submit a payment of $86,000 to be deposited in the Public Access and Recreation Fund, an interest bearing account established at SANDAG in-lieu of providing sand to replace the beach area lost due to the impacts of the proposed protective structure and to mitigate for the loss of public recreational use over 20 years resulting from the placement of the structure on the public beach and bluff.

The purpose of the mitigation payment is for provision, restoration or enhancement of public access and recreation opportunities to the pocket beach at the terminus of Bermuda Avenue, including but not limited to, public access improvements, recreational amenities and/or acquisition of privately-owned beach or beach-fronting property for such uses. The funds shall be used solely for permanent long-term public access and recreation improvements which provide public access or recreational opportunities along the shoreline, not to fund operations, maintenance or planning studies. Any portion of the fund that remains after ten years may be used for other public beach access and recreation projects within the City of San Diego. The funds shall be released only upon approval of an appropriate project by the Executive Director of the Coastal Commission. The funds shall be released as provided for in a MOA between SANDAG, or a Commission-approved alternate entity, and the Commission; setting forth terms and conditions to assure that the fund will be expended in the manner intended by the Commission. If the MOA is terminated, the Commission can appoint an alternative entity to administer the fund.

This public access mitigation payment will address the impacts of the proposed seawall and the impacts that have been occurring over last 11+ through the placement of unpermitted rip-rap, which prevented the public from using a portion of the public beach and bluff. The $86,000 public access payment results in a per sq. ft. value of lost beach area equal to approximately $110.

I. Comparison to other Public Access/Recreation Mitigations

Payment Based Mitigation

In October 2010, the Commission approved the construction of a 256.3 ft. long seawall fronting five single family homes in Solana Beach which was estimated to impact 3,213 sq. ft. of beach

area over a 20 year period. To mitigate the adverse impacts of the seawall on public access and recreational opportunities, and in lieu of purchasing a comparable area of beach, the Commission required a mitigation payment of $256,000. In June of 2007, the City of Solana Beach adopted an interim in-lieu payment program to mitigate the adverse impacts associated with shoreline devices (Ref. Resolution 2007-042, City of Solana Beach). The program has been designed as "interim" in that until the City completes and the Commission certifies as part of an LCP submittal an economic study that more precisely determines the economic costs, the ultimate costs to the property are unknown. As such, the City's program requires the $1,000 per linear foot payment be assessed in the interim and requires an applicant to agree to modifications to the fee once the economic study is complete and certified and a more site specific fee is assessed. According to the City's program, the monies collected through the mitigation program will be directed for City use for public access and recreational projects. This payment resulted in a per sq. ft. value of lost beach area equal to approximately $80 (Ref. CDP 6-09-033/Garber, et. al.).

In June 2010, the Commission approved construction of a 57 ft. long seawall fronting a single-family house in Encinitas which was estimated to impact 801 sq. ft. of beach area over a 20 year period. To mitigate the adverse impacts of the seawall on public access and recreational opportunities, and in lieu of purchasing a comparable area of beach, the Commission required the applicant to make a payment based on a current per sq. ft. real estate appraisal of the blufftop lot (without improvements) multiplied by 801 sq. ft. of lost public beach. This method was selected due to a lack of specific recreational empirical data necessary to determine the value of the lost public beach. While the value of the public beach is likely to be higher than the value of a blufftop parcel because of the public benefit derived from its use, the Commission determined that the unimproved blufftop appraisal was appropriate until a more accurate method of determining economic value of the loss to public access and recreational opportunities is identified in Encinitas. The property owner made a payment of $136,606 to mitigate recreation impacts of the seawall. This payment resulted in a per sq. ft. value of lost beach area equal to approximately $170. (Ref. CDP 6-07-133/Li)

In 2005, the Commission approved the construction of a 120 ft.-long, 2 ½ ft. wide seawall below the Las Brisas condominium complex in Solana Beach. The seawall was located below the dripline of the bluff and involved the fill of a 410 sq. ft. void. Therefore, the land area impacted over the 22 year design life of the seawall was estimated to be 1,364.8 sq. ft. After hiring an economist, Dr. Phillip King, to perform an economic analysis of the lost recreational value associated with the construction of the seawall, the Commission determined that the applicant should make a payment of $248,680.72 to mitigate impacts of the seawall. The payment was designed to be used for purchase of beach land and/or recreational beach park amenities. This payment resulted in a per sq. ft. value of lost beach area equal to approximately $182. (Ref. CDP 6-05-072/Las Brisas).

In October 2004, the Commission approved the construction of a 585 ft. long seawall fronting a 172 unit condominium complex in Monterey which was estimated to impact 43,500 sq. ft. of beach area over a 50 year period. To mitigate the adverse impacts of the seawall on public access and recreational opportunities, and in lieu of purchasing a comparable area of beach, the Commission required a mitigation payment of $5,300,000. This amount was derived from the cumulative 50 year recreational beach impact based on an estimated annual value of the beach

area lost of $4,148. This payment resulted in a per sq. ft. value of lost beach area equal to approximately $122 (Ref. CDP 3-02-024/Ocean Harbor House).

Project Based Mitigation

In May, 2012, the Commission approved an 1,800 ft. long seawall and removal of an approximately 1,800 linear ft., 12 ft. wide existing rock revetment fronting the Pacific Coast Highway in Ventura County. To mitigate the adverse impacts of the seawall on public access and recreational opportunities, and in lieu of purchasing a comparable area of beach, the Commission required the construction of a new public access stairway and a new public access ramp to the beach, new public access signs, new ADA-compliant parking spaces, and repair and paving of the existing adjacent road shoulder and bicycle lane areas (Ref. CDP 4-11-026/Caltrans).

In August 2010, the Commission approved construction of an approximately 130 ft. long seawall fronting a single-family house in Santa Cruz which was estimated to impact 3,716 sq. ft. of beach area over a 20 year period. To mitigate the adverse impacts of the seawall on public access and recreational opportunities, and in lieu of purchasing a comparable area of beach, the applicant proposed the incorporation of a new two-foot-wide public access pathway along the lower platform of the proposed seawall at an elevation about 4 feet above the mean high tide line to provide a connection from the upcoast pocket beach, over the seawall, to the downcoast pocket beach. Furthermore, conditions of approval also required modification to the path (e.g., increase in elevation) over time if necessary to ensure that it always continues to be usable even at high tides, including in light of sea level rise. In addition, the applicant proposed that development on the adjacent downcoast property (also owned by the applicant) shall be limited to public access, recreation, and open space development and uses (Ref. CDP 3-09-042/O'Neill).

In December 2009, the Commission approved the modification and expansion of an existing 120 ft. long seawall fronting a single-family house in Santa Cruz. To mitigate the adverse impacts of the seawall on public access and recreational opportunities, and in lieu of purchasing a comparable area of beach, the applicant proposed the incorporation of a new two-foot-wide public access pathway along the lower platform of the proposed seawall to provide a connection from the upcoast adjacent beach, leading around a rocky promontory, and terminating at public access stairway (Ref. CDP 3-08-019/Sea Breeze).

II. Analysis of Public Access and Recreational Impact Mitigation for the Proposed Seawall

While none of the methodologies used in the above-cited examples of in-lieu mitigation for the adverse impacts of a seawall can be applied directly to the subject development because of the difference in project details and location, they do identify a range of mitigation values and a project based mitigation that has been applied in other cases. In each case, the Commission found that the mitigation did not fully mitigate for the loss of the public beach and, thereby, the loss of public access and recreational opportunities. In the case of the subject seawall, the loss of 780 sq. ft. of public beach and bluff (encroachment and estimated erosion), and the temporal loss of beach area caused by 11+ years of encroachment by unpermitted rip-rap, cannot be fully offset by the required payment since the beach and bluff itself cannot be replaced. The proposed

shoreline armoring has significant and unmitigated impacts to public access and recreational opportunities. As shown above, the required mitigation payment for impacts to public access and recreation in this case is within the range of previous payments made to mitigate the adverse impacts of seawalls on public access. The per sq. ft. value applied to this project is approximately $110, which is generally consistent with past commission actions which required per sq. ft. value payments of between $80 and $182.

In addition, in the June 2010 approval of the Li seawall (CDP 6-07-133/Li), the Commission used a valuation method that based on an appraisal of the blufftop lot fronting the proposed seawall. The appraised value of the lot was then divided by the lot area to determine the sq. ft. value of the lot. The Commission found that the sq. ft. value of public beach area lost had a value of at least as much as the sq. ft. value of the private blufftop lot. This variation on this method of analysis can also be used to verify that the required public access mitigation for the proposed Oceanus seawall is appropriate. 1425 Oceanfront Street is an undeveloped blufftop lot located just south of the Oceanus condominium structure. In 1996, the 5,248 sq. ft. property sold for $370,000. We can calculate a reasonable present day value of the lot by adding a relatively modest 3% compounded appreciation rate to the sale price for the lot over 16 years. This 3% assumed rate of appreciation yields a present day value of approximately $594,000. Dividing the 5248 sq. ft. of the blufftop lot at 1425 Oceanfront Street into the assumed present day value yields a per sq. ft. present day value of approximately $113. This per sq. ft. value is reasonably close to the per sq. ft. value of $110 that the applicant is required to pay for the public access and recreational opportunities impacts associated with the proposed seawall.

III. Staging and storage

The use of the beach or public parking areas for staging of construction materials and equipment can also impact the public's ability to gain access to the beach. Special Condition 7 requires that the applicant submit a construction staging and material storage plan for the subject development. The applicant has stated that beach access to the site will occur directly seaward of the condominium structure at 4848 Bermuda Avenue. Special Condition 7 has been attached to mitigate the impact of such construction activities on public parking areas and public access. Special Condition 7 prohibits the applicant from storing vehicles on the beach overnight, using any public parking spaces overnight for staging and storage of equipment, and prohibits washing or cleaning construction equipment on the beach or in the parking lot. The condition also prohibits construction on the beach during weekends and holidays and during the summer months (between Memorial Day to Labor Day) of any year.

In summary, Special Condition 5 requires the applicant to submit a payment of $86,000 to the SANDAG Public Access and Recreation Fund to mitigate for loss of beach area available for public use, and thus, loss of public access and recreational opportunities. The funds shall be used for public access improvements in the vicinity of Bermuda Street as a first priority, then the Sunset Cliffs area of Ocean Beach. However, if after ten years of approval of this CDP, the funds have not been spent, they may be used for other public beach access and recreational opportunities within the City of San Diego. As conditioned, the proposed development can be found to be consistent with the public access and recreation policies and Section 30235 of the Coastal Act.

E. ENVIRONMENTALLY SENSITIVE HABITATS

The following Chapter 3 policies of the Coastal Act are most applicable to this development:

Section 30230 of the Coastal Act states:

> *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 30240 of the Coastal Act states, in part:

> *[…]*
>
> *(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.*

The applicant is proposing to use a track mounted excavator and/or a rubber-tired loader to pick up, remove, and reposition the existing and proposed rip-rap on the subject site and to excavate a keyway for the tied back seawall. During application of shotcrete, a crane will be used to lower reinforced steel mats during tidal lows onto the beach. However, the shotcrete will be pumped from the blufftop and only the 'nozzle man' and the shotcrete hose will be on the beach. Construction time is projected to occur over a 4 to 5 month period as all most work can only be done during low tides.

No native flora currently exists on the bluff top or face of the bluff where the seawall is proposed to be installed. In addition, no sensitive or threatened marine organisms currently occupy the rip-rap that is proposed to be removed through this CDP. However, approximately 20 feet west of the project footprint, surfgrass beds are present on several small terraces at approximately -3 ft. mean sea level (Exhibits 9-10). Surfgrass beds provide important habitat for algae, invertebrates, and fishes.

Special Condition 9 requires that the existing surfgrass beds not be impacted during project construction. Specifically, a qualified biologist shall erect a temporary fence and be present during removal of the existing rip-rap on the beach and any other time that mechanized equipment is used on the beach. As conditioned, the Commission finds that the proposed project, will ensure that all environmental impacts will be minimized to the maximum extent feasible. Therefore, the proposed project can be found consistent with resource protection policies of the Coastal Act.

F. VISUAL RESOURCES/ALTERATION OF NATURAL LANDFORMS

Section 30240 (b) of the Coastal Act is applicable and states:

> *(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.*

In addition, Section 30251 of the Coastal Act states, in part:

> *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 . . .*

As stated above, the proposed construction will occur on a public bluff/beach. The bluff face directly to the north of the proposed shoreline device is in a natural state and does not currently have any coastal armoring. Existing seawalls and rock rip-rap exist approximately 80 ft. north of the site. An existing seawall and public stairway exists directly to the south of the subject site. The proposed approximately 120 ft.-long seawall has the potential for adverse impacts on visual resources of the existing natural bluffs. Although a large quantity of rip-rap currently covers much of the bluff fronting the subject site, this rip-rap is unpermitted and should have been removed more than 11 years previously. Following construction of the proposed seawall, the natural appearance of the bluffs will be substantially altered. To mitigate the visual impacts of the proposed seawall, the applicant proposes to color and texture the seawall. The visual treatment proposed is similar to the visual treatment approved by the Commission in recent years for other shoreline devices in San Diego County. (ref. CDP #6-02-84/Scism; 6-02-02/Gregg, Santina; 6-03-33/Surfsong; 6-04-83/Johnson, Cumming; 6-07-134/Brehmer, Caccavo). The technology in design of seawalls has improved dramatically over the last two decades. Today seawalls typically involve sculpted and colored concrete that upon completion closely mimic the natural surface of the lower bluff face. In the case of the subject seawall request, the specific design methods for coloring and texturing the seawall have not as yet been submitted. Therefore, Special Condition 1 requires the submittal of detailed plans, color samples, and information on construction methods and technology for the surface treatment of the seawall.

Therefore, as conditioned, the Commission finds that potential visual impacts associated with the proposed development have been reduced to the maximum extent feasible and the proposed development will include measures to prevent impacts that would significantly degrade the adjacent public shoreline. Thus, with the proposed conditions, the project is consistent with Sections 30240 and 30251 of the Coastal Act.

G. PROTECTION OF OCEAN WATERS/BMP'S

Section 30230, 30231 and 30232 of the Coastal Act require that new development be designed so that ocean waters and the marine environment are protected from polluted runoff and accidental spill of hazardous substances:

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.

Section 30232

Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.

Special Condition 7 is attached which requires that during the construction of the project, "the permittee shall not store any construction materials or waste where it will be or could potentially be subject to wave erosion and dispersion." This is a standard requirement for all seawall projects approved by the Commission. Additionally, to assure that the subject development will not result in the pollution of the ocean waters, Special Condition 8 has been attached. Special Condition 8 requires the applicant to submit a Best Management Plan that incorporates structural and nonstructural Best Management Practices (BMPs), for Executive Director approval, for the construction of the proposed seawall. Construction methods must be devised to assure that shotcrete material does not mix with or pollute ocean waters. With appropriate BMPs, the potential for this polluted material from the site making its way into the ocean will be eliminated. Therefore, as conditioned, the Commission finds the proposed development consistent with the marine and water quality protection policies of the Coastal Act.

H. UNPERMITTED DEVELOPMENT

Development has occurred on the subject site without the required coastal development permit, including, but not limited to non-compliance with Emergency CDP No. 6-01-006-G; specifically, with Special No. 4 of the emergency permit that required a follow-up regular coastal development permit to authorize the non-engineered revetment as permanent development or remove the rock revetment by June 10, 2001. It also appears that a much greater quantity of rip-rap was placed than was permitted pursuant to the emergency CDP. The emergency CDP also required the rip-rap to be kept at a minimum consistent with the angle of repose of the slope. The applicant is requesting after-the-fact authorizations for the existing unpermitted riprap landward of the new seawall.

Additionally, Special Condition No. 8 of Emergency CDP No. 6-01-006-G required submittal of a performance bond to the City of San Diego within 10 days of approval to provide for removal of the rip-rap within 150 days of installation (June 10, 2001), unless a regular CDP was issued. However, the applicant never submitted evidence of a performance bond to the Commission and the rip-rap has been in place well beyond 150 days (for more than 11 years) without being authorized by a regular CDP in violation of the terms and conditions of Emergency CDP No. 6-01-006-G (Exhibit 14).

Although development has taken place prior to submission of this permit application, consideration of the application by the Commission has been based solely upon the policies of the Coastal Act. Commission review and action on this permit 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 any development undertaken on the subject site without a coastal permit, or that all aspects of the violation have been fully resolved. Accordingly, the applicant remains subject to enforcement action for engaging in unpermitted development activities, unless and until the conditions of approval included in this permit are satisfied, the permit is issued, and the unpermitted development is removed.

To assure the unpermitted development is resolved in a timely manner, Special Condition 17 has been attached to require the applicant to comply with all Special Conditions of approval within 90 days of Commission action or within such additional time granted by the Executive Director for good cause and to require that the applicant remove the unpermitted development within 60 days of issuance of this CDP or within such additional time granted by the Executive Director for good cause.

I. LOCAL COASTAL PLANNING

On December 7, 2010, the San Diego City Council approved the formation of the Oceanus Geologic Hazard Abatement District (Oceanus GHAD). The Oceanus GHAD includes the 13-unit three-story blufftop condominium structure at 4848 Bermuda Avenue and two detached single-story bluff top duplexes at 1466-1472 Pescadero Drive. A GHAD is a political subdivision of the State, authorized to prevent, mitigate, abate or control geologic hazards and to mitigate or abate structural hazards that are partly or wholly caused by geologic hazards. As a state agency, GHADs are authorized to acquire, construct, operate, manage or maintain

improvements on public or private lands. While the GHAD members proposed to include portions of public property seaward of the applicant's property and 1466-1472 Pescadero Drive, the City of San Diego City Council did not include that public property when it approved the Oceanus GHAD. (See Exhibit 4) Therefore, Oceanus GHAD, as a subdivision of the state, cannot authorize local permit approvals on the public property seaward of its approved boundary.

The City has a certified LCP and issues coastal development permits for the Ocean Beach community pursuant to the certified LCP. However, in this case, proposed project is located within both the Commission's area of original jurisdiction and the City of San Diego appealable jurisdiction. The portion of the subject site seaward of the western property line where the majority of development is proposed to take place is zoned Parks and Open Space in the City's certified LCP. The portion of the subject site within the property lines of 4848 Bermuda Avenue is zoned for multi-family residential. The proposed work, as conditioned, is consistent with all applicable Chapter 3 policies of the Coastal Act. Therefore, as conditioned, will not prejudice the ability of the City of San Diego to continue to implement its certified LCP for the Ocean Beach area of the City of San Diego.

J. CONSISTENCY WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

The Oceanus GHAD acted as the lead agency for CEQA purposes and determined that the project was categorically exempt. However, no specific categorical exemption class or item was cited.

Section 13096 of the Commission's Code of Regulations requires Commission approval of Coastal Development Permits to be supported by a finding showing the permit, as conditioned, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The proposed project has been conditioned in order to be found consistent with the Chapter 3 policies of the Coastal Act. Mitigation measures, including conditions addressing sand supply mitigation, public access and recreation mitigation, encroachment on public property/impacts to public trust lands, extension of seawall authorization/seawall removal and project monitoring/maintenance program will minimize all adverse environmental impacts. As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project is the least environmentally-damaging feasible alternative and is consistent with the requirements of the Coastal Act to conform to CEQA.

APPENDIX A

SUBSTANTIVE FILE DOCUMENTS

- Site Plan titled "Proposed Repair Site Plan & Details" by TerraCosta Consulting submitted on May 17, 2012
- "Geotechnical Basis of Design & Alternatives Analysis Oceanus Geologic Hazard Abatement District" by TerraCosta Consulting Group dated 1/26/11
- City of San Diego Certified LCP
- City of San Diego issued CDP #572535/Avery
- City of San Diego Resolution Number 306493 Passed on December 7, 2010 (Oceanus GHAD Formation)
- Ocean Beach Precise Plan
- "*Shoreline Stabilization Project Oceanus Condominiums Biological Resources Report*" by Merkel & Associates, Inc. dated May 26, 2011
- CDP F9620 approved 3/20/1981 - *Sunset Cliffs Shoreline and Upper Cliff Stabilization Project*
- Emergency CDP 6-01-006-G – Placement of grouted rip-rap on the bluff fronting 4848 Bermuda Avenue.
- CDP Nos.:
    - 4-87-161/Pierce Family Trust and Morgan
    - 6-87-371/Van Buskirk
    - 5-87-576/Miser and Cooper
    - 6-01-006-G/Oceanus
    - 6-02-02/Gregg, Santina
    - 3-02-024/Ocean Harbor House
    - 6-02-84/Scism
    - 6-03-33-A5/Surfsong
    - 6-04-83/Johnson, Cumming
    - 6-05-72/Las Brisas
    - 6-07-133/Li
    - 6-07-134/ Brehmer, Caccavo
    - 3-08-019/Sea Breeze
    - 6-08-73/DiNoto, et. al.
    - 6-08-122/Winkler
    - 6-09-033/Garber
    - 3-09-042/O'Neill
    - 4-11-026/Caltrans

APPENDIX B

SAND MITIGATION PAYMENT FORMULA

Payment Amount = (Volume of sand for mitigation) x (unit cost to buy and deliver sand)

$\mathbf{M} = \mathbf{V_t} \times \mathbf{C}$

where

M = Mitigation Fee

$\mathbf{V_t}$ = Total volume of sand required to replace losses due to the structure, through reduction in material from the bluff, reduction in nearshore area and loss of available beach area (cubic yards). Derived from calculations provided below.

C = Cost, per cubic yard of sand, of purchasing and transporting beach quality material to the project vicinity ($ per cubic yard). Derived from the average of three written estimates from sand supply companies within the project vicinity that would be capable of transporting beach quality material to the subject beach, and placing it on the beach or in the near shore area.

$\mathbf{V_t} = \mathbf{V_b} + \mathbf{V_w} + \mathbf{V_e}$

where

$\mathbf{V_b}$ = Volume of beach material that would have been supplied to the beach if natural erosion continued, based on the long-term regional bluff retreat rate, design life of the structure, percent of beach quality material in the bluff, and bluff geometry (cubic yards). This is equivalent to the long-term reduction in the supply of bluff material to the beach resulting from the structure.

$\mathbf{V_w}$ = Volume of sand necessary to replace the beach area that would have been created by the natural landward migration of the beach profile without the seawall, based on the long-term regional bluff retreat rate, and beach and nearshore profiles (cubic yards)

$\mathbf{V_e}$ = Volume of sand necessary to replace the area of beach lost due to encroachment by the seawall; based on the seawall design and beach and nearshore profiles (cubic yards)

$\mathbf{V_b} = (S \times W \times L/27) \times [(R\ h_s) + (\mathbf{h_u}/2 \times (R + (R_{Cu} - \mathbf{R_{cs}})))]$

where

R = Long-term regional bluff retreat rate (ft./yr.), based on historic erosion, erosion trends, aerial photographs, land surveys, or other accepted techniques. For the Sunset Cliffs area, this regional retreat has been estimated by the applicant's representative to be 0.20 ft./year. The use of any alternative retreat rates must be documented by the applicant and should be the same as the predicted retreat rate used to estimate the need for shoreline armoring.

L = Design life of armoring without maintenance (yr.). If maintenance is proposed and extends the life of the seawall beyond the initial estimated design life, a revised payment amount shall be determined through the coastal development permit process.

W = Width of property to be armored (ft.)

h = Total height of armored bluff (ft.)

S = Fraction of beach quality material in the bluff material, based on analysis of bluff material to be provided by the applicant

h_s = Height of the seawall from the base to the top (ft)

h_u = Height of the unprotected upper bluff, from the top of the seawall to the crest of the bluff (ft)

R_{cu} = Predicted rate of retreat of the crest of the bluff, during the period that the seawall would be in place, assuming no seawall were installed (ft/yr). This value can be assumed to be the same as R unless the applicant provides site-specific geotechnical information supporting a different value.

R_{cs} = Predicted rate of retreat of the crest of the bluff, during the period that the seawall would be in place, assuming the seawall has been installed (ft/yr). This value will be assumed to be zero unless the applicant provides site-specific geotechnical information supporting a different value.

NOTE: For conditions where the upper bluff retreat will closely follow the lower bluff, this volume will approach a volume of material equal to the height of the total bluff, the width of the

property and a thickness equal to the total bluff retreat that would have occurred if the seawall had not been constructed. For conditions where the upper bluff has retreated significantly and would not be expected to retreat further during the time that the seawall is in place, this volume would approach the volume of material immediately behind the seawall, with a thickness equal to the total bluff retreat that would have occurred if the seawall had not been constructed.

$\mathbf{V_W} = \mathbf{R} \times \mathbf{L} \times \mathbf{v} \times \mathbf{W}$

where

R = Long-term regional bluff retreat rate (ft./yr.), based on historic erosion, erosion trends, aerial photographs, land surveys, or other accepted techniques. For the Sunset Cliffs area, this regional retreat has been estimated by the applicant's representative to be 0.20 ft./year. The use of any alternative retreat rates must be documented by the applicant and should be the same as the predicted retreat rate used to estimate the need for shoreline armoring.

L = Design life of armoring without maintenance (yr.) If maintenance is proposed and extends the life of the seawall beyond the initial estimated design life, a revised payment amount shall be determined through the coastal development permit process.

v = Volume of material required, per unit width of beach, to replace or reestablish one foot of beach seaward of the seawall; based on the vertical distance from the top of the beach berm to the seaward limit of reversible sediment movement (cubic yards/ft of width and ft. of retreat). The value of v is often taken to be 1 cubic yard per square foot of beach. In the report, Oceanside Littoral Cell Preliminary Sediment Budget Report" (December 1987, part of the Coast of California Storm and Tide Wave Study, Document #87-4), a value for v of 0.9 cubic yards/square foot was suggested. If a vertical distance of 40 feet is used for the range of reversible sediment movement, v would have a value of 1.5 cubic yards/square foot (40 feet x 1 foot x 1 foot / 27 cubic feet per cubic yard). These different approaches yield a range of values for v from 0.9 to 1.5 cubic yards per square foot. The value for v would be valid for a region, and would not vary from one property to the adjoining one. Until further technical information is available for a more exact value of v, any value within the range of 0.9 to 1.5 cubic yards per square foot could be used by the applicant without additional documentation. Values below or above this range would require additional technical support.

W = Width of property to be armored (ft.)

$\mathbf{V_e} = \mathbf{E} \times \mathbf{W} \times \mathbf{v}$

where

E = Encroachment by seawall, measured from the toe of the bluff or back beach (ft.)

W = Width of property to be armored (ft.)

v = Volume of material required, per unit width of beach, to replace or reestablish one foot of beach seaward of the seawall, as described above;

Site Specific Values for equation variables:

C = $17.29 per cubic yard to purchase and deliver sand

R = 0.2 ft./yr

L = 20 years

W = 120 feet (per measurement by staff)

S = 0.53 (weighted average using 0.40 for Point Loma, 0.70 for Bay Point)

h = 31 feet

v = 0.9 cubic yard per foot of width and foot or retreat

E = 2.5 feet (only in channel) – assume channel is 5 feet wide

Bluff material

Vb = (0.2 x 20 x 120 x 31 x 0.53)/27

Vb = 292.09 cubic yards

292.09 x 17.29 = $5,050.24

Fixing Location of Back Beach

Aw = 0.2 x 20 x 120

Aw = 480 square feet

Vw = 480 x 0.9

Vw = 432 cubic yards

432 x 17.29 = 7,469.25

Encroachment

Ae = 2.5 x 5

Ae = 12.5

Ve = 12.5 x 0.9

Ve = 11.25

11.25 x 17.29 = 194.51

Total

5,050.24 + 7,469.28 + 194.51 = $12,714.03

APPENDIX C

GHAD FORMATION DOCUMENTS (R-2011-532 COR.COPY)

RESOLUTION NUMBER R- 306493

DATE OF FINAL PASSAGE DEC 07 2010

A RESOLUTION OF THE COUNCIL OF THE CITY OF SAN DIEGO ORDERING THE FORMATION OF THE OCEANUS GEOLOGIC HAZARD ABATEMENT DISTRICT, APPOINTING THE MEMBERS OF THE BOARD OF DIRECTORS OF THE DISTRICT, AND GRANTING THE CONSENT OF THE CITY COUNCIL TO THE FORMATION BY THE DISTRICT OF A SPECIAL ASSESSMENT DISTRICT TO PAY THE COSTS OF IMPROVEMENTS AUTHORIZED BY THE DISTRICT PURSUANT TO ITS PLAN OF CONTROL.

WHEREAS, on November 15, 2010, the City Council received a petition (Petition) from certain individuals owning property in the City of San Diego requesting that the City initiate proceedings to form a geologic hazard abatement district, to be known as the Oceanus Geologic Hazard Abatement District (GHAD) pursuant to the provisions of Division 17 of the California Public Resources Code (Code), section 26500, et seq.; and

WHEREAS, pursuant to Resolution No. R-306320, the City Council determined that the formation of the GHAD was required by the health, safety and welfare of the area; and

WHEREAS, the City Council directed the City Clerk to provide notice, pursuant to the provisions of the Code, to all property owners within the GHAD of a public hearing to consider the formation of the GHAD and such notice was mailed to all property owners; and

WHEREAS, the City Council has not received objections from the owners of more than 50% of the assessed value of property within the GHAD; and

WHEREAS, the City Council has received the names of five property owners within the GHAD who have indicated their willingness to serve as members of the board of directors of the GHAD; and

WHEREAS, the property owners petitioning for the formation of the GHAD have indicated their intention to fund the cost of improvements to be made by the GHAD through the formation of a special assessment district, as permitted by the Code, and have provided to the City Council a proposed resolution of intent for the creation of such a district, on file with the City Clerk's office as Document No. RR-306493; and

WHEREAS, pursuant to California Streets and Highway Code section 10104, the City Council must consent to the proposed resolution of intent prior to the resolution of intent being adopted by the GHAD; and

WHEREAS, the boundaries of proposed special assessment district are identical to, and coterminous with, the boundaries of the GHAD, as indicated in the Petition; NOW, THEREFORE,

BE IT RESOLVED, the Council of the City of San Diego as follows:

1. That the Oceanus Geologic Hazard Abatement District be and is hereby formed in accordance with the Code.

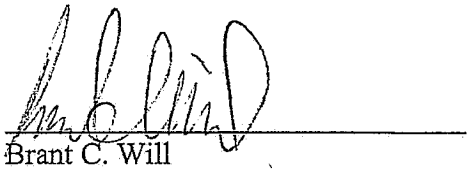
2. That the GHAD shall consist of all real property in the City of San Diego included within the exterior boundary lines designated as the GHAD on the map included with Petition and on file with the City Clerk as Document No. RR-306320, excepting therefrom all public property.

3. That the following five property owners within the GHAD are appointed as members of the board of directors of the GHAD: Allen Bloom; Mike Halling; Mel Pohl; Gina Steele; and Daniel R. Smith.

4. That the City Council hereby consents to the proposed resolution of intent of the GHAD to form a special assessment district coterminous with the boundaries of the GHAD, pursuant to California Streets and Highways Code section 10000, et seq., but only to the extent that the GHAD shall hold harmless and indemnify the City of San Diego, its officers and employees, from any and all causes of action, claims, losses or damages which may arise, directly or indirectly, from the action of the City Council in reviewing and granting its consent to the formation of the special assessment district.

5. That the City Clerk shall transmit a certified copy of this resolution to the GHAD.

APPROVED: JAN I. GOLDSMITH, City Attorney

By 
Brant C. Will
Deputy City Attorney

BCW:jdf
11/18/10
12/02/10 COR.COPY
Or.Dept:Debt. Management

Passed by the Council of The City of San Diego on DEC 07 2010, by the following vote:

Council Members	Yeas	Nays	Not Present	Recused
Sherri Lightner	☑	☐	☐	☐
Kevin Faulconer	☑	☐	☐	☐
Todd Gloria	☑	☐	☐	☐
Anthony Young	☑	☐	☐	☐
Carl DeMaio	☑	☐	☐	☐
Donna Frye	☑	☐	☐	☐
Marti Emerald	☑	☐	☐	☐
Ben Hueso	☑	☐	☐	☐

Date of final passage DEC 07 2010.

AUTHENTICATED BY:

JERRY SANDERS
Mayor of The City of San Diego, California.

(Seal)

ELIZABETH S. MALAND
City Clerk of The City of San Diego, California.

By _____, Deputy

Office of the City Clerk, San Diego, California

Resolution Number R- 306493

PLAN OF CONTROL FOR
OCEANUS GEOLOGICAL HAZARD ABATEMENT DISTRICT

In recognition of the geologic hazard affecting the portion of the City of San Diego's coastline extending across 4848 Bermuda Avenue and 1466-1474 Pescadero Drive, resulting from ongoing coastal erosion, the proposed Geologic Hazard Abatement District (GHAD) has developed a Plan of Control, which provides a plan for the prevention, mitigation, abatement, and control of this geologic hazard. The Plan of Control protects the bluff-top improvements at 4848 Bermuda Avenue and 1455-74 Pescadero Drive, which are currently threatened by continuing coastal erosion. The numerous bluff failures that have occurred at the subject properties, if not mitigated, will place both the bluff-top structures and beach-going public in peril, and will plague this portion of the City's coastline for the foreseeable future until these bluffs re-equilibrate at the expense of the bluff-top improvements.

The recognition of severe coastal erosion in this area and the threat posed to private and public improvements date back to the early 1950s. In the ensuing years, the City of San Diego pursued various measures to stabilize this section of coastline, finally constructing the comprehensive Sunset Cliffs Shoreline and Upper Cliffs Stabilization Project, which comprised approximately 5,800 feet of coastline within the Ocean Beach area of San Diego between Newport Avenue and Osprey Street. The project, which was finished in 1983, consisted of structural improvements, earthwork, and landscaping necessary to retard shoreline erosion and improve public safety along this mile-long portion of the City's coastline. Although no specific shoreline stabilization recommendations for the subject properties were provided as a part of the City's original shoreline stabilization project, it was acknowledged that work would be required at some time in the future after erosion of the lower formational soils had advanced to the point where existing improvements would become threatened.

Eighteen years after completion of the City project, a portion of the pre-existing seawall fronting the condominiums at 4848 Bermuda Avenue failed in early January 2001, and an Emergency Permit was issued by the California Coastal Commission on January 11, 2001, for the temporary stabilization of the coastal bluff. One requirement of the Emergency Permit was that a formal Coastal Development Permit be acquired in order to authorize the temporary emergency as permanent development. A follow-up formal CDP was never pursued and the CCC issued a Notice of Violation on June 4, 2002.

Ongoing erosion has also affected the 1466-74 Pescadero Drive property, which up until the early 1990s supported a two-story bluff-top residential structure, along with a lower aging seawall and gunite-stabilized upper bluff. Circa 1994, these aging shore protection improvements failed, ultimately resulting in the need to remove the bluff-top structure. Ongoing erosion is now encroaching on the still-remaining residential structures on the property and is also threatening to flank existing improvements to both the north and south.

As indicated in the attached figure, the currently proposed Plan of Control includes removal of the seaward 25+ feet of emergency rock in front of 4848 Bermuda Avenue and the existing debris in front of 1466-74 Pescadero Avenue; placement of a portion of the removed material at the base of the sea cliff below 1466-74 Pescadero Avenue, and off-site disposal of any excess materials; the reconstruction of an approximately 110-foot-long, 15-foot-tall, tied back shotcrete seawall below 4848 Bermuda Avenue at the same location as the previous wall, and the subsequent placement of 8-ton toestone extending from the southerly 4848 Bermuda Avenue property line to the northerly 1466-74 Pescadero Avenue property line, tying into the adjacent northerly neighbor's rock revetment and seawall. The 8-ton riprap in front of 1466-74 Pescadero Avenue will provide an armor layer over the inner corestone placed at the toe of the sea cliff.

The Plan of Control incorporates future monitoring and maintenance that will include repositioning of rocks that have shifted or fallen out of the preferred alignment, importing of additional rock as needed, and resurfacing of the proposed seawall where necessary. Additionally, as erosion of the southern rock headland occurs, additional rock may need to be added in the future to prevent flanking of the currently proposed revetment.

At the conclusion of the project, additional intertidal area will be returned to the public. All of the existing unattractive debris seaward of 1466-74 Pescadero Avenue will be removed, providing a more attractive finished appearance. The proposed improvements associated with the Plan of Control will stabilize both properties, and the proposed GHAD will continue to maintain this section of the City's coastline and abate any future geologic hazards only after review and approval by the Coastal Commission and any other interested resource and regulatory agencies.

Braven R. Smillie, Certified Engineering Geologist
California CEG No. 207

PROFESSIONAL GEOLOGIST
BRAVEN R. SMILLIE No. 207 CERTIFIED ENGINEERING GEOLOGIST
9-30-10
STATE OF CALIFORNIA

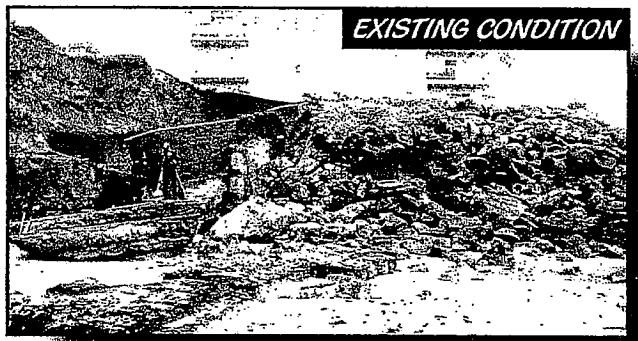
TerraCosta Consulting Group

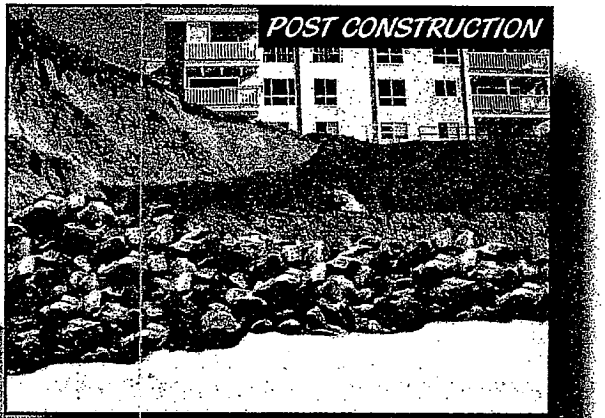
Geologic Hazard Abatement District Plan of Control

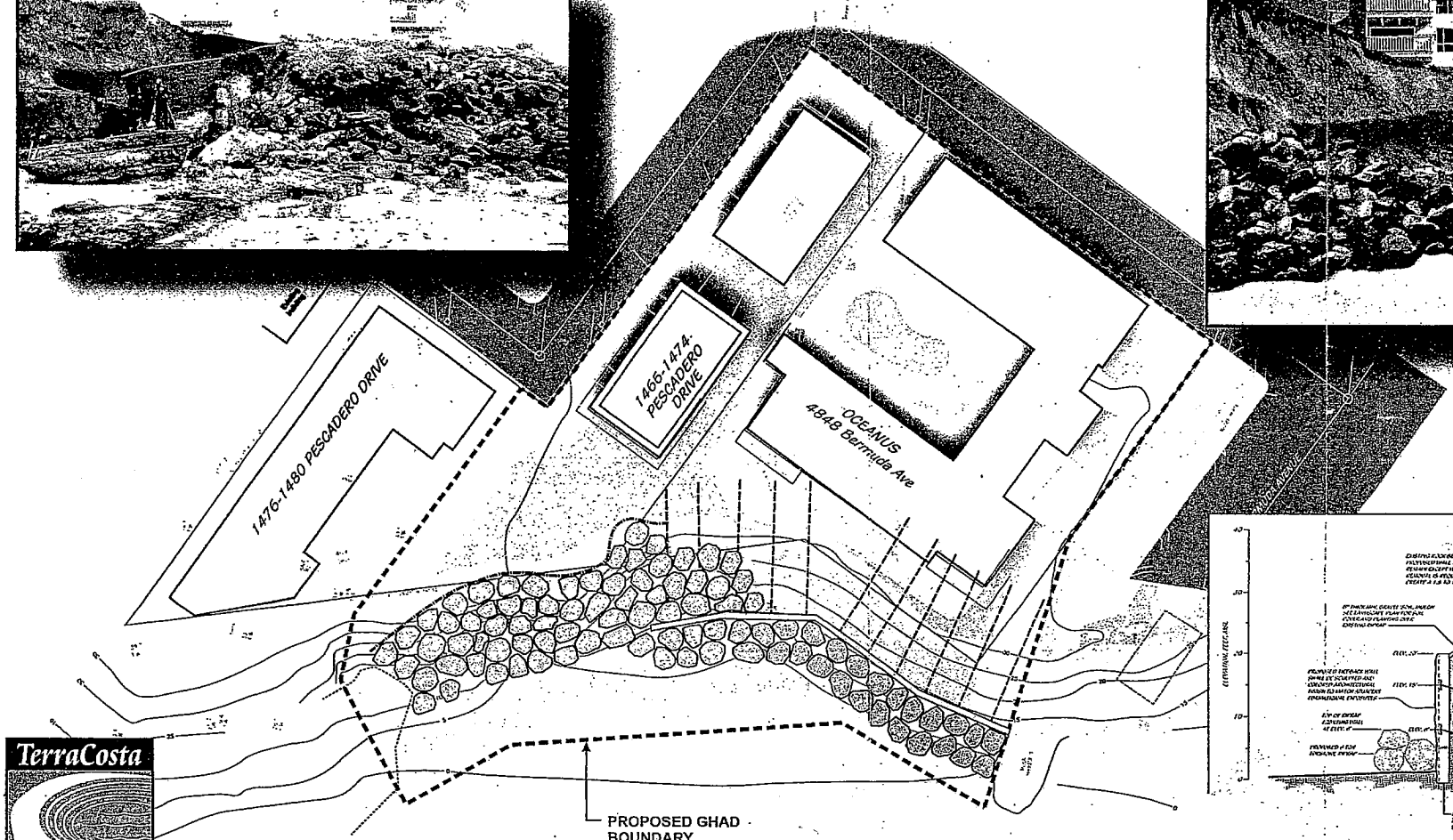
For

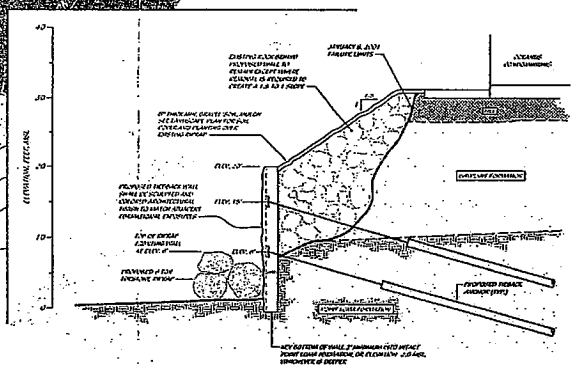
Oceanus - 4848 Bermuda Avenue

1466-1474 Pescadero Drive









GENERALIZED CROSS SECTION

TerraCosta Consulting Group

EXHIBIT 'A'
LEGAL DESCRIPTION
GHAD BOUNDARY

LOT 1 OF OCEANUS APARTMENTS, ACCORDING TO THE MAP THEREOF NO. 6984 IN THE CITY OF SAN DIEGO, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAID SAN DIEGO COUNTY, TOGETHER WITH A PORTION OF OCEAN BEACH, BLOCK 44, IN THE CITY OF SAN DIEGO, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF NO. 279, RECORDED MAY 28, 1887, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST SOUTHERLY CORNER OF SAID LOT 1; THENCE ALONG THE SOUTHWESTERLY LINE THEREOF

1.	NORTH 53°55'43" WEST (PER MAP 6984)	68.00 FEET	;THENCE LEAVING SAID SOUTHWESTERLY LINE
2.	NORTH 72°33'13" WEST	79.48 FEET	;THENCE
3.	NORTH 30°41'48" EAST	46.65 FEET	;THENCE
4.	NORTH 03°58'10" WEST	93.13 FEET	;THENCE
5.	NORTH 30°01'18" WEST	33.96 FEET	;THENCE
6.	NORTH 62°18'44" EAST	39.26 FEET	;THENCE
7.	SOUTH 80°27'17" EAST	19.39 FEET	TO A POINT OF INTERSECTION WITH THE NORTHWESTERLY PROLONGATION OF A LINE COMMON TO LOTS 6 AND 7 OF SAID MAP 279; THENCE ALONG SAID PROLONGED LINE AND LOT LINE
8.	SOUTH 53°55'29" EAST	79.00 FEET	TO THE NORTHWESTERLY LINE OF PESCADERO DRIVE, BEING A 20 FOOT WIDE ALLEY PER SAID MAP 279 AND AS SHOWN ON SAID MAP 6984, BEING ALSO THE SOUTHEASTERLY LINE OF SAID LOTS 6 AND 7; THENCE ALONG SAID LINE
9.	SOUTH 36°04'31" WEST	10.00 FEET	TO AN ANGLE POINT IN THE SIDELINE OF SAID PESCADERO DRIVE, BEING ALSO A POINT IN THE NORTHERLY LINE OF SAID LOT 7; THENCE ALONG SAID COMMON LINE

10. SOUTH 53°55'29" EAST 125.05 FEET TO A POINT OF INTERSECTION WITH THE NORTHEASTERLY PROLONGATION OF THE SOUTHEASTERLY LINE OF LOT 1 OF SAID MAP 6984; THENCE ALONG SAID PROLONGED LINE AND LOT LINE

11. SOUTH 36°07'07" WEST 139.98 FEET **TO THE POINT OF BEGINNING.**

CONTAINS 0.654 ACRES MORE OR LESS

PREPARED BY:

ALTA LAND SURVEYING, INC.

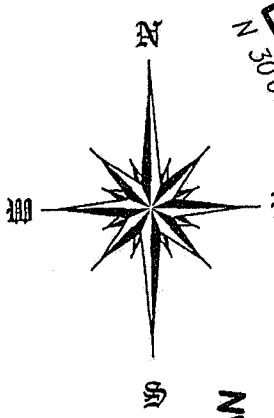
08/24/10

MIGUEL A. MARTINEZ
L.S. 7443
LIC. EXP. 06/30/12

SHEET 1 OF 1 SHEET

EXHIBIT 'B'

OCEANUS CONDOS
4848 BERMUDA AVENUE
SAN DIEGO, CA 92107



PACIFIC OCEAN

PESCADERO DR.

31 OCEAN BEACH
BLOCK 44
MAP NO. 279

PESCADERO DR.

BERMUDA AVENUE

LOT 1
MAP NO. 6984

APN: 448-242-02

APN: 448-242-27

N 62°18'44" E 39.26'

S 80°27'17" E 19.39'

S 53°55'29" E 79.00'

S 35°04'31" W 10.00'

S 53°55'29" E 125.05'

N 30°01'18" W 33.96'

N 3°58'10" W 93.13'

N 30°41'48" E 46.65'

(N 7°28'23" W) (55.15')

(N 36°07'07" E 60.00')

(N 53°55'13" W 150.04')

79.48' N 72°33'13" W

(N 53°55'43" W 112.00')

68.00'

(99.94') S 36°07'07" W 139.98'

20'

P.O.B.

LEGEND

( ) DATA PER MAP 6984

GHAD BOUNDARY

PROFESSIONAL LAND SURVEYOR
MIGUEL A. MARTINEZ
L.S. 7443
Exp. 06/30/12
STATE OF CALIFORNIA

Alta Land Surveying
9517 GROSSMONT SUMMIT DR.
LA MESA, CA 91941
PHONE / FAX: (619) 579-2582

1780 GHAD BDRY EXHIBIT J.N. 10-1780 DATE: 08/24/10

40' 0' 40'

SCALE: 1" = 40'

PROJECT LOCATION

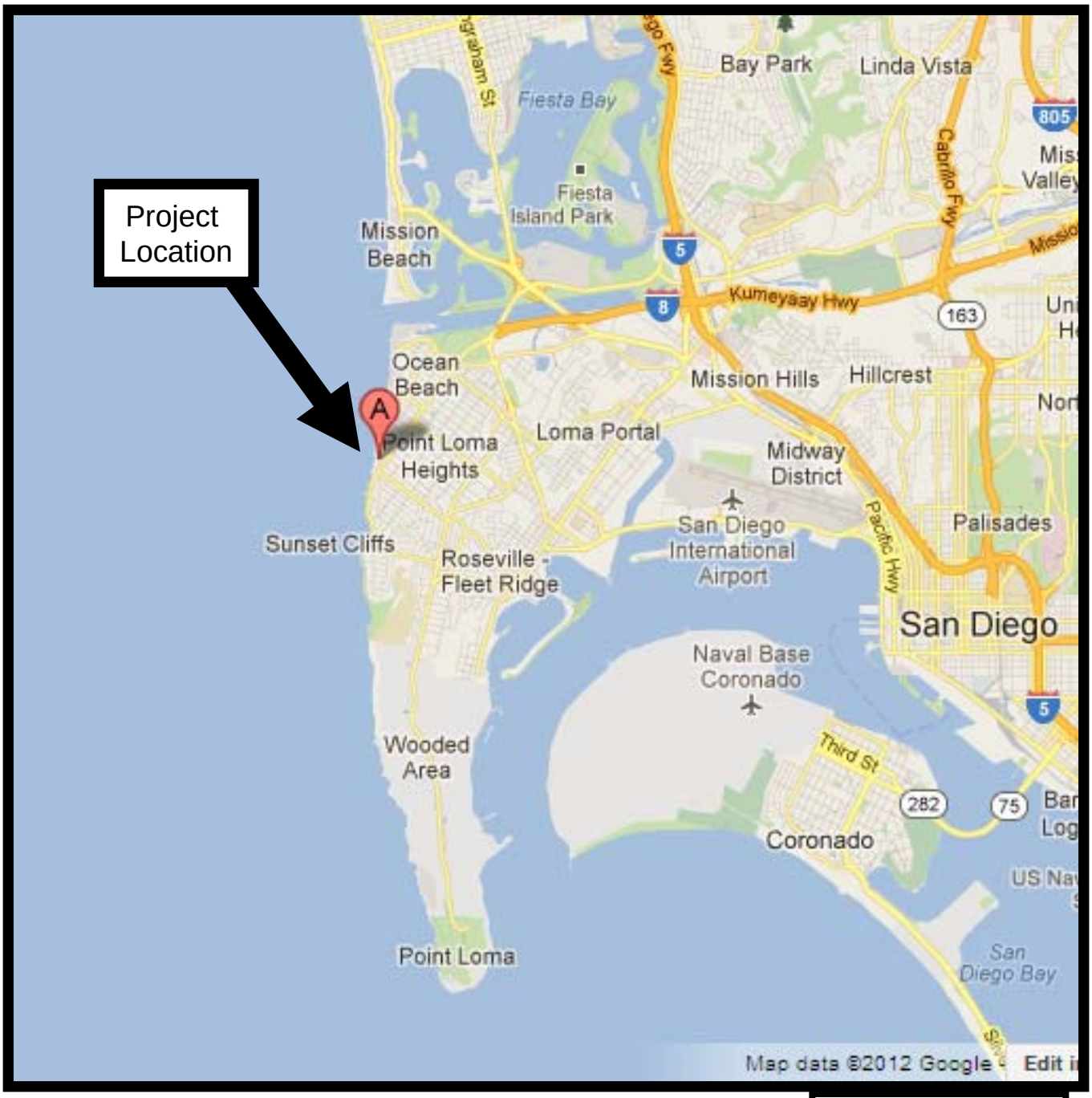


EXHIBIT NO. 1

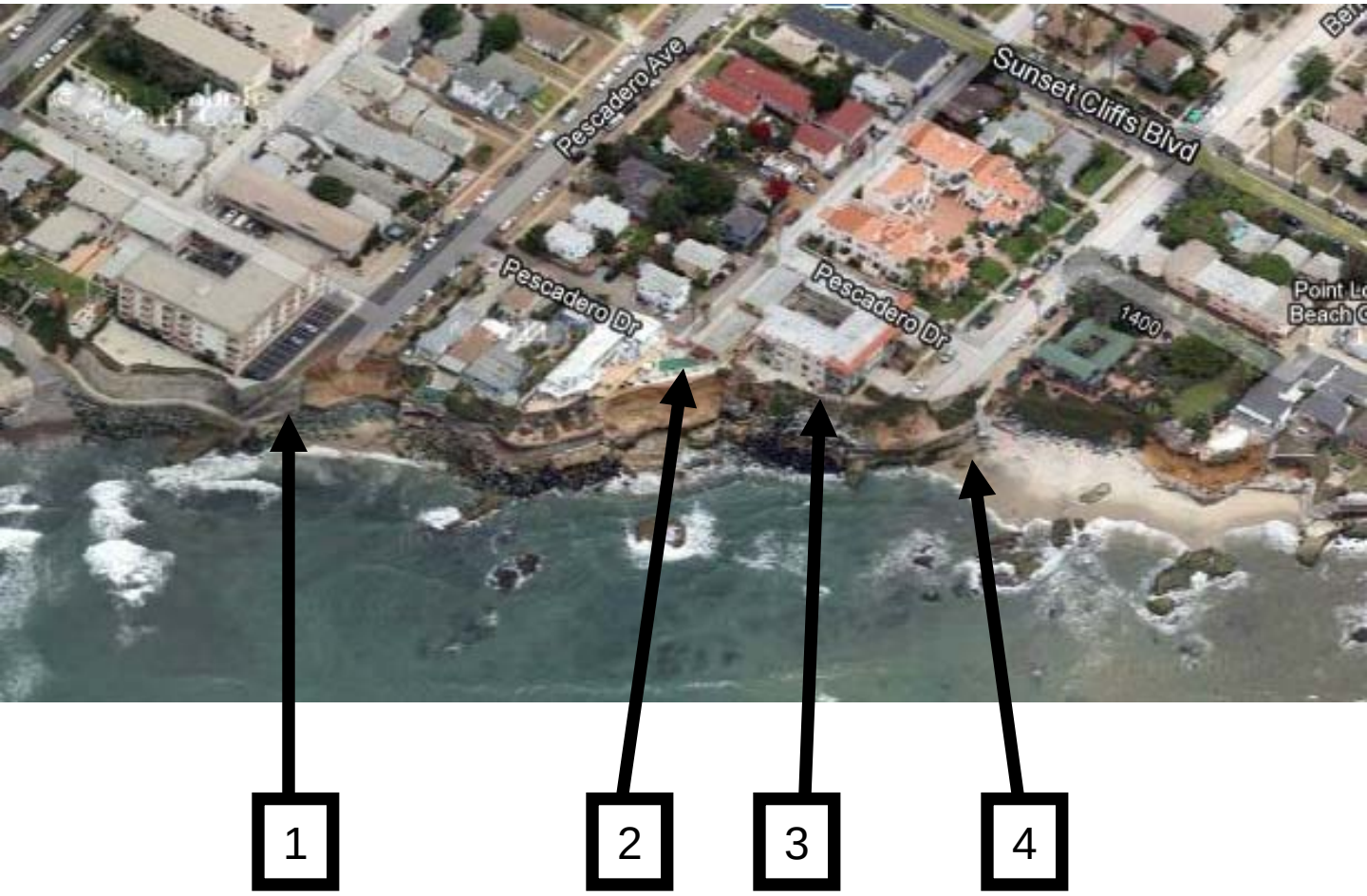
APPLICATION NO.
6-11-010

Project Location

California Coastal Commission

Google Maps

PROJECT LOCATION



1. Pescadero Ave. Public Access Stairway and Pocket Beach
2. 1466-1472 Pescadero Drive (2 Detached Duplexes)
3. 4848 Bermuda Ave. (13-Unit Condominium Structure)
4. Bermuda Ave. Public Access Stairway and Pocket Beach

EXHIBIT NO. 2
APPLICATION NO.
6-11-010
Project Location
California Coastal Commission

Google Maps

POCKET BEACH BELOW 4848 BERMUDA AVENUE (2/9/12)

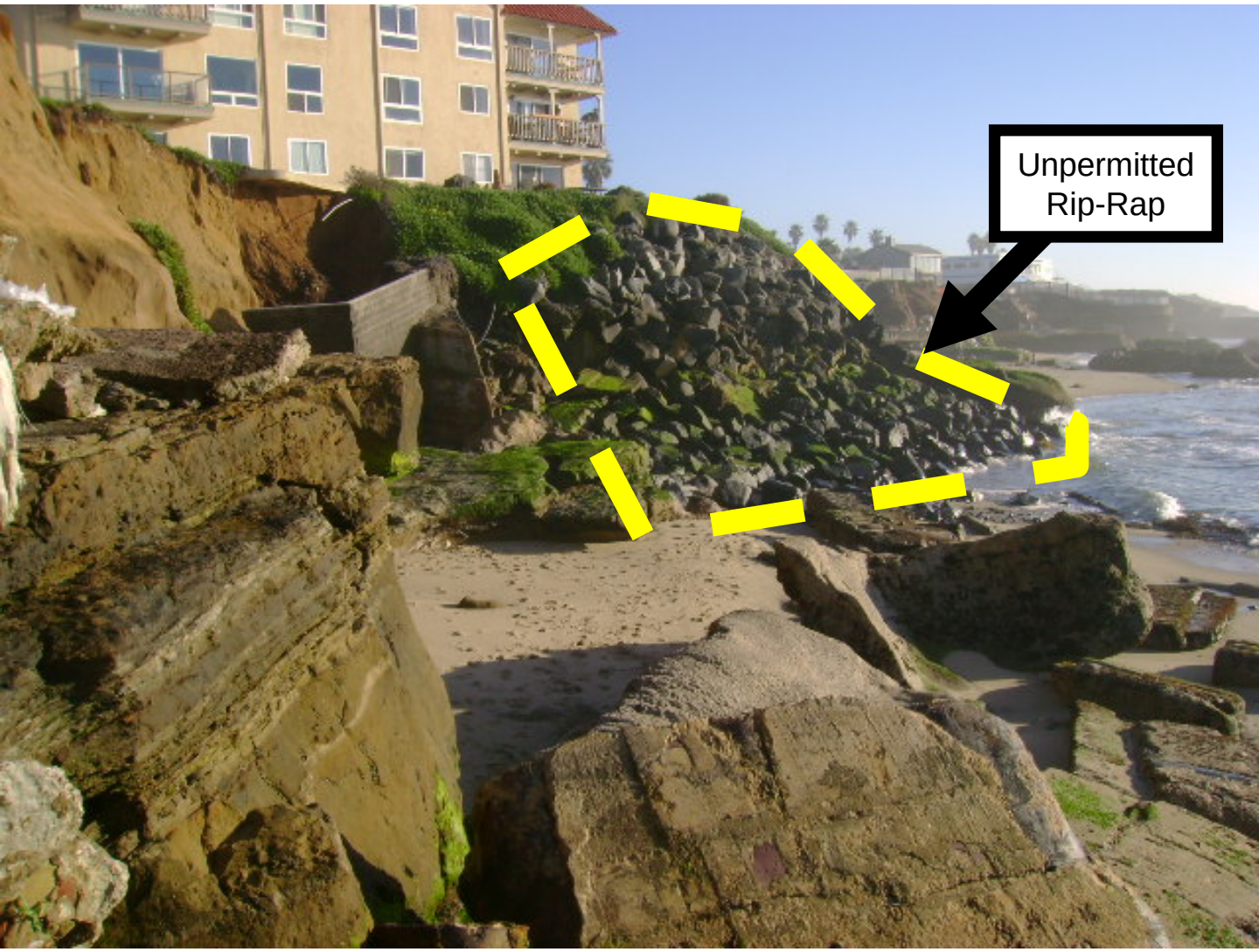
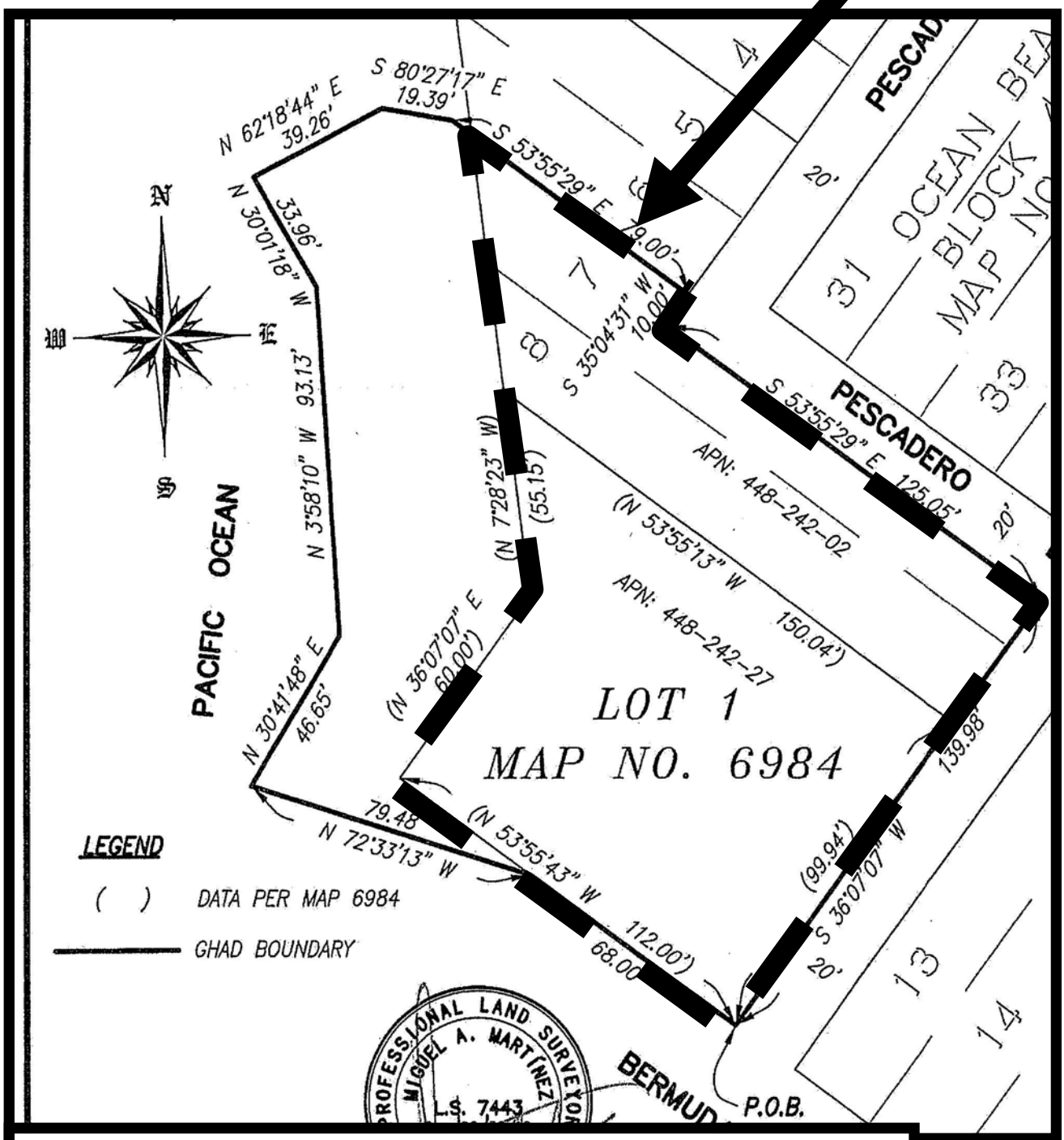


EXHIBIT NO. 3
APPLICATION NO. **6-11-010**
Site Photo
California Coastal Commission

Staff Photo

OCEANUS GHAD



2. That the GHAD shall consist of all real property in the City of San Diego included within the exterior boundary lines designated as the GHAD on the map included with Petition and on file with the City Clerk as Document No. RR-306320, excepting therefrom all public property.

EXHIBIT NO. 4
APPLICATION NO.
6-11-010
Oceanus GHAD
California Coastal Commission

PROPOSED SITE PLAN

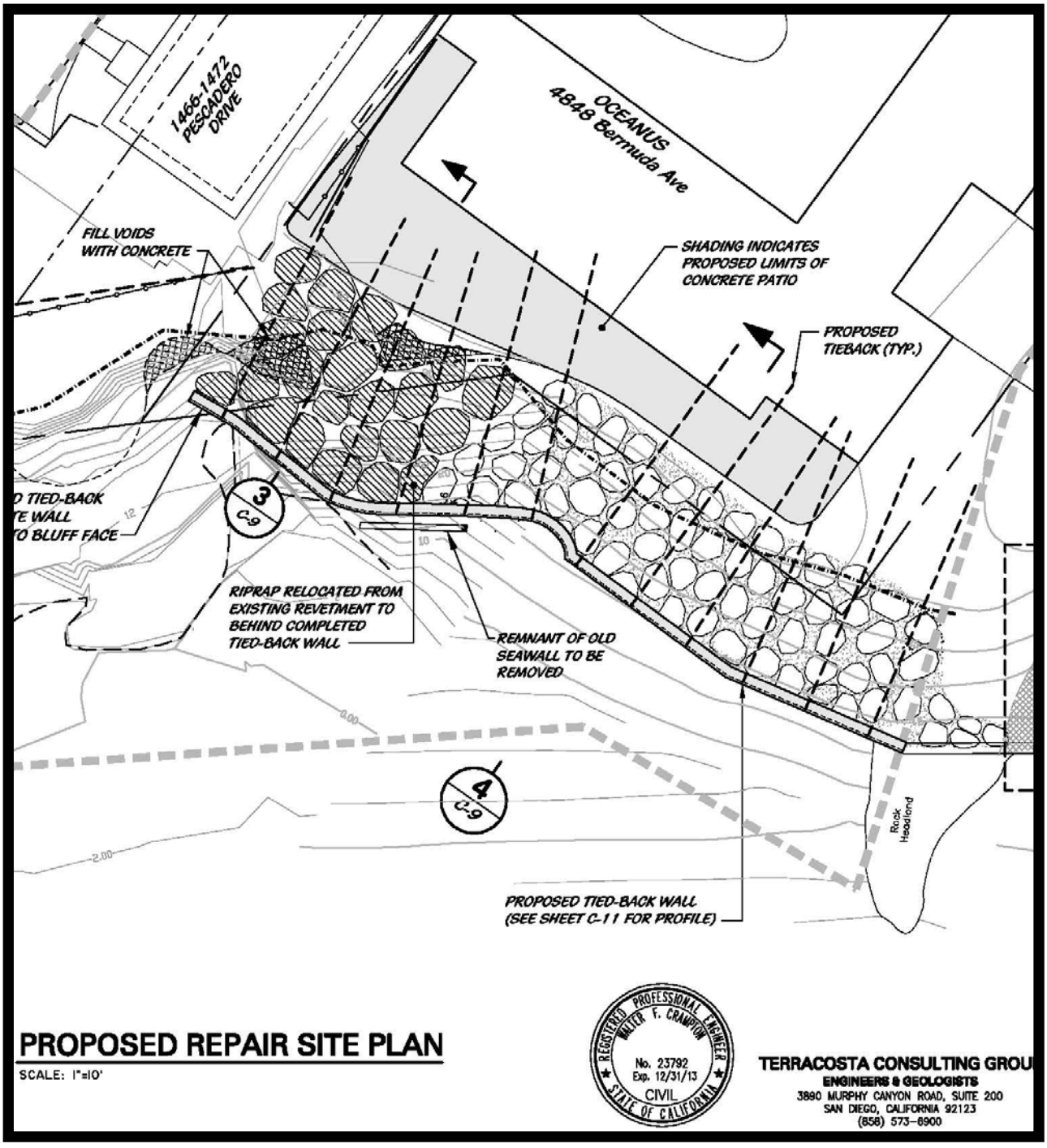


EXHIBIT NO. 5
APPLICATION NO. **6-11-010**
Proposed Site Plan
California Coastal Commission

SEAWALL CROSS SECTION

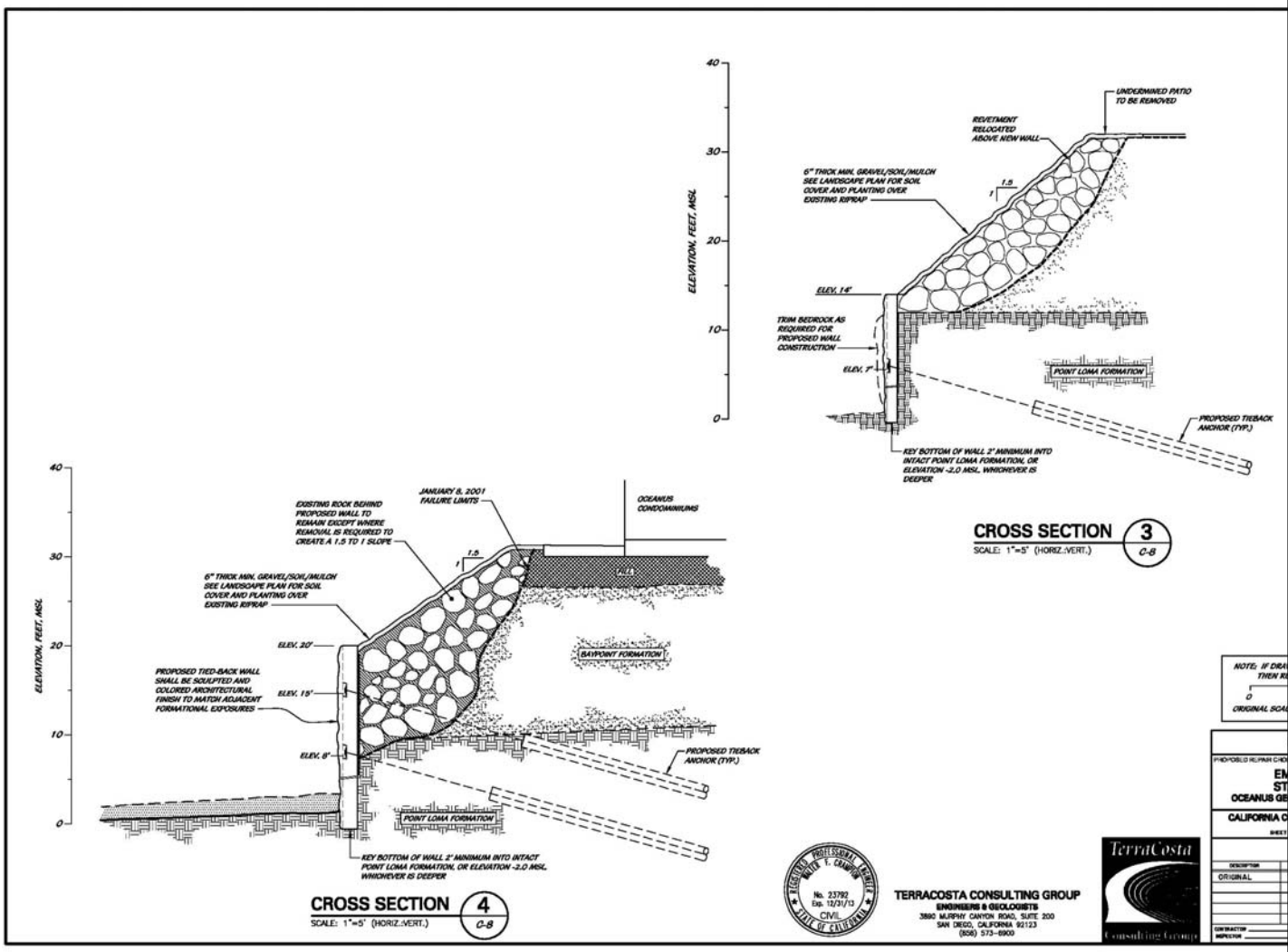


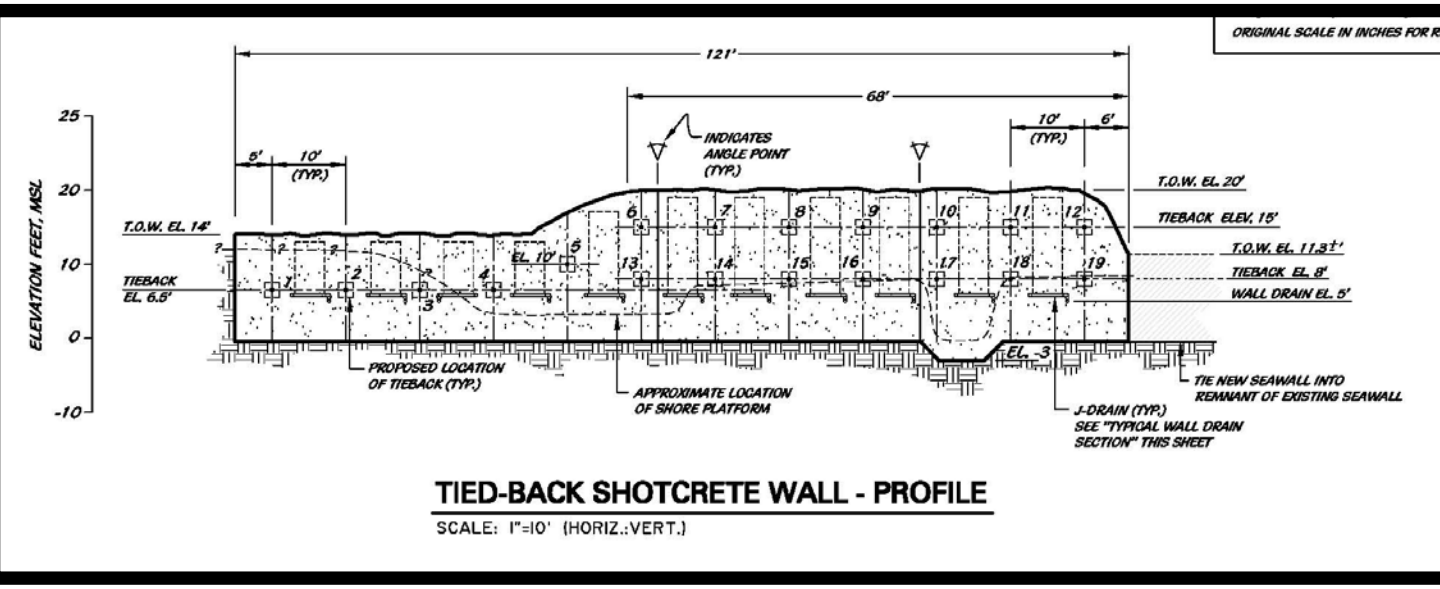
EXHIBIT NO. 6

APPLICATION NO.
6-11-010

Cross Section

California Coastal Commission

SEAWALL PROFILE



TIED-BACK SHOTCRETE WALL - PROFILE

SCALE: 1"=10' (HORIZ.:VERT.)

EXHIBIT NO. 7

APPLICATION NO.
6-11-010

Profile

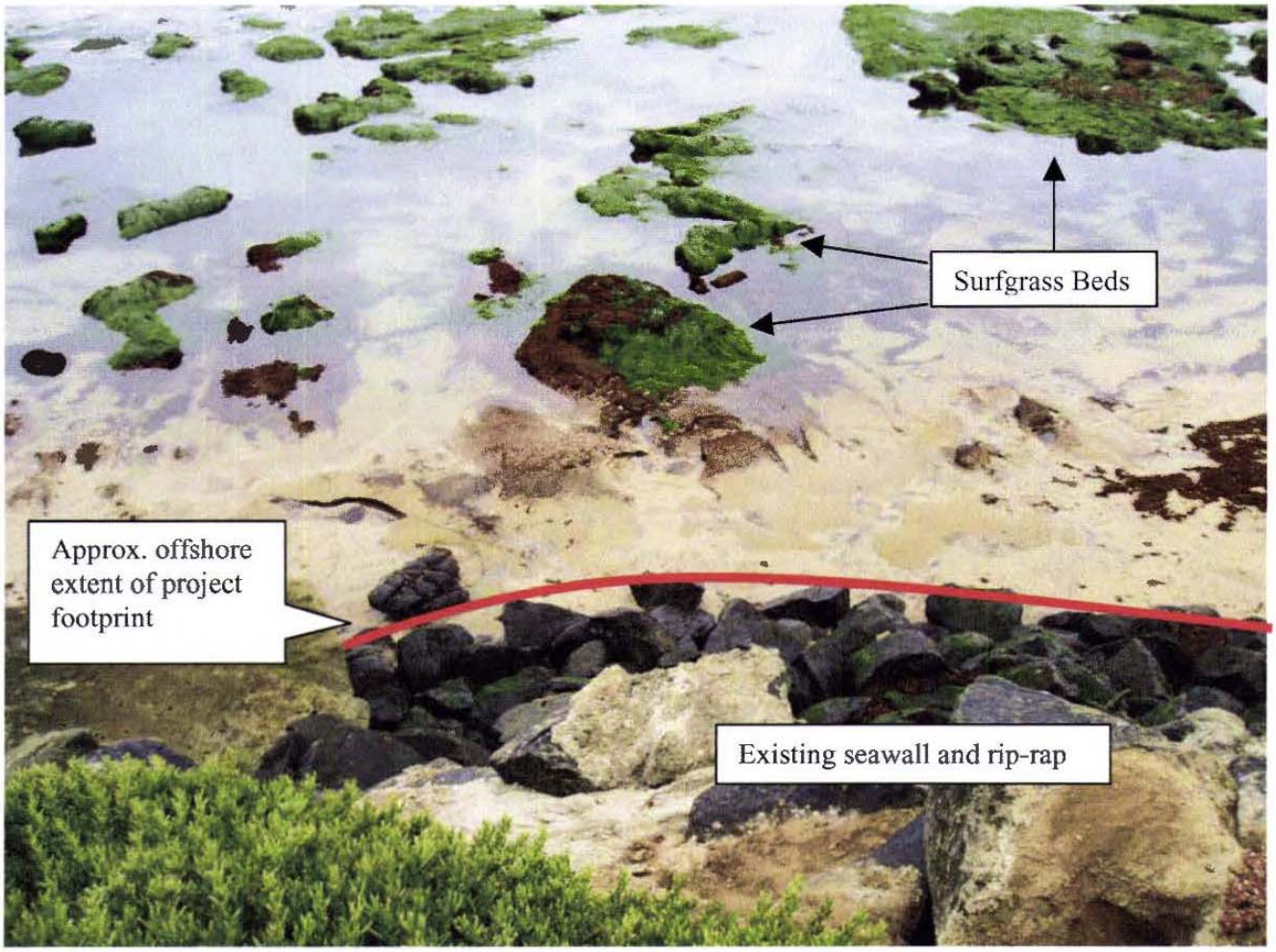
California Coastal Commission

POCKET BEACH BELOW 4848 BERMUDA AVENUE (2/9/12)

EXHIBIT NO. 8
APPLICATION NO. **6-11-010**
Site Photo
California Coastal Commission

Staff Photo

SURFGRASS BEDS



Photograph of southern portion of project area looking down from top of bluff. Note surfgrass beds offshore.

EXHIBIT NO. 9
APPLICATION NO.
6-11-010
Surfgrass Beds
California Coastal Commission

Photo and Captions from applicant's Biological Report

SURFGRASS BEDS

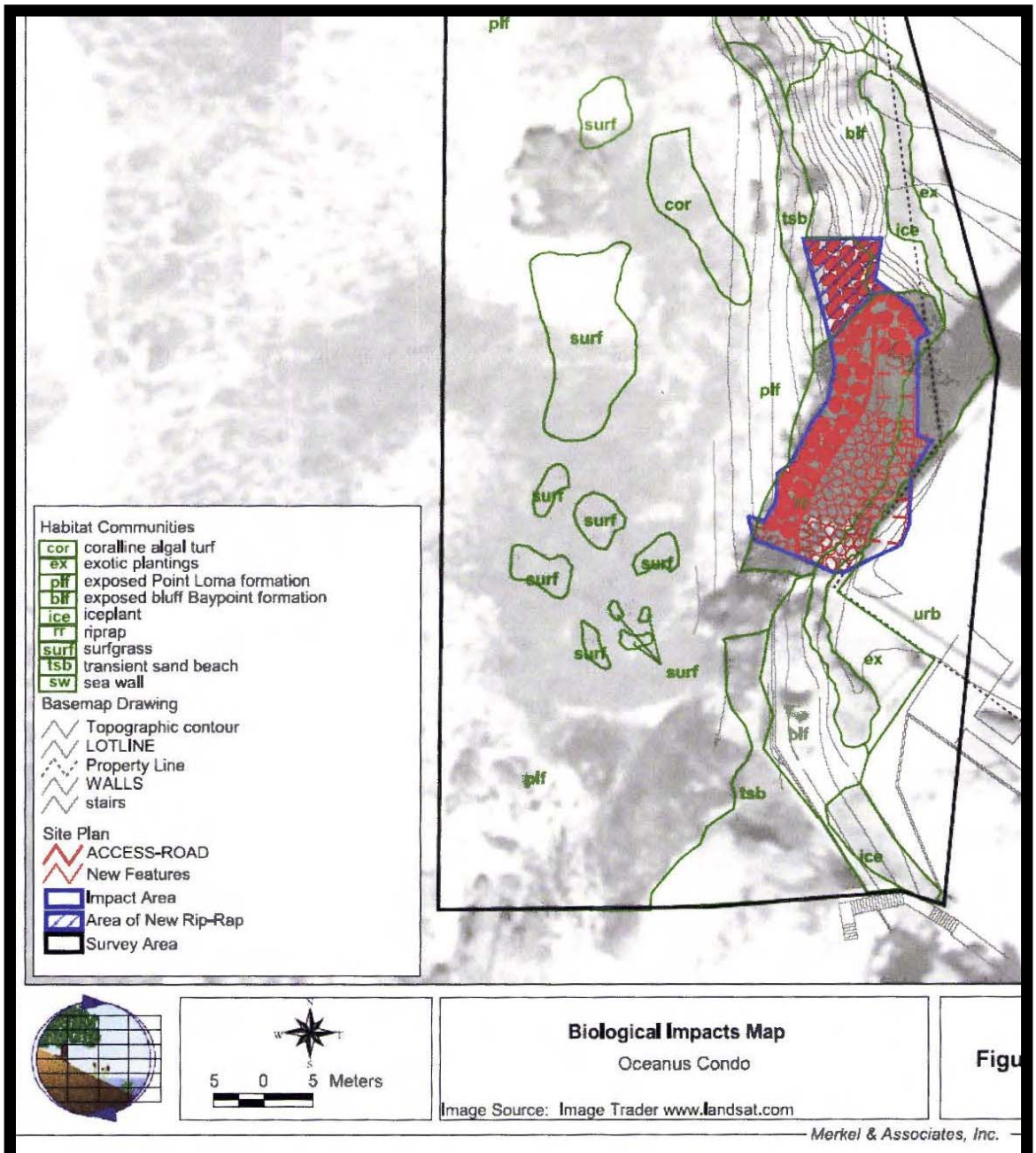


Figure 3. Direct Biological Impact Analysis Map

EXHIBIT NO. 10
APPLICATION NO.
6-11-010
Surfgrass Beds
California Coastal Commission

Exhibit from applicant's Biological Report

CITY-OWNED SEAWALL AND VAULT

Photo Dated 9/13/2010

EXHIBIT NO. 11
APPLICATION NO.
6-11-010
Seawall/Vault
California Coastal Commission

Copyright (C) 2002-2010 Kenneth & Gabrielle Adelman, California Coastal Records Project, www.Californiacoastline.org

PROPOSED REPAIR TO CITY-OWNED SEAWALL

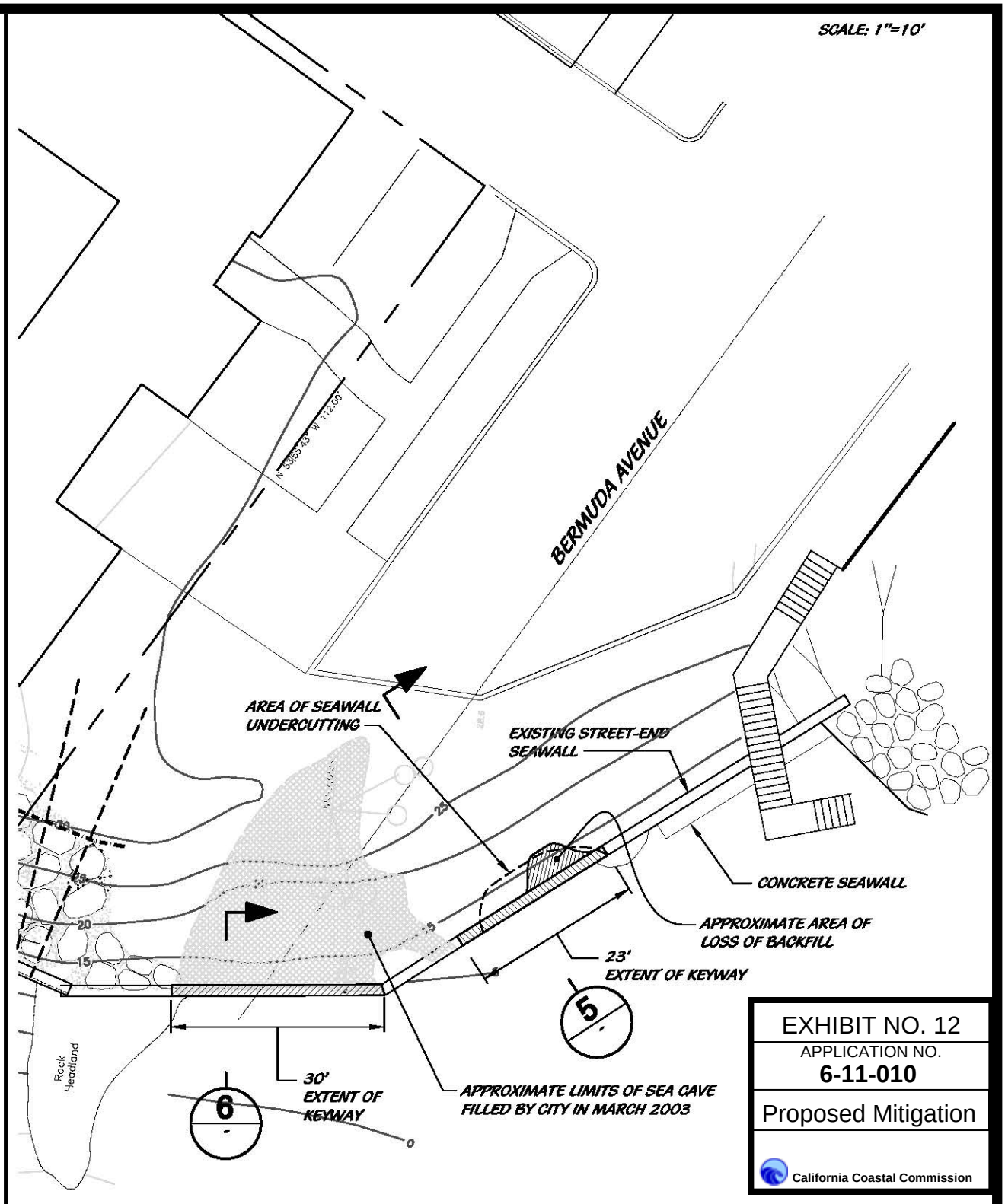


EXHIBIT NO. 12

APPLICATION NO.
6-11-010

Proposed Mitigation

California Coastal Commission

PROPOSED MITIGATION OF STREET END SEAWALL

SCALE: 1"=10'

PROPOSED REPAIR TO CITY-OWNED SEAWALL

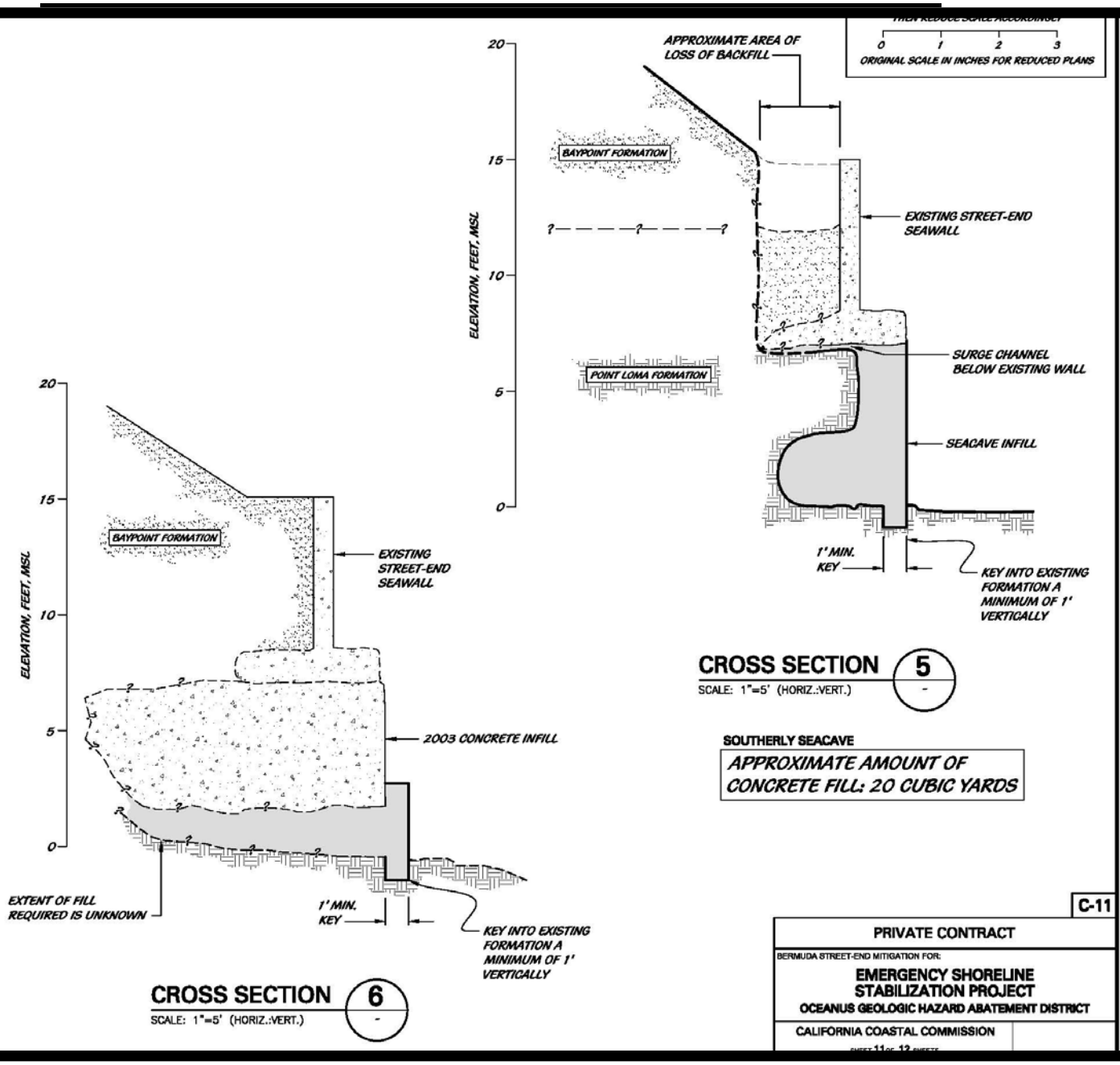


EXHIBIT NO. 13
APPLICATION NO.
6-11-010
Proposed Mitigation
California Coastal Commission

EMERGENCY CDP 6-01-006-G

STATE OF CALIFORNIA -- THE RESOURCES AGENCY GRAY DAVIS, *Governor*

CALIFORNIA COASTAL COMMISSION
SAN DIEGO AREA
7575 METROPOLITAN DRIVE, SUITE 103
SAN DIEGO, CA 92108-4402
(619) 767-2370

RECEIVED
JAN 1 8 2001
CALIFORNIA
COASTAL COMMISSION
SAN DIEGO COAST DISTRICT

EMERGENCY PERMIT

Emergency Permit No. **6-01-006-G** Date: **January 11, 2001**

Applicants: **Cathy Bongiovi, et. Al**
4848 Bermuda Avenue
San Diego, CA

Agent: **Tshien "Jan" Ma, SE**

LOCATION OF EMERGENCY WORK: On the public beach fronting 4848 Bermuda Avenue, Ocean Beach, San Diego, San Diego County.

WORK PROPOSED: Placement of rip rap (consisting of ½-ton to 2-ton quarry stone) at the toe of an approximately 30 ft. high bluff to construct temporary non-engineered revetment. Also proposed is minimal grouting necessary to hold stones together (reference cross-sections of repair plans by TM Engineers, Inc. dated 1/8/01).

This letter constitutes approval of the emergency work you or your representative has requested to be done at the location listed above. I understand from your information and our site inspection that an unexpected occurrence in the form of a seawall collapse and bluff erosion requires immediate action to prevent or mitigate loss or damage to life, health, property or essential public services. 14 Cal. Admin. Code Section 13009. The Executive Director of the Coastal Commission hereby finds that:

(a) An emergency exists which requires action more quickly than permitted by the procedures for administrative or ordinary permits and the development can and will be completed within 30 days unless otherwise specified by the terms of this permit;

(b) Public comment on the proposed emergency action has been reviewed if time allows;

(c) As conditioned, the work proposed would be consistent with the requirements of the California Coastal Act of 1976.

The work is hereby approved, subject to the conditions listed on the attached page.

Sincerely,

PETER M. DOUGLAS
Executive Director

Sheilyn Sutton for

By: DEBORAH LEE
Deputy Director

EXHIBIT NO. 14
APPLICATION NO.
6-11-010
Emergency CDP
California Coastal Commission

CONDITIONS OF APPROVAL:

1. The enclosed Emergency Permit Acceptance form must be signed by the PROPERTY OWNER and returned to our office within 15 days.

2. Only that work specifically described in this permit and for the specific properties listed above is authorized. No other work is approved by this emergency permit. The construction, placement, or removal of any accessory or protective structure, including but not limited to, stairways or other access structures, walls, fences, etc. not described herein, are not authorized by this permit.

3. The work authorized by this permit must be completed within 30 days of the date of this permit (i.e., by February 11, 2001). Any additional work requires separate authorization from the Executive Director. **If during construction, site conditions warrant changes to the approved plans, the San Diego District office of the Coastal Commission shall be contacted immediately prior to any changes to the project in the field.**

4. The randomly placed rock approved under this emergency permit is considered TEMPORARY work done in an emergency situation and shall be removed within 150 days (i.e., by 6/10/01) unless a regular coastal development permit is approved to maintain the rock for a longer period of time as an interim measure.

5. In exercising this permit, the applicant agrees to hold the California Coastal Commission harmless from any liabilities for damage to public or private properties or personal injury that may result from the project.

6. This permit does not obviate the need to obtain necessary authorizations and/or permits from other agencies (e.g. Dept. of Fish & Game, U.S. Fish & Wildlife, U.S. Army Corps of Engineers, State Lands Commission, City of San Diego).

7. No local sand, cobbles or shoreline rocks shall be used for backfill or for any other purpose as construction material. During both the construction and removal stages of the project, the permittee shall not store any construction materials or waste where it will be or potentially be subject to wave erosion and dispersion. Within 5 days of completion of construction, the permittee shall remove from the bluff face and beach area any and all debris that results from construction of the approved development.

8. Within ten days of the date of this permit (i.e., January 21, 2001), the applicant shall submit for review and written approval of the Executive Director, evidence that a performance bond (or other similar instrument), in a form and content acceptable to the Executive Director, has been accepted by the City of San Diego for an amount sufficient to cover the removal of the rip rap. The bond shall remain in effect until the protective measures have been removed or alternate measures have received approval by the City of San Diego and/or the California Coastal Commission under a regular coastal development permit.

9. The applicant shall obtain all necessary reviews and approvals from the City of San Diego including, but not necessarily limited to, an encroachment removal agreement and site development permit for the completed emergency work.

If you have any questions about the provisions of this emergency permit, please call the Laurinda Owens at the Commission's San Diego Coast Area Office at the address and telephone number listed on the first page.

EMERGENCY PERMIT ACCEPTANCE FORM

TO: CALIFORNIA COASTAL COMMISSION
SAN DIEGO COAST AREA
7575 METROPOLITAN DRIVE, SUITE 103
SAN DIEGO, CA 92108-4402
(619) 767-2370

RE: **Emergency Permit No. 6-01-006-G**

INSTRUCTIONS: After reading the attached Emergency Permit, please sign this form and return to the San Diego Coast Area Office within 15 working days from the permit's date.

I hereby understand all of the conditions of the emergency permit being issued to me and agree to abide by them. I also understand that the emergency work is temporary and a regular Coastal Permit is necessary to maintain the randomly placed rock for a longer period as an interim measure.

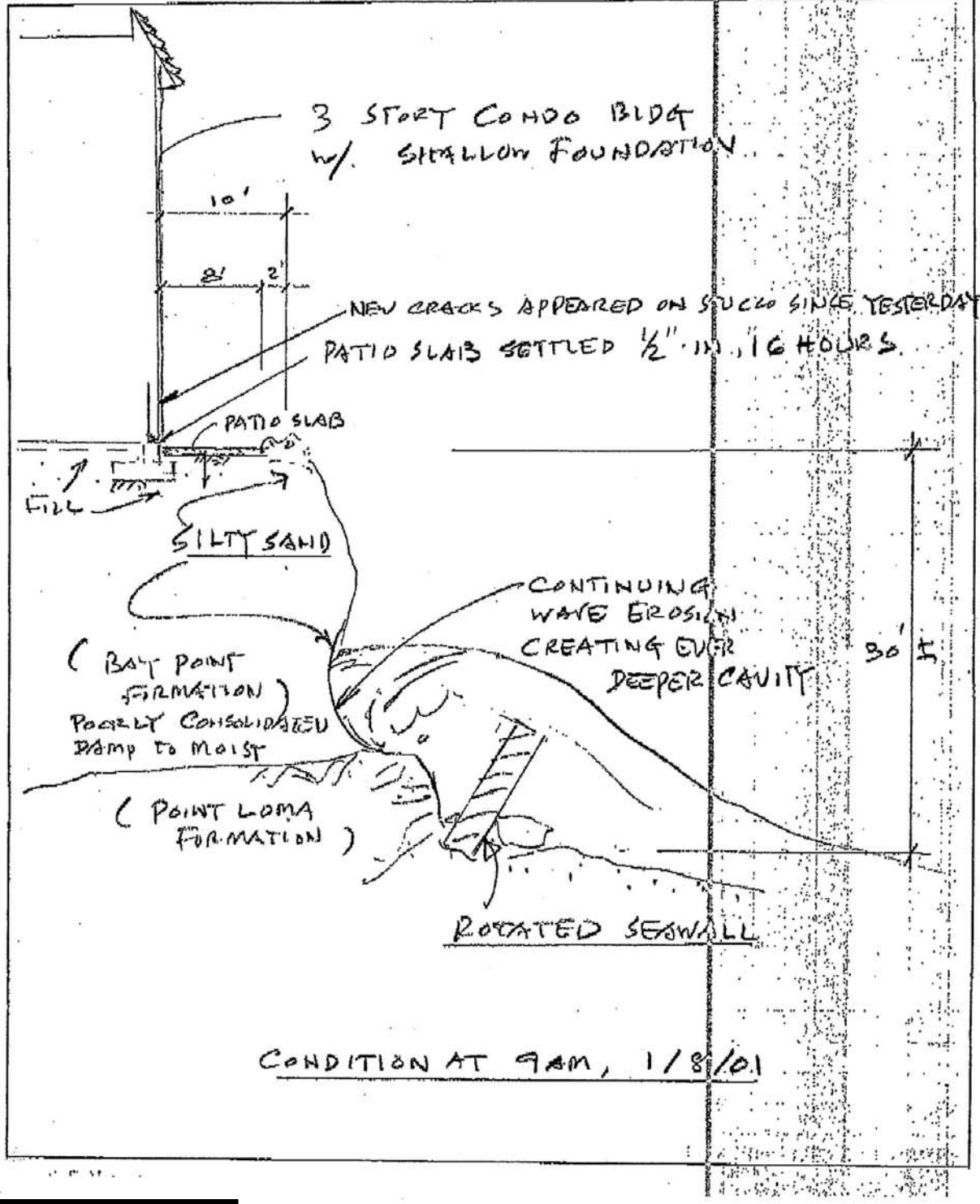
Board of Governors,
Signature of property owner
Oceana HOA
Joseph J. Bongiovi III
Name
4848 Bermuda Ave #D-2
Address
San Diego, CA 92107

1/15/01
Date of Signing

(G:\San Diego\Emergency\6-01-006-G Bongiovi, et.al EP.doc)

TM Engineers, Inc.
226 Avenida Del Mar
San Clemente, CA 92672
Tel 949-361-0618 Fax 949-361-0754
E-mail: tmengineers@earthlink.net

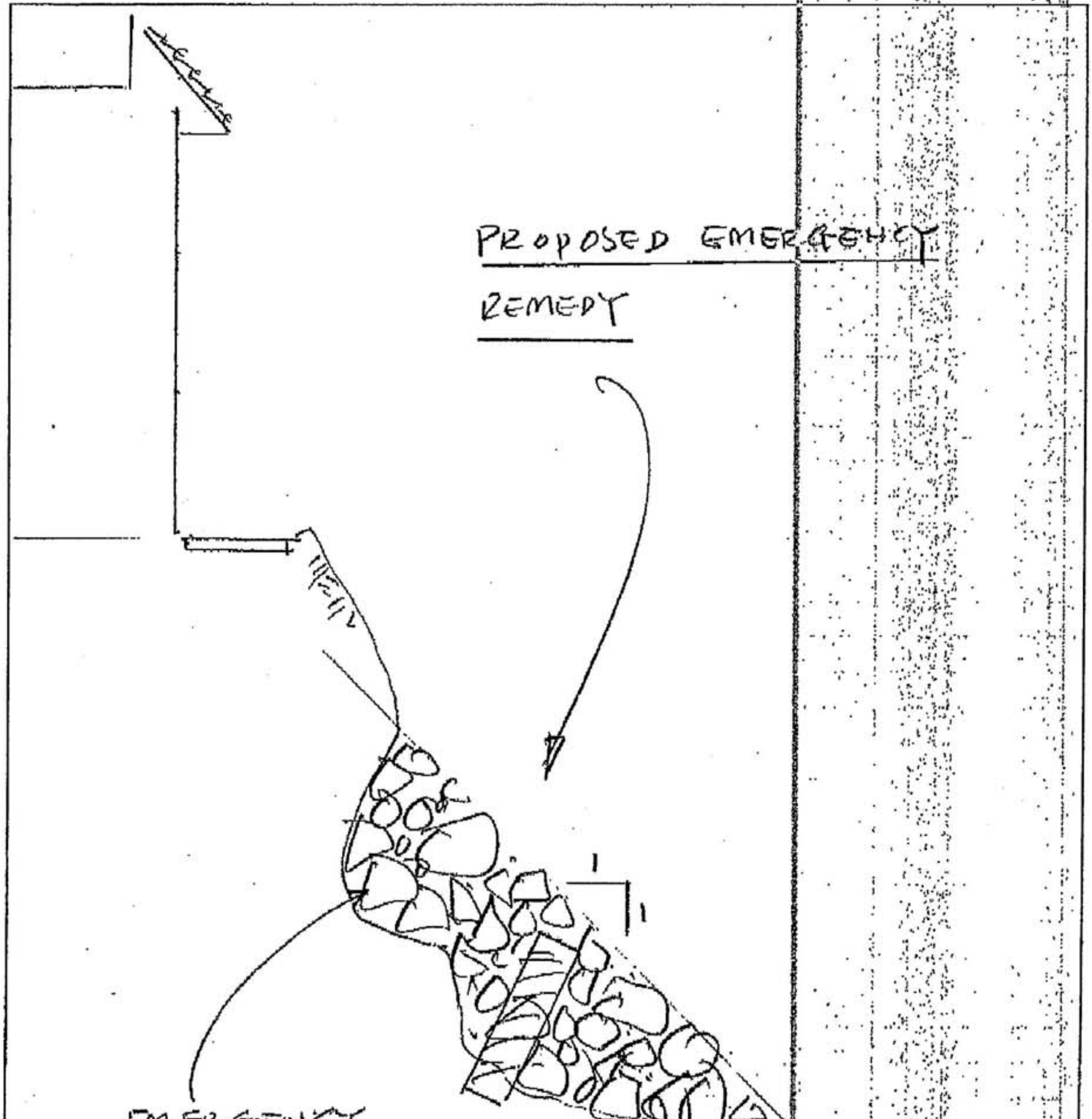
JOB Kapiloff SHEET NO. 1 OF 2 S.D.
CALCULATED BY T.MA, P.E. DATE 1/8/01
CHECKED BY DATE
SCALE



CONDITION AT 9AM, 1/8/01

TM Engineers, Inc.
226 Avenida Del Mar
San Clemente, CA 92672
Tel 949-361-0618 Fax 949-361-0754
E-mail: tmengineers@earthlink.net

JOB 4878 Bermuda Dr.
SHEET NO. 2 OF 2
CALCULATED BY ______ DATE ______
CHECKED BY ______ DATE ______
SCALE ______



EMERGENCY
FILL ½T – 2T QUARRY STONES IN BLUFF CAVITY. QUANTITY OF STONE WILL BE KEPT AT A MINIMUM CONSISTENT WITH ANGLE OF REPOSE, GROUT FILLED.